

HOLLINS

Architects, Surveyors & Planning Consultants

STRUCTURAL REPORT

**AGRICULTURAL CONVERSION
TO
RESIDENTIAL**

**MILL FARM
SHOP STREET
WORLINGWORTH
WOODBIDGE
SUFFOLK
IP13 7HT**

PREPARED BY:

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**RJF/NJR/21.153
NOVEMBER 2022**

1.0 INTRODUCTION

We were instructed to carry out a structural examination of the above redundant buildings to assess its structural state and suitability for conversion to domestic use.

This report is prepared as the result of a single site visit, 2nd November 2022.

This report has been prepared as a result of the site inspection.

2.0 DESCRIPTION AND COMMENTS

- 2.1** The existing buildings comprise a number of distinct elements and areas constructed at various times. We would refer you to the key plan as to identification of areas referred to below.

Building A

This appears to be the earliest building on the site comprising solid brickwork construction up to eaves level, 335mm thick up to 2.4M above floor level, and then 215mm thick brick above to eaves level incorporating projecting piers at tie beam locations and splayed brickwork full height to the corners.

On inspection of the brickwork generally, no evidence of defect, settlement, or deformation of the brickwork.

The roof structure comprises tie beams at eaves level together with the roof structure comprising purlins propped off the tie beams supporting rafters spanning ridge to eaves. The roof covering is clay pantiles over roofing felt. No evidence of deformation or defect in the roof structure.

Area B

A later out-shoot on the north elevation of the brick barn. Masonry construction 215mm thick to eaves height, the roof structure comprises tie beams, purlins, and rafters spanning ridge to eaves. No evidence of defect or deformation in the structure.

Area C

A later lean-to extension added to the north elevation of the brick barn, 215mm brick thick construction with a roof structure comprising purlins and rafters. No evidence of deformation or defect.

Area D

Infill monopitch extension linking the east gable of the brick barn with the north gable of Area E, referred to below. This consists of sawn softwood studwork on a brick plinth clad externally with weatherboarding. Again, no evidence of defect or deformation in the structure.

It is understood that the present monopitch roof structure is to be replaced with a pitched roof structure as part of the proposed conversion works as illustrated on the planning application drawings.

Area E

Originally constructed as an open-fronted cart lodge.

North wall, 215mm thick brickwork up to eaves level with tie beam and stud infill above. Towards the eastern end of the wall some localised deformation of the brickwork, possibly related to the mature tree adjacent. Remedial works will be required in this location.

East and south elevations are clad externally with vertical boarding on a timber frame, on a red brick plinth. Internally, these elevations are also clad to provide a smooth surface internally, probably in connection with past use as stabling. No evidence of deformation or defect.

To the open front, facing west, the eaves beam at its point of junction with the north elevation, in the past the end of the beam has suffered rot and a later member has been added to the side of the existing eaves beam to provide adequate support onto the brickwork below. We would suggest further remedial work be carried out to provide a more satisfactory repair.

Area F

This comprises a monopitch roof structure on timber studwork supported on a brick plinth. On further examination it was noted that the plinth is in fact 440mm thick and probably represents the remnants of a much larger structure that previously existed on the site which has now been removed. It is our understanding that the existing monopitched roof structure is to be removed and a pitched roof structure added as part of the proposed works of conversion. We understand that the proposal is to insert additional studs between the existing brick plinth and the existing eaves beam to provide support for cladding.

