STRUCTURAL ENGINEERS

Property Address	The Talbot 1 Ashbourne Road Leek
Customers	Saxondale Properties Ltd & Premier Inn Hotels Ltd
Our Ref.	P12-290/GRW/JH
Inspection Date	6 August 2012
Report Date	10 August 2012
Prepared by	Giles Ward MA CEng MICE **Partner** giles.ward@hwa-consulting.com For and on behalf of Howard Ward Associates LLP

Summary

Purpose of report:

- To assess the general structural condition of the property in light of proposed re-development.

Areas of concern:

- Significant movement apparent to original front elevation, predominantly towards its left-hand end.
- High moisture levels are likely to have resulted in damage to timber floor joists and other internal timberwork.

Recommended actions:

- Take down and re-build distorted elements of front elevation.
- Rectify sources of moisture ingress and replace any timbers damaged by fungal attack.

Conclusion:

- The property has undergone significant movement, although this is localised to the original front elevation. The extent is such that rebuilding of the affected sections is recommended. Subject to this, and to the replacement of any rotten structural timbers, the property may be considered for all practical purposes stable.

1. General/Background

1.1 In describing the property all references to front, rear, left and right assume that it is viewed from the main square, with the front elevation facing towards the war memorial.

1.2 The property is a former public house, the main part of which appears, from the date on the front elevation, to have been built in 1878. The majority of the original part of the property is on three stories, with a small section extending to a fourth storey in the tower at the centre of the front elevation.

1.3 The property has been extended to the front with a single storey flat roofed section, to the left with a small single storey pitched roof section and at the rear on three stories. The floor to ceiling height of this addition is however less than in the original property and hence the upper floors are not aligned with those in the original part.

1.4 The age of the extensions is not known but none appears to be especially recent.

1.5 There appears to be a cellar beneath the property. Safe access was however not available to this area and we were therefore unable to confirm its details or extent.

1.6 General external views of the property are shown in photographs Nos. 1-3.

2. Topography/Geology

2.1 The site slopes gently down from rear to front. The gradient is insufficient to cause problems that might be associated with slope instability. There are no topographical features nearby which might lead to foundation problems.

2.2 Data from the British Geological Survey indicates that the site is underlain by the Morridge Formation, which consists of interbedded mudstones, sandstones and siltstones. Bearing capacities of such materials are likely to be good, although their proximity to the surface at the site is not known and could only realistically be determined by trial excavation or borehole investigation. Details of any overlying superficial strata are not recorded by the British Geological Survey.

2.3 There is therefore nothing to suggest any specific issues with the underlying ground that might affect the stability of the foundations, although it is stressed that this conclusion is based on limited information at this stage.

3. Inspection

3.1 Signs of significant movement are apparent externally in the front elevation of the original part of the property towards its left-hand end. Photographs Nos. 4-8 illustrate.

3.2 More minor distortions were apparent in the central/right section of the front elevation, as shown in photograph No 9, but these do not appear to have resulted in significant cracking or internal damage.

3.3 Elsewhere, no signs of significant distortion or cracking to the main brickwork elements of the structure were apparent.

3.4 In the ground floor bar area below the most significantly distorted sections of the front elevation, relatively modern steelwork is evident as shown in Photographs Nos. 10 and 11. The original front wall has been removed below the main beam and a significant area of the front wall has been re-built above the beam, the blockwork to the inner leaf being visible on the first floor as shown in Photograph No. 12.

3.5 High moisture levels are present in much of the property. A major source of this appears to be in the ground floor bar area, where water was dripping in at the time of our inspection. We assume that the source of the water was an accumulation of rain on the flat roofed extension; although no significant rain fell during our inspection we suspect that there may have been some immediately prior to it. Although dampness in itself is not generally a structural issue, prolonged high levels of moisture are likely to lead to fungal attack on timber and we would strongly suspect that this is occurring, although limited access was available to the main structural timbers such as floor joists. Remedial works to the ends of some first floor joists appear already to have been undertaken, although it is unclear whether this relates to previous damage to the joists or to the installation of the adjacent steelwork. Photograph No. 13 illustrates. A localised area of the ground floor

appeared to have collapsed in the rear right section around the entrance to the ladies toilets (Photograph No. 14) although it is unclear whether this is an issue of rot or damage from other sources.

3.6 Minor disturbance to the tiling was apparent in the pitched roofed extensions but the slates to the original part of the building showed no signs of significant damage or sagging where visible. Limited access to roof voids was available but the upper section over the tower contained relatively new steelwork and timbers and we therefore suspect, given the consistently good external appearance of the roof, that much of it has been relatively recently renewed. A slight lean was however noted to the rear chimney as shown in Photograph No. 15, although the extent did not appear to be sufficient to warrant any immediate remedial action.

4. Discussion/Recommendations

4.1 The most significant area of concern in the property is the left section of the original front elevation. Elsewhere, the main load-bearing walls appear to be in reasonably good condition.

4.2 It is unclear whether the recently introduced steelwork at ground floor level was an attempt to arrest ongoing movement or whether the incompetent installation of the steelwork was the primary cause of damage, although we suspect the latter explanation to be more likely. Regardless of the cause, the extent of the distortion is such that, not least for architectural reasons, we would strongly recommend the re-building of the affected areas. Whilst it would theoretically be possible to reinforce and strengthen the areas of cracking

and hence to restore the majority of the structural integrity of the property, this in itself would be a far from straightforward operation and would be unlikely to offer particularly significant savings over the re-building alternative, and would clearly also not address the issue of the significant distortion that is currently apparent.

4.3 As suggested above, we suspect that some structural timber elements within the property, especially in its lower parts, may have been damaged by fungal attack due to the high moisture levels. As a first step, it would be advisable to rectify the sources of moisture ingress, which appear to include defective flat roofing and possibly rainwater goods. A more thorough survey of the timber could then be undertaken, which we suspect would result in a requirement for the replacement of some sections of timber floor joist.

4.4 Timbers at roof level appear however to be in a satisfactory condition, although we stress that limited access was available. The lack of sagging or disturbance visible externally is however a good indication of the general condition of the roof and it seems unlikely that any significant remedial action would be required to this area.

Photograph No. 2
Right elevation – General view

Photograph No. 3
Rear elevation – General view

Photograph No. 4
Original front elevation, left section

Photograph No. 5
Original front elevation, left section

Photograph No. 6
First floor, front left room

Photograph No. 7
Second floor, front left room

Photograph No. 8
Second floor front room adjacent to left corner

Photograph No. 9
Original front elevation, right section

Photograph No. 10
Steel column supporting steel beam in ground floor bar area

Photograph No. 11
Beam supported via steel lintel, bar area

Photograph No. 12
First floor front left room. Front wall rebuilt in blockwork

Photograph No. 13
First floor front left room. Joist ends replaced (bolted to existing)

Photograph No. 14
Ground floor rear right. Localised collapsed floor

Photograph No. 15
Slight lean to rear chimney