

Our Ref: 232777/TDent/mz
Your Ref: MUK.227980

Enquiries to: Tom Denton
Mobile: [REDACTED]
Email: tom.denton@gateleymitherspurslow.com

6 November 2023

McLarens
76 King Street
Manchester
M2 4NH

by email only: Paul.Taylor@mclarens.com

For the attention of Paul Taylor

Dear Sirs

Re: 27 HIGH STREET, BARFORD, WARWICK CV35 8BU

Thank you for your recent instruction when we were asked to carry out an inspection in respect of the damage at the subject property.

We confirm our Mr Tom Denton visited the property on Monday, 30 October 2023 and met with .

This report is based on a visual inspection only with no opening up or exploratory works carried out within the property and is limited to the nature of instruction.

All references to left and right-hand sides are as facing the front elevation of the property unless otherwise stated.

1.0 PROPERTY DESCRIPTION

- 1.1 The subject property is a large, detached, two-storey property of traditional construction with brick and stone block walls. There is cross hipped roof and cross gable roof with a tile covering.
- 1.2 The property has been extended to the front and right-hand side elevations. To the single-storey addition on the right-hand side elevation, a flat roof has been installed.
- 1.3 The damage is focused to the right-hand side single-storey addition and adjoining right-hand elevation of the property.

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1.0 PROPERTY DESCRIPTION

- 1.4 With reference to BGS mapping (British Geological Survey Service), the property is located on the Mercia Mudstone Group. The high plasticity clays within the mudstone are prone to shrinking/swelling caused by changes in ground water conditions. During extended periods of dry weather, the clays within the mudstone formation are susceptible to shrinkage especially in the presence of vegetation with a high moisture demand.
- 1.5 There are several mature trees in close proximity to the area of damage. This includes a 16m tall spruce tree situated 4m away from the right-hand side elevation on the neighbouring property. There are also several large mature trees to the front garden. These trees are within influencing distance. During dry periods, the roots of the trees may extend beyond their usual spread to survive.
- 1.6 There is drainage proximate to the right-hand side elevation of the property and running directly below the single-storey addition which is the area of damage.

2.0 BACKGROUND INFORMATION

- 2.1 It was confirmed there have been no recent structural alterations made to area of the property where the damage has occurred.
- 2.2 We were informed that the occupier noticed the cracks starting to appear in the right-hand side single-storey addition in early October 2023 and they continued to worsen over recent weeks.
- 2.3 Gateley Smithers Purslow are appointed to form a report on causation and remedy for the cracking observed.

3.0 OBSERVATIONS

External

- 3.1 To the front elevation of the right-hand side single-storey addition, there is tapered vertical cracking in the junction between the main house and left-hand side wall of the single-storey addition that runs from the soffit down to the mid-section of the wall. The opening varies from 3mm to 10mm. This is mirrored internally to the front wall of the garage/workshop.
- 3.2 To the front elevation of the right-hand side single-storey addition, there is stepped cracking in the stonework above the window opening that runs from the top right corner of the window opening to the front right-hand corner of the wall. The opening varies from 1mm to 3mm.

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3.0 OBSERVATIONS

External Cont'd.../

- 3.3 To the right-hand side elevation of the right-hand side single-storey addition, there is stepped cracking in the stonework to the left-hand side of the garage/workshop window opening that runs from the left edge of the window frame down to the ground. The opening varies from 2mm to 4mm.
- 3.4 To the right-hand side elevation of the right-hand side single-storey addition, there is stepped cracking in the stonework above the top left-hand corner of the garage/workshop window opening that runs from the top left corner of the window frame up to the soffit. The opening varies from 1mm to 2mm.
- 3.5 To the right-hand side elevation of the right-hand side single-storey addition, there is stepped cracking in the stonework below the bottom right-hand corner of the utility/second kitchen window opening that runs from the bottom right corner of the window frame to the ground. The opening varies from 2mm to 4mm.
- 3.6 To the right-hand side elevation of the right-hand side single-storey addition, there is stepped cracking in the stonework above the top right-hand corner of the utility/second kitchen window opening that runs from the top right corner of the window frame up to the soffit. The opening varies from 1mm to 2mm.
- 3.7 To the right-hand side elevation of the right-hand side single-storey addition, there is stepped cracking in the stonework above the top right-hand corner of external door opening that runs from the right side of the door frame up to the soffit. The opening varies from 1mm to 2mm. This is mirrored internally with cracking around the external door opening within the entrance area.
- 3.8 To the front elevation two-storey addition, there is stepped cracking in the stonework that runs from below the first floor window opening down towards the front right-hand corner of the extension. The opening varies from 3mm to 5mm.

Internal

- 3.9 To the front wall of the single-storey right-hand side addition garage/workshop, there is tapered vertical cracking to the front left corner at the junction to the main property. The opening varies from 2mm–4mm.
- 3.10 To the rear wall of the single-storey right-hand side addition garage/workshop, there is tapered vertical cracking to the rear left corner at the junction to the main property adjacent to the internal doorway leading to the entrance area. The opening varies from 3mm–4mm.

