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Specification & Methodology Statement for:

Removal of modern linings within the historic core of Mill Cottage, Clymping

The historic core of Mill Cottage is constructed in flint with red brick dressings which originally was plastered internally with a lime hair mortar. During the 20th century relining work was carried out in the form of a cementitious render on a masonry backing which was physically adhered to the historic fabric. The modern lining system has cracked and in addition settlement has occurred in the south east corner, due in part to a fig tree undermining the structure. The modern intervention is preventing the historic fabric from breathing and consequently it retains damp.

Externally the flintwork has been consolidated – repointing and bedding in loose / missing flints which has strengthened bonding of the fabric, thus allowing careful removal of the internal modern linings to take place.

Prior to any commencement of works temporary supports are to be put in place. Accrows / Strong boys are to be placed internally beneath the inserted purlins at every fourth rafter and in addition install raking props on each side of the wall the number of props required to be in accordance with the Structural Engineers' recommendations.

After completion of the temporary works a thorough investigation of the external flintwork is to be carried out and any cracking identified and tell tales put in place. Where necessary and under the direction of the Structural Engineer hydraulic lime grout is to be injected into the crack. Subject to width of crack grout to be either cream of cream with an aggregate content of either 2 or 4mm.

Commencing in the north west corner of the room (lhs of chimney breast) using hand tools only, starting at the top and working down in no more than 1000mm lifts remove top section of internal linings using masonry tools only. Where the adhesion is still well bonded and the use of hand tools is causing significant vibration. A masonry drill may be used, subject to a sample area. Upon removal of a 1metre square section an external review of the outer face of the wall is to be carried out and any new cracks identified, fitted with tell tales and consolidated as previously stated. Clean off internal face of flint wall and consolidate by way of lime pointing and rebedding of loose flints. Allow to carbonate and strengthening for a minimum of 7 days before removing next 1000mm lift on same wall. Whilst waiting for consolidation works to carbonate repeat process of removal of modern lining and consolidation on top 1000mm lift to rhs of chimney breast. Continue this repair strategy for remaining extent of north wall leap-frogging between lhs and rhs of chimney breast in 1000mm lifts to minimise risk of collapse. At any stage if significant cracking of the flintwork is observed the Structural Engineer should be notified, and additional strengthening specified which may include the use of helibars, in accordance with manufacturer recommendations to tie the crack together.

Repeat process to western end of southern wall and northern end of eastern wall, leaving the south east corner to last.

Prior to consolidating the south east corner, reduce as much as possible the fig tree that is growing immediately abutting the building. Take down, setting aside all pieces of flint and brick in the immediate area, using strong boys to support masonry above



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to facilitate removal of the tree including as much root as possible. All modern masonry lining and cementitious plaster to be removed from site.

Rebuild using lime mortar specified by The Lime Centre to replicate the original mortar using record photographs to ensure correct gauge of brick dressings and flint coursing.

Upon completion of the consolidating works to an entire wall and before commencing removal of the modern linings to the remaining wall apply first coat of lime plaster into which will be embedded fibre reinforcing before applying two further coats - base coat and finishing coat in accordance with lime plaster specification.

Should during the works an area of walling collapse, all works shall cease, the surrounding work will be temporary supported and the Structural Engineer notified so that a specification for rebuilding incorporating additional strengthening can be determined. All historic material arising from a collapse shall be retained and re-used where in a sound condition.

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