

## Schedule of Works for Wall Construction.

### Overview

The chimney stands in the centre of the house (inside), with its foundations stretching over an archway.

The chimney had been subsiding and caused a significant series of cracks to appear in the first floor east bedroom chimney wall. These cracks were large enough for someone's hand to be inserted into it and grew at an alarming pace.

Our children were moved out of the bedroom and a temporary structured wooden brace was erected in the bedroom to prevent the wall (and likely chimney) from subsequent collapse.



The emergency work was carried out in accordance with Geoff Dentons (Adam Power Ltd, Structural Engineers) specifications, with the work completed as quickly as possible owing to the delicate and dangerous nature of the operation.

### Removal of the existing wall

Once all the associated supports were in place in accordance with the wall plan.pdf document, the brace that was preventing the wall/chimney from collapse was carefully removed bit by bit, whilst taking out brick work at each stage.

It was then visible and thus discovered at this stage that the midfeathers wall was floating and also in a precarious state.

Old bricks that were intact and sound, were cleaned of masonry and made good for the wall rebuild.

### **Rebuilding the new wall.**

The area was cleared and made good for the new wall to be rebuilt. This was built straight, so that the midfeathers wall that was floating could be tied in, which is likely how the wall originally would have been. To enhance the strength of the structure, helifix crack stitching was used to tie all the walls together.

The chimney buttress on the right hand side was not replaced to its full height, with the structural engineer recommending that no additional/unnecessary weight was placed on the chimney and the associated screw piles that support the foundations i.e. to help prevent further subsidence in the future.



### **Brickwork**

All salvageable bricks were reused in the construction, with the aforementioned bricks that were sourced from a reclamation yard used to make good any remaining numbers that were required.

Please note that its believed unbond has been used on original bricks, altering the colour slightly and is more evident on the left hand side pillar.

Brick sizes vary, but the majority of the original bricks are either 23cm by 6cm deep or 23x 5.5cm. The additional bricks used are predominately 23x6cm. Whilst these may appear different in the photos, the limemortar is running over the bricks, making them appear smaller than they are when measured.

Limemortar was used and the spacing of the bricks was kept in keeping.

### **Apendix1**

Wall just before the cracks started to go critical.

