

MARSH DESIGN LIMITED

STRUCTURAL SURVEYS, DRAWINGS & DESIGN CALCULATIONS

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STRUCTURAL INSPECTION REPORT

DATE: 16th December 2016

REF: MDL – 1508

1. NAME OF CLIENT

Mr. Ian Howe

2. ADDRESS OF PROPERTY INSPECTED

81a, Huddersfield Road
Holmfirth
HD9 3AS

3. DATE OF INSPECTION

15th December 2016

4. PURPOSE OF INSPECTION

We have been instructed by Mr. Howe to comment upon the defects noted to the timber roof truss members, rafters and window lintels on the front elevation of the property.

5. TYPE OF INSPECTION

A visual inspection of the property was undertaken from ground level and from easily accessible areas.

A photographic summary of any structural defects noted is included in Appendix 'A'.

6. DESCRIPTION

The property is a listed building of natural coursed stone construction sat under a Yorkshire stone slate roof covering.

7. OBSERVATIONS AND COMMENTS

Inspection of the end of the timber roof truss which bears onto the front elevation, and timber window lintels above the windows at second floor level confirmed that wet rot defects were in evidence.

The two timber window lintels, which measured only 75mm deep have also suffered from structural deflection under stress from the weight of the masonry and roof loads above.

Inspection of the roof rafters at eaves level was very limited, but evidence of wet rot defects were once again noted.

8. CONCLUSIONS AND RECOMMENDATIONS

It is Mr. Howe's intention to undertake a full program of renovation and restoration to the second floor level of the property.

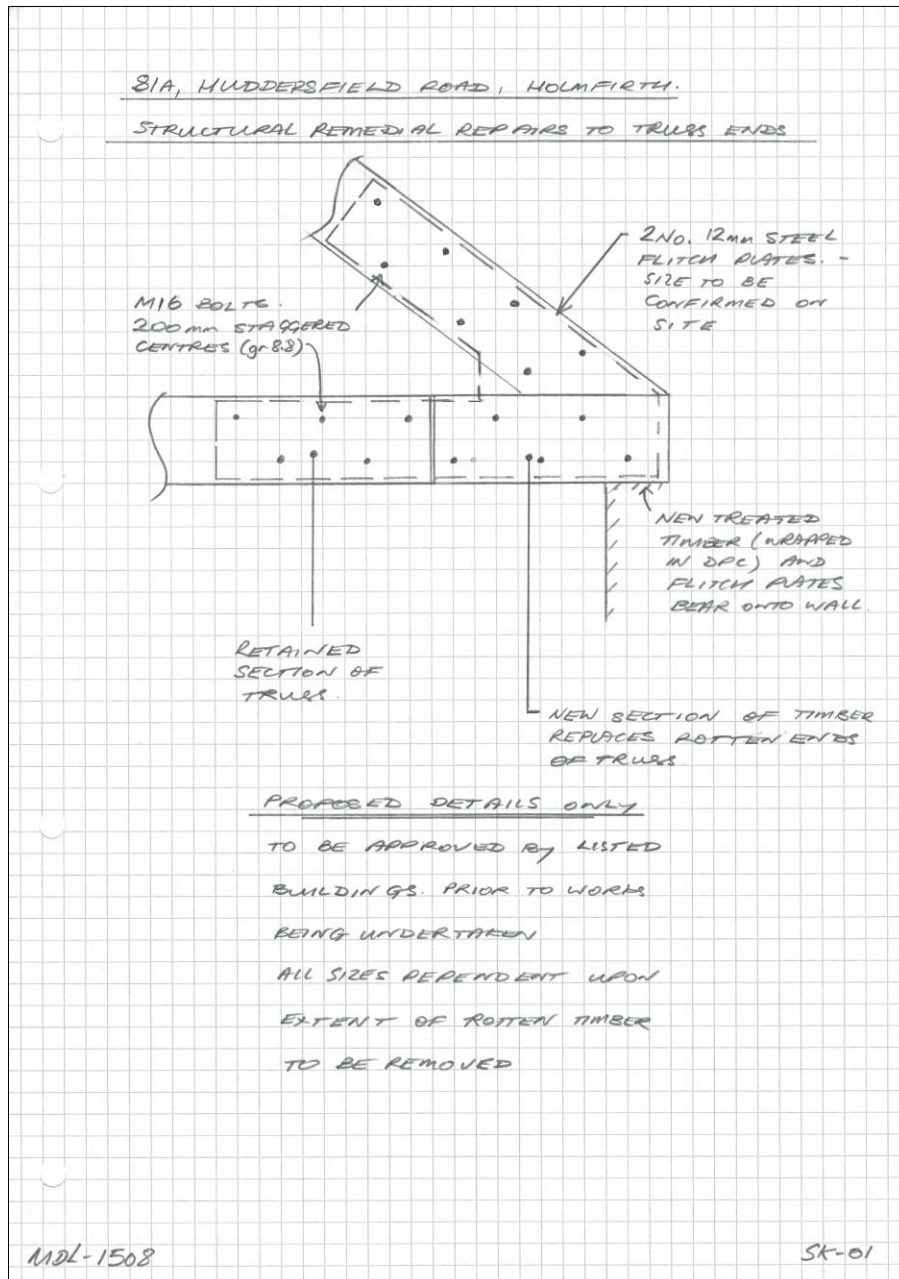
As part of these renovation and restoration works, we would advise that the following structural remedial repairs are undertaken. However please note that these must be accepted and approved by the listed building officer from Kirklees Council prior to the works being undertaken.

The timber lintels over the window openings should be replaced with new reinforced concrete lintels.

Unfortunately, the depth of the existing timber lintels is only very shallow at 75mm deep, and replacement timber lintels on a like for like basis will not have adequate structural strength to support the load above. Furthermore, installing deeper timber lintels, which would be in the region of 200mm to 225mm deep, would disrupt too much of the masonry and 'through stones' above the window openings.

With regards to the end of the truss member, we would advise that the existing rotten section of timber is cut out, with a new piece of timber being reinserted in its place.

Steel flitch plate brackets will then be installed to splice the retained and new section of timber together. The steel flitch plate brackets will also bear into the existing front elevation of the property to provide bearing support onto the external wall.



When the structure has been fully stripped back, with all the roof structure being exposed, further rot defects will most likely become evident. At this time we would advise that a full inspection of the roof structure timbers are undertaken by a timber specialist with any recommended treatments being undertaken.

9. LIMITATIONS

This is not a full structural report.

We have only commented upon the defects noted to the timber roof truss members, rafters and window lintels on the front elevation of the property.

We have not inspected woodwork, damp proof membranes or other parts of the structure which are covered, unexposed or inaccessible and we are therefore unable to report that any such part is free from defect.

We have not at this present time conducted any intrusive or destructive testing of the fabric of the property and in particular we cannot confirm that the property is free from asbestos or high alumina cement construction.

This report has been prepared for the sole benefit of Mr. Ian Howe, his professional advisors and the listed building officers at Kirklees Council.

The liability of Marsh Design Limited and their employees shall not extend to any third party.

This report, or any part of it, should not be passed on to any third party without the express permission of Mr. D. Haigh, with whom the copyright remains.

Yours faithfully,

A handwritten signature in blue ink, appearing to read 'D S Haigh', written in a cursive style.

For and on behalf of
MARSH DESIGN LIMITED

APPENDIX 'A'

PHOTOGRAPHIC SUMMARY OF STRUCTURAL DEFECTS NOTED

Photo 1

Rotten ends to window lintels.



Photo 2

Rotten end of truss chord sitting into front elevation of property.



Photo 3

Rotten ends of roof rafters.

