

LTR/18096/01/PMc

11<sup>th</sup> June 2018

Mr F Noon  
Yew Tree Cottage  
Hellifield Road  
Bolton by Bowland  
BB7 4NS

Dear Mr Noon,

**RE: 18096 – Yew Tree Cottage  
Structural Inspection**

PWA attended site on the 1st June 2018 to inspect the gable end of the property which had been subject to previous remedial works due to some bulging of the external leaf. From our inspection it appears as though lateral reinforcement had been installed every 4th course of stone, it is also understood that some anchors had been installed to fix the external leaf to the internal at the same time, though evidence of this was not clearly visible at the time of our inspection.

At the time of our inspection it was evident that recent movement had taken place and is highly likely to be ongoing. Mortar joints show signs of stress and cracking which extends around the gable into the restraining perpendicular wall. The cracking patterns noted are consistent with bulging mechanism which was clearly visible to the gable wall suggesting that previous repairs had been ineffective as a long-term stability solution.

Internally the structures have been dry lined and so no structural movement was noted this however does not guarantee that the internal leaf is not subject to structural movement and so further intrusive investigations should take place to ensure bearing of structural members and the integrity of the internal leaf is suitable for the long term.

The Gable wall is bulging significantly and is considered to be in danger of collapse, recently stones have become dislodged and fallen from height into the neighbouring garden, this is clearly presenting a current health and safety risk to third parties. Adequate temporary work / cordons should be put in place to minimise the risk due to the possibility of complete or partial collapse. There is also evidence of the stone work being porous with the application of render in the past, the mechanism of water ingress and freezing actions over a long period may have instigated / accelerated the movement noted.

It is recommended that the affected portion of the gable wall be removed to ground level, this will include the removal of the chimney, during works a suitably qualified structural

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engineer should inspect at intervals to ensure stability of the remaining structure and comment on the condition of the internal wall advising of any remedial works at this stage.

A temporary propping scaffold must be designed to restrain the stone façade as the removal and disruption of the stonework may act as a catalyst for a greater collapse. An appropriate contractor should be approached to undertake these works proving risk assessments and method statements for review prior to undertaking the works.

Following the careful removal of the external leaf the internal wall should be made good as required along with any additional works identified during the inspections recommended above. Mechanical fixings should then be installed in line with current building regulations and the new external leaf built up vertically with the chimney reinstated. Any cracking to the return wall should be rakes out and re pointed.

The above works should be carried out as soon as possible, the movement on the wall is likely to accelerate as the eccentricity becomes greater, this will be exacerbated by poor weather conditions and so as a minimum the temporary support works should be put in place as soon as practicable.

We trust the above is suitable for your current requirements.

Should you require anything further at this stage please do not hesitate in contacting the undersigned,

Yours sincerely,



Paul McDonald  
Engineering Manager  
For and on behalf of Paul Waite Associates Ltd

CC: Geoff Curry



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