

The Old Crown, Weston Turville

Test panels conducted by Stewart Ivory for Lost Marble Conservation on 12th January 2024



2mm angle grinder blade



Front Test Panel #1

- Incredibly hard cement render, single coat, between 15-20mm thick.
- Brickwork laid in non-hydraulic lime mortar in Flemish Bond
- This panel was reasonably dry behind the render
- Hand made iron nails set into the mortar joints had been rendered over
- Render was removed with minimal damage to brickwork but did remove a microscopic layer from the fired face



Showing detail of mortar and brick face adhering to cement render plus damp spores beneath the render, iron nail embedded in cement mortar



Front Test Panel #2

- Same very hard cement render, single coat
- Iron nails evident
- Areas of render delaminated from brickwork
- This area is very damp behind the render
- Evidence of historic lime render on face of bricks

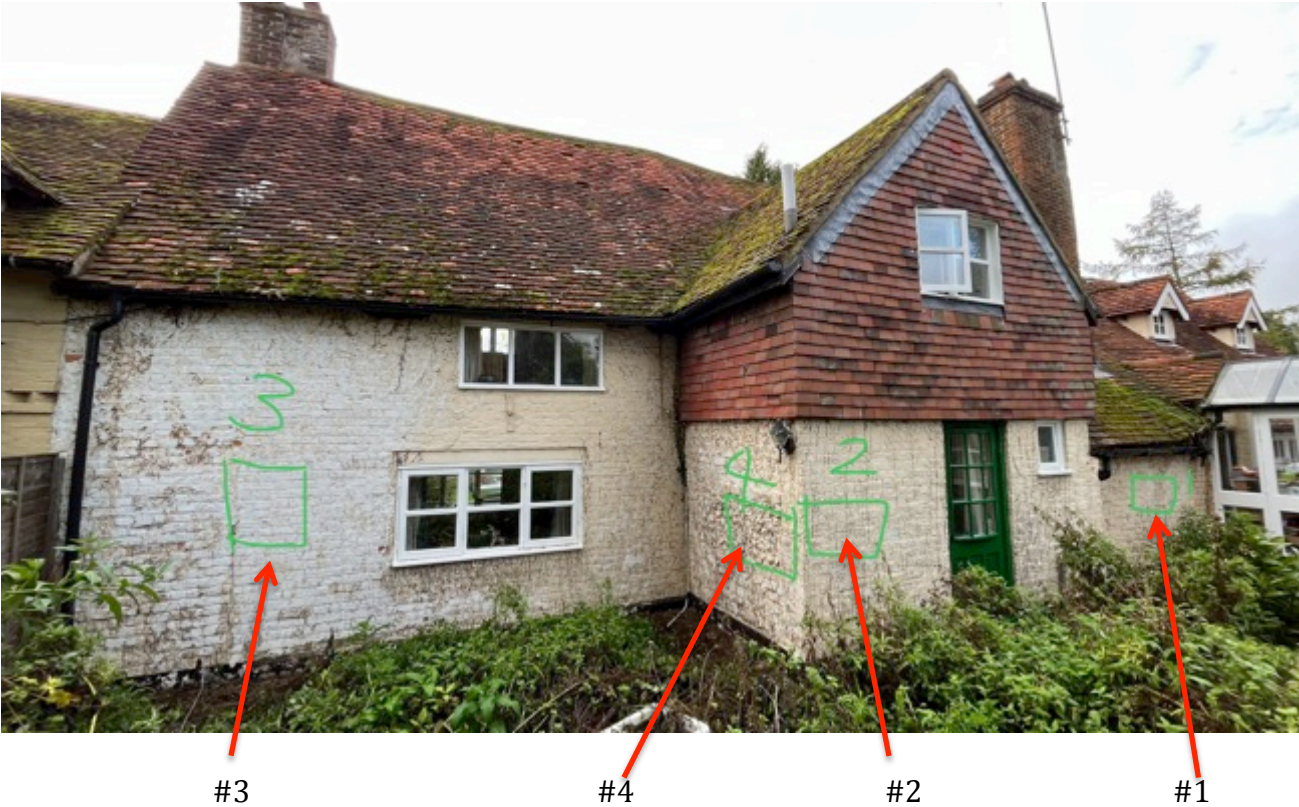


Front Test Panel #3

- Same single coat, very hard cement render
- Iron nails rendered over
- Cracks in render follow brick joints and not – as originally suspected – in line with timber frame
- Slate DPC is effective]
- Below DPC the brickwork is very damp
- The protruding plinth has evidence of an older skin of 2 inch thick render below ground level
- The plinth area is so damp it contains worms
- Concrete apron trapping moisture but not connected to the house wall
- Air brick found to be blocked with concrete and covered over by concrete apron



The Old Crown, Rear Test Panels - DOFF paint removal



All test panels subjected to 2no. applications of Paint-Rid™ – first coat left over night, second coat left for a few hours dwell time.



- All test panels subjected to super heated water at 150°C and at 40 bar pressure using the DOFF™ system to remove modern masonry paint:



- DOFF removed the plastic paint with ease, causing zero damage to the brickwork
- DOFF exposed areas that had previously been lime washed and, as seen above, areas that were added to the building after lime washing was the traditional coating
- The flint and brick test panel #4 was lime washed – an extensive build up of historical lime wash is evident
- Other areas around the base of the single story barn revealed cement pointing, trapping damp within the brick plinth of the barn. This – and other modern materials in conjunction, is causing failure of the wall coatings inside (gypsum and modern paints) caused primarily by damp trapped within.

DOFF panel #4

Cement

Historical lime wash



Contractor recommendations following the test panels:

Front:

- Remove all the cement render to the front
- Remove all concrete apron – this may be enough to allow wall to dry out – there may be no need for French drain or even a small trench, just lower ground level and expose air bricks
- Consult with Conservation Officer to decide upon wall covering:
- 1. If the brick panels are all in a good condition use 4 coats of traditional hotmixed lime wash
- 2. If bricks not in suitable condition to be exposed, then 2no. coats of lime render

Rear:

- Remove concrete apron
- Remove all modern paint using DOFF
- Remove all cement pointing
- Repoint using traditional hotmixed lime mortar
- Lime wash 4no. coats using hotmixed traditional lime wash