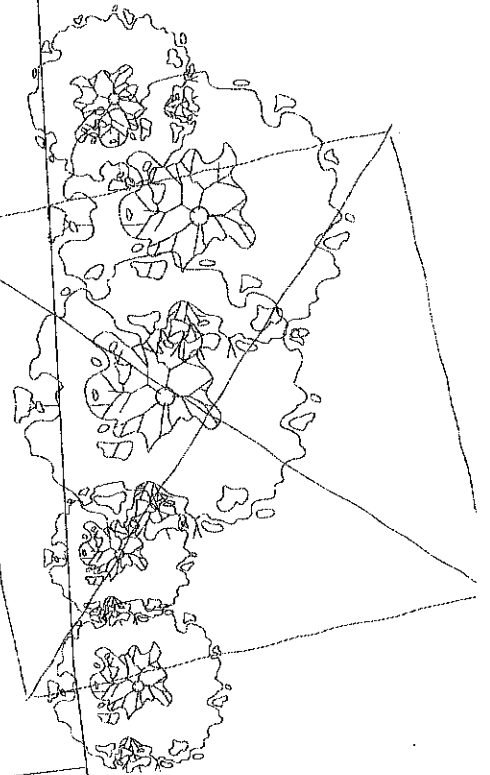
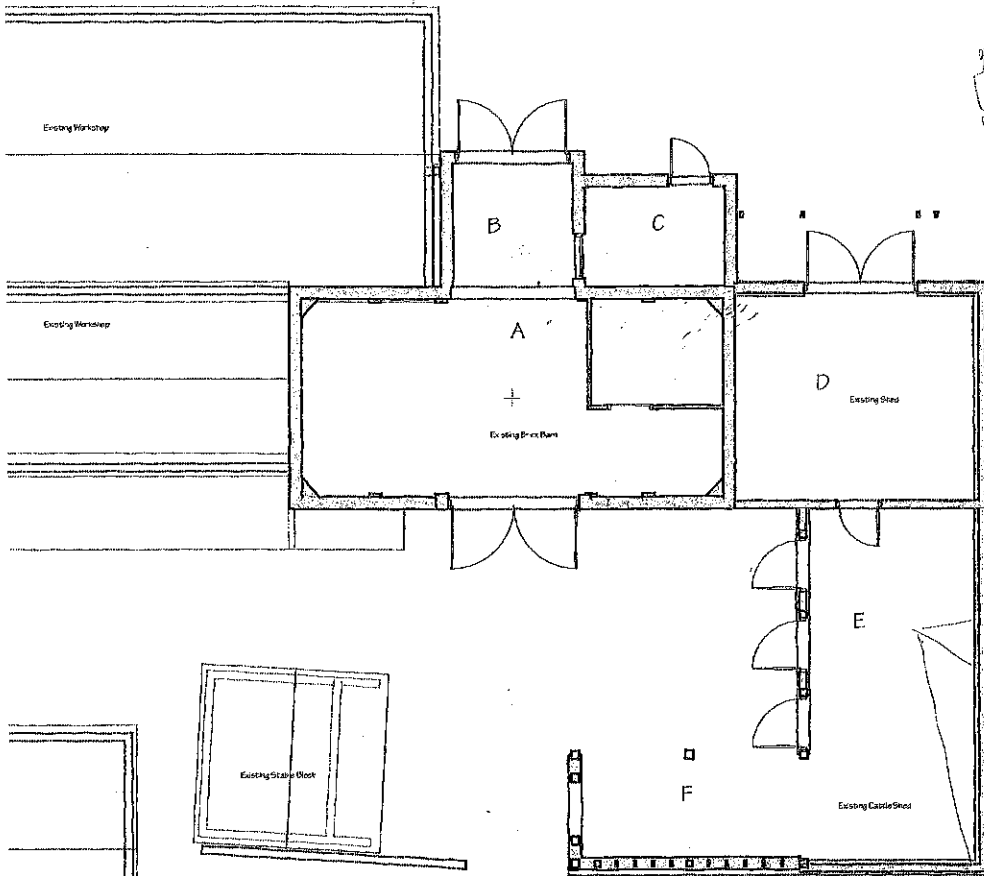
3.0 CONCLUSION AND RECOMMENDATIONS

The main brick-built barn structure is of substantial construction and will provide adequate support to accommodate additional loads imposed by the insertion of a new first floor structure.

With reference to the remaining areas, as noted above, remedial works will be required to the north wall of Area E, together with the end of the eaves beam on the west elevation.

In conclusion, it is considered that the existing structure is suitable for conversion.





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SCALE