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consulting civil & structural engineers

LJG/217/1586

Cheffins Planning & Development
Clifton House
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Cambridge
CB1 7EA

FAO Mr B Pridgeon

16 February 2018

Dear Sir

Ref: 27 Clements Lane, Haverhill, Suffolk CB9 8JR

1.0 Introduction

1.1 Further to your request for a structural inspection of the above property, we visited the premises recently and would accordingly advise as follows.

1.2 We have not inspected woodwork or other parts of the structure which are covered, unexposed or inaccessible, and we are therefore unable to report that any such part of the property is free from defect. This report is concerned solely with the points referred to below, and our liability in this regard is limited to yourselves as our clients. No liability is conferred or intended to be conferred for the purposes of the Contracts (Rights of Third Parties) Act 1999

1.3 The dwelling is a detached cottage style construction, which has evolved significantly over a period of time. We understand that a separate report is being prepared relating to Heritage aspects of the premises. Accordingly, we do not propose to duplicate comments referred to there in the context of this report.

1.4 Likewise extensive photographs have been taken of the premises to accompany the Heritage report. Our report should be cross referenced to those photographs for illustrative purposes.

1.5 Our report is based on a visual inspection of the premises at this time. We did not carry out any detailed, disruptive, investigations.

1.6 This report has been prepared in support of documentation being submitted for a Planning Submission to the Local Authority for the proposed demolition of the existing cottage. This report should be cross referenced to the associated documentation provided by your offices in this respect.

2.0 Description of Premises

2.1 The existing building appears to have originally been formed as a two storey construction with ancillary undercroft space.

2.2 The original two storey frontage element appears to have had a single storey kitchen lean-to, with solid 225mm thick division walling evident between the rear breakfast area and the current side bathroom space at ground floor level.

2.3 In the original construction a flint sub base has been provided, which remains exposed within the cellar area. Solid 225mm thick brickwork has then been built off this flint work to the original two storey construction, which appears to have been originally formed as a two up and two down cottage, with a single storey kitchen lean-to at the rear.

2.4 We understand that the original property may date back to the early 19th century, with a series of alterations subsequently adopted to the premises. The latest of these alterations appear to have been carried out in the early part of the 20th Century. Prior to that time, historic photographs indicate a mix of plain render and exposed brickwork finishes to the property.

2.5 All of the property currently has a rough cast cementitious external render finish applied to the perimeter walling. This appears to have been applied to standardise finishes at the time of the alteration and extension work adopted some 85-90 years ago.

2.5 The single storey kitchen lean-to has subsequently been raised to provide a third bedroom with a shallow monopitched roof deck and mineralised felt roof finishes over. The original frontage section of the property has a pitched and hipped roof, with slate roof tile coverings over. There is currently no access into the loft zone.

2.6 The first floor third bedroom addition at the rear has been formed using single skin, nominal 105mm thick, masonry enclosure walling.

2.7 The original centrally positioned staircase has subsequently been replaced with a stair set along the LHS flank wall. This wall is a solid 225mm wide construction, built up on the line of the original single storey kitchen lean-to.

2.8 The solid 225mm wide walling ends adjacent to what is currently the main entrance door, positioned at the rear LH corner edge of the property. At this position the 225mm wide masonry returns to a single skin, nominal 105mm thick, wall construction. This single skin brickwork returns across the single storey rear bay addition set to the rear of the breakfast room.

2.9 There is single skin enclosure walling to both the kitchen addition and the bathroom set to the rear RH corner of the property at ground floor level. This walling supports a monopitch roof with slate coverings over. As noted above, the single skin walling then continues through to first floor level to enclose the third floor bedroom space.

2.10 Suspended timber floor constructions are present throughout the ground floor accommodation.

2.11 The bay projection off the rear of the breakfast room has a flat roof deck with lead roof coverings over.

2.12 External joinery components consist of a mix of single glazed softwood timber and metal framed components, as well as double glazed UPVC windows and doors.

3.0 Condition of Premises

3.1 Ground levels along the LHS edge of the property are set high in relation to internal floor levels, with the ground extending to around 300/350mm above internal floor level.

3.2 The rough cast cementitious render finishes typically extend continuously down to ground level. Patch repairs have been adopted to the render in recent years. These repairs have typically been adopted using an inappropriate cementitious render applied to the background masonry.

3.3 There are extensive problems with a mix of rising and penetrating damp affecting all wall finishes generally to the ground floor accommodation, particularly around the rear, and along the LHS flank wall.

3.4 As noted above, considerable sections of the perimeter walling have been formed as single skin, nominal 105mm thick, brickwork. Where single skin walling is present, there are corresponding significant problems with a mix of rising and penetrating damp through the walling, exacerbated by the manner in which the render finishes are continuous to ground level.

3.5 This in turn gives rise to quite extensive mould staining on internal wall finishes, as well as damp related decay of internal plaster finishes generally.

3.6 There is evidence of a selection of cracking in external render finishes, notably where there are changes in wall formats between 105mm and 225mm wall constructions.

3.7 Where there are high ground levels along the LHS edge of the property, there is correspondingly poor subfloor ventilation. Vents have been introduced internally into the floor. These are inappropriate and ineffective. The lack of subfloor ventilation has in turn resulted in decay of the suspended ground floor timber construction.

