



TOPPING ENGINEERS

CONSULTING CIVIL &
STRUCTURAL ENGINEERS

STRUCTURAL INSPECTION REPORT

LOCATION:

The Yews, Dunnington

CLIENT:

Stephensons Rural

DOCUMENT REF:

19035-SIR-001

REVISION/DATE:

Revision A / 21 January 2021

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Revision	Description	Date	Author	Checked
A	First Issue	21.01.2021	DAT	CJB

1.0 BRIEF

Acting on instructions from Stephenson's Rural, Topping Engineers visited the above premises on Friday 8 January 2021 to carry out a visual structural inspection. The purpose of the inspection was to review the existing structural condition to determine the feasibility of residential conversion of the existing farm buildings.

2.0 DESCRIPTION

The Yews is located off Stamford Bridge Road, outside the village of Dunnington near York at NGR SE664531. The site consists of multiple farm buildings of varying ages including a farmhouse and cottage, stables, piggeries, covered courtyard, open cattle shed with two further sheds and further ancillary buildings. The existing arrangement is shown on Charlotte Kitchen Architects drawing 101, which is included in the appendices of this document.

At the time of inspection, the site was unoccupied, and the majority of the buildings were observed to have been disused for a number of years.

For the purpose of this report the existing farmhouse known as The Yews (building F) and Yews Cottage (building E) are existing dwellings with no proposed change of use and are excluded from this report.

3.0 OBSERVATIONS AND COMMENTS

Stables Building B

The building is located immediately north of The Yews farmhouse and attached to the farmhouse at its southern end.

Accommodation and construction is typical of a former stable and this single storey masonry structure is constructed in clay brickwork with a clay pantile covered timber apex roof. Individual spaces are segregated with masonry division walls and predominantly accessed through stable and access doors to the west elevation. The east elevation has a sheet covered extension at the northern end.

The building is currently in a state of disrepair with dilapidation to the roof covering and structure and evidence of structural movement in the walls.

When viewed externally, the roof line is undulating and internally there are numerous holes visible in the pantile covering and consequential decay in some of the structural timbers.

The masonry walls are generally plumb and in line but there is an area of lateral movement on the west elevation. The area is c2-3m wide and affects four courses of masonry (0.9m²).

Stepped diagonal cracking is visible in the cross walls to the northern end of the building, an indication of structural movement at the northern end of the west elevation. Lintels to the west elevation are a mixture of timber and brick arches. The timber lintels were observed to be in a relatively satisfactory condition. The brick arches were observed in a moderate condition such that limited movement was observed and as a minimum the arches would require slate packing using conventional masonry repair techniques.

The condition of the brickwork was observed to be aged and weathered in the most exposed areas, with partially open joints where pointing has eroded. Rainwater goods were observed to be partially missing and in poor order.

The ground floor of the building is generally concrete and typical for the former usage with troughs in some of the spaces.

Building D

The building is located to the west of the Yews farmhouse to the covered courtyard is attached to the west elevation of the building. Construction is loadbearing masonry with a clay pantile covered timber apex roof the building and the building has single and two storey sections.

Generally, the building is aged and weathered with significant deterioration of the building fabric but limited structural movement.

The building ridge and roof lines are well aligned with no obvious significant movements.

Masonry to the building is extensively weathered with large areas of eroded pointing with open joints.

Patch repairs and infills have scarred the masonry in areas of the south gable and east elevation.

Cracking to the spandrel at the change in level between roofs on the east elevation was noted along with displacement of the masonry to the left-hand side of the eastern arch.

On the west elevation movement was noted above the masonry arched lintels along with a small area of missing brickwork and exceptionally high erosion/weathering. The area is limited to say 5m² and requires repair using conventional techniques.

Building C

The building is located north west of The Yews farmhouse and is a brick-built barn with an apex fibre cement roof and partial first floor.

The original apex roof structure has a historic lean-to extension to the north.

Generally, the walls to the original building are plumb and in line. The original southern section of the building is aged and weathered with isolated masonry issues limited to deterioration of cruciform ventilation holes and minor movements around windows.

The lean-to extension has suffered structural movement on the north elevation, visible through previous re-pointing of cracked masonry. No evidence of recent movement was observed.

Internally the first floor has previously been repaired but there is evidence of rot and decay in the original structural timbers. A low steel rail is used to support the floor timbers and the rail is not a conventional structural section.

Buildings A and H – Piggery

These buildings are located to the west of the courtyard and consist of single storey brick barns with fibre cement roof coverings supported by steel and timber trussed roofs.

With the exception of the roof to building H, the remainder of these buildings are in reasonable structural condition where visible. The west elevation of building H is observed by vegetation at the southern end. The timber roof trusses to building H have deteriorated and failed where the roof covering is missing.

4.0 DISCUSSIONS AND CONCLUSIONS

These derelict farm buildings vary in form in age and condition. Our outline assessment is as follows:

Stables Building B

Whilst defects were noted, the building form is suitable for adaptive re-use to residential accommodation, with the exception of the sheeted extension at the north east corner. None of the defects observed would be prohibitive to residential conversion nor would significant re-building be required. We have reviewed Charlotte Kitchen Architect draft proposals, which retain the form of the existing building and confirm the conversion is achievable.

