

DUR REF: AE/KM/12/1362 Your REF:	Buildings
	Energy
27 <sup>th</sup> February 2015	Environment
Glossop Land Company 56 Grange Road Bowdon	Infrastructure
Cheshire WA14 2FH	Dunham Court 2 Dunham Road Altrincham
For the attention of Mr D Fairclough	WA14 4NX
Dear Sirs	t: 0161 613 6000 f: 0161 613 6099
RE: WOODS MILL – MILLTOWN GLOSSOP	enquiries@clancy.co.uk
We write following a brief re-inspection on Monday 16th February 2015 by Mr Andrew Eccles accompanied by Mr David Fairclough of Glossop Land Company.	www.clancy.co.uk Offices at:
The concern relates specifically to the condition of a timber truss bearing to the south elevation, visible at fourth floor level, and local collapse of a panel of brick arch flooring at third floor level adjacent to the east elevation.	Birmingham Glasgow Liverpool
This report should be read in conjunction with our previous reports on the building dated 23rd April 2007 and 23rd July 2014.	London Manchester Newcastle
We comment as follows.	Norwich
Truss Bearing	Prestwick Reading
Adjacent to the south elevation, the end truss towards the west end of the building (adjacent to the extension) has collapsed at its bearing.	Kuwait Mumbai Muscat
This defect is not recorded within the survey report we prepared in 2007, following	

I his detect is not recorded within the survey report we prepared in 2007, following an inspection in late 2006, and a review of photographs taken at that time does not indicate either collapse of the truss bearing or associated distortion of the external masonry at the bearing location.

During our inspection carried out in June 2014 the collapsed truss bearing and masonry distortion was noted. A comparison of photographs taken in June 2014 and a photograph taken during an inspection on 16th February 2015 indicates that the bottom boom of the truss, (which had detached from the rafter member and collapsed in June 2014) has dropped by approximately a further 150mm.

We noted in our report dated 23rd July 2014 that the condition of the roof had deteriorated significantly between 2007 and 2014.

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Consequently, the building as a whole, but the roof in particular, was suffering from accelerated damage due to exposure to weathering and water ingress, which was extensive. We advised that it was likely that remedial work would extend to complete replacement of the roof structure.

Whilst there only appears to be a single truss which has failed to date, the deterioration in its condition over the last 7 to 8 months is we believe an indication of acceleration in the rate of deterioration of the roof structure. The consequence of this at the truss bearing location is that the guttering and masonry at high level is distorted and at increased risk of local collapse.

Detailed checks on the condition of individual truss bearings have not been carried out. This is a matter for a timber specialist, as previously advised. The consequence of further failure of trusses at their bearings, is the potential for further local collapse of masonry. Clearly, the combined effect of local collapse in a number of areas may lead to a risk to overall stability.

## Floors

At third floor level at the east end of the building, a single bay of the brick arch floor has collapsed. The tie rods remain in place.

The end bays at both ends of the building are a slightly bigger span the regular bays between cast iron columns. Consequently, the brick arch in the end bays is flatter than the general condition. The collapsed arch appears to be only two brick on edge courses deep.

This collapse had not occurred at the time of our previous inspections and is believed to have occurred in late January 2015.

Following our 2014 inspection, we reported that, with the exception of an area of collapse at the fourth floor level, the floors were generally in similar condition to that noted in 2007. However we specifically noted extensive spalling of plaster from the soffit of the brick arched fourth floor on the line of the roof valleys above and, more extensive corrosion of floor beams and tie rods, advising that local repairs by repointing / rebuilding may be required to the upper two floors.

The reason for the apparent sudden recent collapse of a section of the fourth floor is not immediately apparent. Tie rods have clearly not failed and remain intact. We suspect that the most likely reason is weakening of the shallow brick arch construction due to water ingress and deterioration of the mortar. With the arch being so flat, the brickwork may have been unable to accommodate the reduction in strength caused by mortar deterioration.

On the basis of the incident which has occurred locally, the likelihood is that other areas may be, or may become, vulnerable to similar local collapse due to an on-going issue of water ingress. The wider effects of a number of areas of local collapse may lead to a risk to overall stability.



## Comment

We have previously stated that there is a risk of local instability of the building due to potential local collapse. The principal causes of this are vandalism / theft and water ingress, which is accelerating the deterioration of the building.

Whilst it is not possible to determine at what rate the building will deteriorate, or to predict when and where areas may suffer collapse, we are of the opinion that the recent incidents and evidence of deterioration noted within this report, are an indication of the potential for significant structural deterioration in the short term.

The collapsed floor in particular is a cause for concern.

We are aware that the building is secured and there is no public access available, but the potential for local collapse to occur without notice, must be highlighted to those who do from time to time gain entry to the building for monitoring inspections.

Whilst we have no immediate concern as to the overall stability of the building, the situation could change in the event of further local collapse.

To carry out temporary protection or propping of the building would be an expensive item and one which would require careful consideration in relation to potential redevelopment proposals, particularly regarding time scales.

With regard to redevelopment, the costs associated with carrying out structural repair work will inevitably increase as the building continues to deteriorate. These costs may reach a point whereby the proposed redevelopment utilising the existing structural layout becomes unviable. An alternative approach which may be considered, would be for the external walls, which we generally believe to remain in reasonable condition (save for a requirement to attend to rainwater discharge, remove vegetation, repoint and locally rebuild), to be retained and the internal structure - floors, beams, columns, etc. - to be removed and replaced with a new structural arrangement. However, the costs associated with such a comprehensive structural remodelling of the building may jeopardise the economic viability of the redevelopment.

In the meantime, we would recommend that a regime of monitoring inspections at say 6 monthly intervals, or more frequent in the event of reported incidents, be carried out.

We would recommend that you consider the options outlined above, including the financial implications, in consultation with your cost advisors. If you require further structural advice, please do not hesitate to contact us.

Yours faithfully

Andrew Eccles Associate

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