3.8 Ceiling finishes at both levels are uneven, due to the manner in which the property has evolved over a period of time, coupled with the use of slender timber framing members to both pitched and hipped roof elements over the original frontage section, together with the lightly framed shallow monopitched roof at the rear.

3.9 The property has not had the benefit of significant recent/planned maintenance. All finishes within the premises are in a poor condition, exacerbated by extensive problems associated with a mix of rising and penetrating damp.

3.10 There is no heating to the first floor accommodation. The only heating at ground floor level consists of an open fire place on the LHS flank wall and a gas fire in the rear breakfast room. The absence of heating has resulted in very extensive mould staining, particularly in the kitchen and bathroom spaces where single skin walling is present.

3.11 There are storey height stepped vertical cracks in the render finishes along the line of junction between original and extended sections of the property to both LHS and RHS flank walls.

3.12 Cracking is also evident around the rear RH corner of the bathroom projection, where there appears to be problems with poor discharge of both foul and stormwater runoff from this part of the property into the adjoining manhole. Cracks in the render finishes at this position open out to around 3-4mm in width.

3.13 Further cracking is evident below the side kitchen window opening, with cracks of up to 4-5mm evident in the render finishes.

3.14 In summary, the building fabric to all of the property, and in particular to the various rear additions referred to above, is generally in a very poor condition.

3.15 This is compounded by widespread evidence of poor workmanship and poor construction detailing throughout the premises. Any proposal to retain and refurbish the existing cottage would require very extensive, and correspondingly expensive, remedial works as referred to below.

4.0 Recommendations for possible retention

4.1 All of the existing ground levels along the LHS edge of the property would need to be significantly re-profiled, to reduce external ground levels below internal floor levels.

4.2 All of the existing above, and below, ground foul and stormwater drainage arrangements will need to be extensively overhauled and largely replaced.

4.3 The existing roof coverings would need to be stripped back to all of the property and re-roofing adopted generally. Conventional re-roofing would be applicable for the original duopitched roof format to the front of the premises, with upgrading of insulation at ceiling level.

4.4 At the rear, a replacement warm roof deck would be required over the shallow monopitched roof to the bedroom extension.

4.5 The existing lead roof coverings over the bay window projection to the rear of the breakfast area would likewise need to be stripped back and renewed, again with built up warm roof finishes.

4.6 All existing cracking in external render finishes would need to be cut back, the background masonry exposed and appropriate repairs adopted prior to re-rendering.

4.7 Render would need to be cut back from ground level generally up to floor level, with accompanying provision of a traditional bell mouth drip detail, to prevent ongoing problems with rising damp through capillary action. Associated repairs would be required to the exposed plinth level masonry.

4.8 All external joinery goods would need to be replaced, with matching components throughout. Higher level joinery elements would also need to be replaced, such as eaves and fascia trims.

4.9 Internally all plasterwork finishes would need to be removed from all areas, to both wall and ceiling finishes.

4.10 Appropriate damp proof protection would be required to floor and wall construction throughout.

4.11 Proper provision of subfloor ventilation would be required to all of the timber ground floor construction.

4.12 Extensive treatment works would be required to the timbers forming the suspended ground floor construction.

4.13 All single skin brick walls would need to be upgraded to a cavity wall format, at both ground and first floor levels, through provision of new internal insulated framed and braced liner walls.

4.14 Insulation would need to be provided in the flat roof zone over the first floor bedroom ceilings to the front of the property.

4.15 Completely new electrical and plumbing installations would be required throughout the property.

4.16 A new central heating installation would be required to all of the property.

4.17 Complete replastering would need to be carried out at both ground and first floor levels.

4.18 A replacement, properly serviced, kitchen would be required.

4.19 A properly fitted bathroom would also be required.

4.20 Within the cellar space appropriate fire protection would be required to the soffit of the currently exposed ground floor timber joists.

4.21 There would be a requirement for renewal of internal finishes on completion of fit out works, to include replacement skirting board, architraves, doors and joinery fixtures and fittings generally. Completely new ironmongery would be required throughout.

4.22 All of the property would require complete redecoration and provision of replacement floor coverings.

4.23 In order to carry out the works referred to above, the building would need to be completely stripped back to a bear shell, effectively leaving only the external walling, first floor timber joists and duopitched roof members for the front section of the property in place.

4.24 Everything else would need to be replaced and remodelled. In our opinion it would neither be practical, nor cost effective, to consider adopting such extensive repairs to a very simple cottage of this nature.

4.25 Our strong recommendation would be to demolish the existing building and allow to rebuild a new unit on the plot to details to be agreed as part of subsequent planning discussions.

5.0 Summary

5.1 In our opinion retention of the existing building and upgrading or conversion of the premises to provide appropriate habitable standard accommodation is not practical in this instance for the reasons referred to above.

5.2 The building is generally in a very poor condition, as referred to above. There will be virtually none of the original fabric retained in any proposal for possible retention and refurbishment.

5.3 Considering the very poor condition of the property we would recommend that the cottage is demolished and a replacement construction formed here. In our opinion there is no merit in seeking to retain and repair the existing building, for the reasons referred to above.

We trust that this report is of assistance to you in progressing your discussions with the Local Authority in respect of possible alternative uses for this site.

Should any party either require further clarification of matters referred to above, or additional information from our offices at this time, as part of current Planning Stage considerations, please let us know.

Yours faithfully

L J Gawn BSc. CEng. MIStructE, MICE, MIQA
For and on behalf of Gawn Associates