To achieve the conversion, structural repairs would be required to the walls, in particular, the west elevation. A full rake out and re-pointing of the walls would be needed with isolated repairs to lintels. The timber roof clearly requires some repair along with a full strip and re-cover.

Irrespective of conversion, the structural movement in the cross-walls requires investigation and possible repair. The assessment and repair would be necessary to address the issue and not to facilitate the conversion.

Building D

The form of the building is suitable for residential conversion and whilst repairs to the envelope would be necessary, nothing observed is prohibitive to adaptive re-use.

Structural repairs to the masonry would be required along with a full strip and re-cover of the roof, repairs to any defective structural timber and a full re-pointing of the external envelope.

We have reviewed the proposals shown on Charlotte Kitchen Architects drawings, which retain the form of the existing building and confirm the conversion is achievable.

Building C

The form of Building C is suitable for residential conversion. Repairs to address the isolated age-related defects in the original section of the building, would be required along with structural repairs to the north elevation of the historic extension and internal repairs to address any defective structural timber. We have reviewed the proposals shown on Charlotte Kitchen Architects drawings, which retain the form of the building and confirm these proposals are achievable.

Buildings A and H

As previously stated, the buildings are in reasonable structural repair, with the exception of the roof to Building H which would require replacement, irrespective of a conversion to residential accommodation.

We have reviewed the proposals on Charlotte Kitchen Architects drawings, which retain the form of the buildings and confirm the proposals are achievable.

With all of the buildings, conversion to residential accommodation would require upgrade and renewal of all external joinery, new windows, doors, full fabric, repairs and inclusion of new rainwater goods, foul drainage, thermal insulation and new floor slabs. Intrusive structural timber inspections by specialist are recommended during the course of repair and remedial works.

Report prepared by



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BEng (Hons.) CEng MStructE P.G. Dip

5.0 DISCLAIMER

This report is produced solely for the benefit of Stephenson's Rural and no third-party reliance or assignation is accepted. Observations noted herein are only applicable at the time of inspection, and to the areas visible only. There was no recourse to carry out intrusive investigation during this inspection.

Information

All information supplied by the client and the client's staff and professional advisers, local authorities, other statutory bodies and investigation agencies is accepted as being correct unless otherwise specified and is relied upon.

Condition of Buildings

Unless specifically requested we do not arrange for an investigation to be carried out to determine whether or not High Alumina Cement, Calcium Chloride Additive, Fibrous Asbestos any other deleterious material or permanent woodwool shuttering has been used in the construction of this property.

Inspection

We do not inspect those parts of the building or its services which are built in, covered up or otherwise made inaccessible in the normal course of construction, fitting out or occupation and we are therefore unable to report that any such parts of a property are free from rot or infestation, corrosion or other defects.

Enquiries of Local Authorities and Statutory Undertakers

Unless otherwise stated, we assume that all necessary permanent planning and other consents, approvals and permissions have been obtained for the construction and current use of the premises, and that there are no outstanding enforcement or other notices. Any non-compliance with Building Regulations, Offices, Shops and Railways Premises Act, Fire Precautions Act, Defective Premises Act, Health and Safety Acts, Disability Discrimination Act is not established.

Except to the extent noted in this Report we do not make any enquiries of any statutory authorities concerning the present arrangements in the building or the likely effect of the proposed occupation and ask clients to note that the complexity of the building regulations and other statutory enactments often has a material effect on the way in which a building is planned and used and the cost of consequential work.

It is assumed that professional advice will be sought at the appropriate stage to determine any works that may be necessary due to the planned occupation.

Environmental Inspection

Within our report, as appropriate, we may pass comment upon the apparent existence of contamination or pollution at or in the area of the property, the impact of the past, existing or proposed uses of the property on its immediate environment or other environmental issues such as the energy efficiency of the building or the property. Our report does not however constitute an environmental audit or survey, and nothing contained in it should be treated as a statement that there are no contamination or pollution problems relating to the property or confirmation that the property or any process carried out therein complies with existing or proposed legislation or environmental matters. We have not

considered whether there is any current liability to carry out work needed to comply with environmental legislation or any liability which may arise in the future as a result of proposed legislation.

Soil Report

No searches are made with the Coal Authority or other statutory bodies, unless specified to establish that a property is not likely to be affected by subsidence as a result of mining or tunnelling operations.

Unless otherwise specified, mining, geological and soil investigation reports are not undertaken or inspected. We are therefore unable to certify that any land is capable of development or redevelopment at a reasonable cost.

Unless we are instructed to the contrary, we assume that the ground is not contaminated by dangerous materials and no tests or investigations have been instigated in respect of heavy metal or toxic materials.

Repairs

Unless otherwise stated, we do not ascertain whether or not any structural repairs have been carried out, including timber treatment underpinning and strengthening, nor are we able to ascertain whether or not any guarantees exist.

