

STRUCTURAL APPRAISAL

On

**The Forge
Church Street
Ropley
Hampshire SO24 0DS**

For

Lucinda Kelly & Scott Anderson



A Report on a Structural Appraisal of symptoms of distress evident to The Forge, Church Street, Ropley, Hampshire SO24 0DS by BSF Consulting Engineers Limited.

Date: May 2023

Job No. 18517

STATUS

This Report is prepared for the sole use of Lucinda Kelly & Scott Anderson, and their advisors in considering their further course of action. No responsibility can be assumed for this Report if used by others.

For the purposes of the Contracts (Rights of Third Parties) Act 1999 nothing in this Report shall confer on any third party any right to enforce or benefit from any term of this Report.

SYNOPSIS

This Report deals with observations into possible symptoms of distress evident to The Forge, Church Street, Ropley, Hampshire SO24 0DS. The Report details the observations made, draws conclusions, and makes recommendations.

INTRODUCTION

BSF Consulting Engineers Ltd were commissioned by Lucinda Kelly & Scott Anderson and were requested to carry out a structural appraisal of The Forge, Church Street, Ropley, Hampshire SO24 0DS.

A visit was made to the property on 23rd May 2023

Our instructions were limited to a structural appraisal and visual inspection. This document is not to be considered as a full building survey.

Woodwork or other parts of the structure which are covered, unexposed or inaccessible were not inspected and therefore it is not possible to report that any such part of the building is free from defect.

The purpose of this Report is not to highlight matters such as the state of the decorations, and minor shrinkage cracks normally repaired during decoration, but to examine the structural integrity of the building. It maybe therefore, that not all cracks or defects are listed and defective cosmetic items readily visible may not be itemised.

No site investigations have been carried out to determine whether or not any deleterious or hazardous material is present on site and therefore we are unable to report that the site is free from such risks.

All costings contained within this Report are approximate and quotations should be sought from reputable contractors.

GENERAL OBSERVATIONS

The property known as The Forge, Church Street, Ropley, Hampshire SO24 0DS is a brick masonry detached dwelling with the roof pitched front to rear covered in handmade clay plain tiles and mortar bedded Hodgskiss ridge tiles. There is a gable to each end, with a brick chimney to the top of each gable.

Looking at the property from the road, to the right is a converted stable block which is the same brick masonry construction, pitched front to rear with a hip end on the right hand side and is laid with slate.



The roof over this area was re-roofed during the 1990/2000 with bitumen BS747 Type 1F roofing felt. The roof to The Forge was re-roofed circa 1970/1980 with a bitumen membrane without hessian strips.



The lathes are machine cut. The lathes are $\frac{1}{2}$ " x $\frac{3}{4}$ " untreated which indicates they are from the late 1970's / early 1980's.

To the left hand side of the building is The Forge which is single storey, solid brick masonry construction with handmade clay plain tiles to the roof and half round Hogsback clay ridge tiles.



To the left of The Forge is a modern flat roof construction which is utilised as a garage. This area was not assessed within this Report.

The kitchen to the right hand side of the building under the slate roof has a new concrete wall separating the kitchen from the shed area. This wall is not supporting.

The main roof looks to be in a good condition with cement flashings around the chimney which appear to have pulled away from the chimneys.

The wooden pegs holding the tiles on have been replaced with iron peg drops.



The perimeters of the roof are very untidy.

There is damp within the main property adjacent to the entrance through into The Forge due to water overflowing from the main roof valley and gutter system splashing on to the area of tiling and back up against the wall. This is allowing the water to soak back through the wall.

The main issue within The Forge is that the front wall has pushed out. The cause of this movement is that the front elevation of the roof having no gutter, allowing the water to discharge to ground, washing the earth away therefore undermining the wall, causing the movement.



The movement has resulted in the timber tie pulling forward and putting pressure on the wall plate, which has a joint at the point of the tie bearing. The wall plate has been pulled inwards allowing the three courses of brick above the lintel over the window to also be pulled forward as evidenced by cracking.



As a separate issue, the timber lintel above the window is undersized causing deflection. There is also evidence of wood boring insect infestation which has weakened the timber.

The front wall has stabilised, possibly since guttering was added and in the Surveyors Report which included a picture taken during the 1940's the wall was at the same angle as it currently is.

Within The Forge, several lintels have dropped.



To the rear of the property is a crack in the corner which is evident within the living room which is caused by movement due to the water overflowing from the valley to the main roof.



Over the years several areas of lime mortar have been replaced with sand and cement. This should be carefully removed and replaced with lime mortar.



CONCLUSIONS

Most of the issues within the property are caused by defective rainwater goods.

RECOMMENDATIONS

We recommend the following course of action:-

1. Review and renew where necessary with adequate rainwater goods to the whole property.
2. The roof above the kitchen requires new flashing where the slate roof joins the gable wall to the main house, new tile flaunch with cut down lead soakers.
3. The main roof requires a minor overhaul with new tile flashings around both chimneys, again with cut down lead soakers.
4. The gable wall to the main house adjacent to The Forge, requires the cement rendering to be removed and replaced with lime rendering.
5. The lead soakers where The Forge roof meets the gable wall of the main house area adequate, so the flashing can be formed using expanding metal lathe render-stop prior to new lime rendering being applied.
6. The roof of The Forge needs an overhaul. Ridge tiles needs to be checked and re-bedded where necessary, the moss needs to be carefully removed, any broken tiles replaced and the eaves to both front and back need to be replaced with a new timber fillet. The tiles should be cut so they fit vertically in the centre of the new guttering.
7. The external wall plate needs to be removed and replaced with a larger plate or steel, strapped to the inner wall plate which has moved with the timber tie, strapped to arrest any further movement.
8. The works to the internal fabric of The Forge should consist of propping to the front of the building to temporarily stop the front wall from moving, underpinning of the front of the building to arrest any further movement of the front wall and the wall plate at the rear of the property replaced.

9. The lintel above the window should be replaced with a larger piece of timber, possibly of Oak with the brickwork re-bedded using reclaimed bricks that match in colour and texture, with lime mortar.

10. The lintel on the other window should also be replaced in the same manner.

11. Repoint with lime mortar.

12. The crack in the rear wall, externally, requires repointing with lime mortar. Internally, three Helifix bars to be installed across the crack at a height of approximately 500mm, 1000mm and 1500mm above floor level in the mortar joints. The guttering above requires adjustment to stop any overflow.

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