Limitations

Unless otherwise stated, we are unable to ascertain whether a property has ever been flooded, and we are not able to ascertain the existence of any concealed access hatches or voids.

English Law

The formulation, construction, performance, validity and all aspects whatsoever of the inspection, shall be governed by the Laws of England and the parties hereby agreed to submit to the exclusive jurisdiction of the English Courts.

Reproduction and Use

Reports are for the use only of the party to whom they are addressed and should only be used within the context of the instructions under which they are prepared. They may only be disclosed to other professional advisers assisting in respect of that purpose. No responsibility is accepted to any third party for the whole or any part of the contents.

Neither the whole nor any part of the Report or any reference thereto may be included in any published document, circular or statement, or published in any way without written approval from Topping Engineers Limited of the form and context in which it may appear.

6.0 APPENDICES

Appendix A – Photographs

Appendix A

Photographs

STABLES BUILDING B



Courtyard view (West) shows undulating roof line



Dilapidated Rainwater goods



Movement over Door



Movement over Door



Movement over Door



Movement towards West Elevation



Movement towards West Elevation



Movement towards West Elevation



Movement towards West Elevation



Weathering to Gable Wall



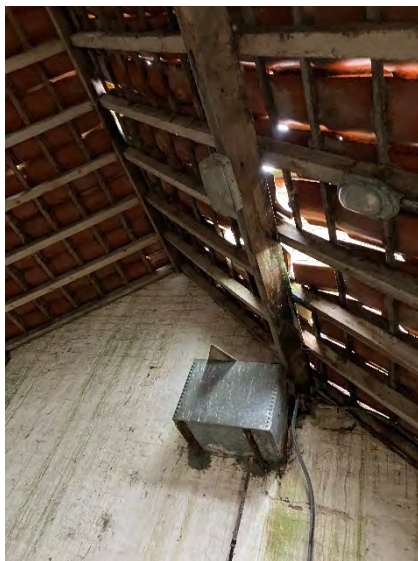
View on Extension



View of East Elevation



View of East Elevation



Dilapidations of Roof



Dilapidations of Roof



Dilapidations of Roof



Lateral movement/damage to West Elevation

BUILDING D



View from Courtyard



General Weathering



View on North Gable



Covered yard Elevation with movement over lintel



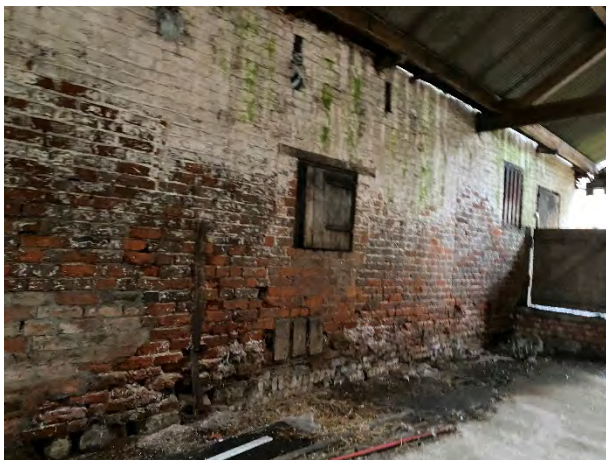
Covered yard Elevation with movement over lintel



Heavily eroded brickwork



Heavily eroded brickwork



Heavily eroded brickwork



Vertical crack



Movement around arch



Arch bearing at junction of two storey section



View on courtyard eaves wall

BUILDING C



View on West Elevation



Movement in North Elevation



Shows junction of the original building and historic extension



View on gable with defects around cruciform ventilation holes



View on gable with defects around cruciform ventilation holes



Views from covered yard (South) with historic adaptations



Views from covered yard (South) with historic adaptations



Defects around ventilation holes



Defects around ventilation holes



Defects in timber partially rectified

BUILDINGS A & H



View on West Elevation



View on South Elevation



View on South Elevation



Internal views



Internal views



Internal views



Poor roof construction



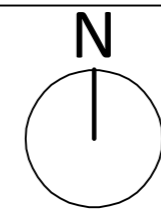
Roof missing/failed



Roof missing/failed

Appendix B

Charlotte Kitchen Architects Drawing



Notes:
As existing drawings based
on survey information
provided by Terra
measurement dated
September 2020.

**ALL DIMENSIONS ARE TO BE
CONFIRMED ON SITE.
DO NOT SCALE FROM
DRAWINGS.**

Key:
— Site area (TBC)
— Proposed units



**ISSUED FOR:
Comment**

Drawing Revision	Date	Description
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Client:
Stephenson Rural

Project:
The Yews, Dunnington

Drawing Title:
Site Block Plan as Existing

Scale:	Date:
1:500@A3	03/11/2020

Project Number:	Drawing Number:	Drawing Revision:
044TYD	101	.

Do not scale from drawings. Check all dimensions on site
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Scale 1:500 @ A3