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3.0 OBSERVATIONS

Internal Cont'd.../

- 3.11 To the right wall of the single-storey right-hand side addition entrance area, there is a diagonal cracking above the top corner of the external door opening and cracking around the external door frame at the junction with the plaster. The opening varies from 1mm–2mm.
- 3.12 To the left wall of the single-storey right-hand side addition entrance area, there is a vertical cracking that runs up the junction between the left wall of the single-storey addition and the main property with the cracking running through the wall and ceiling junction. The opening varies from 2mm–4mm.
- 3.13 To the right-hand side single-storey addition, there is cracking in the floor tiles at the internal door opening to the main property. The crack runs the full width of the internal door opening. The cracking is 1mm–2mm.
- 3.14 To the front wall of the of the single-storey right-hand side addition second kitchen/utility area, there is a diagonal crack that runs from the top left corner of the door opening up to the wall and ceiling junction. The opening varies from 1mm–3mm.
- 3.15 There is drainage that runs below the single-storey right-hand side addition with a manhole cover located in the front garage/workshop area.

4.0 CONCLUSIONS & RECOMMENDATIONS

- 4.1 Based on the location and appearance of the cracking, the damage to the single-storey right-hand side addition is seen to relate to subsidence.
- 4.2 Crack and level monitoring is recommended to assess the extent of the subsidence. It will also serve as a diagnostic tool to understand the severity of the subsidence to lead to an appropriate remedy, which is most likely going to involve tree work and/or drainage repairs.
- 4.3 Site investigations are recommended to confirm causation and will be focussed to the front and right-hand side elevations of the property, including trial pits, soil and root testing. This data can be sent to an arboriculturist to form a report if any tree work is needed.
- 4.4 Site investigations will include a CCTV drainage survey and pressure test local to the front and right-hand side of the property including the drainage running under the single-storey addition.

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4.0 CONCLUSIONS & RECOMMENDATIONS

4.5 Costs of site investigations, monitoring and an arboricultural report are likely to be £3,500.00 plus VAT.

We trust the above meets with your approval, however, should you wish to discuss any aspects in greater detail, please do not hesitate to contact the writer.

Yours faithfully

GATELEY SMITHERS PURSLOW



TOM DENTON
Graduate Building Surveyor

Encs Photographic Plates (overleaf)

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PHOTOGRAPHIC PLATES



Plate 1. Front elevation.



Plate 2. Rear elevation.

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Plate 3. Single-storey addition right-hand elevation.

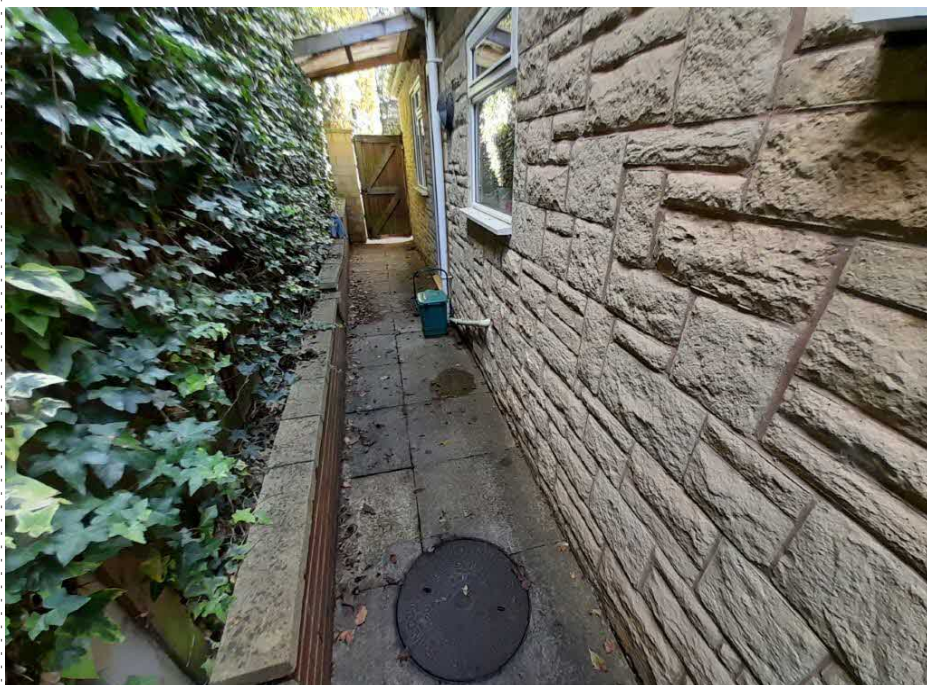


Plate 4. Drainage to right-hand elevation.



Plate 5. Mature trees to front and right-hand elevations.

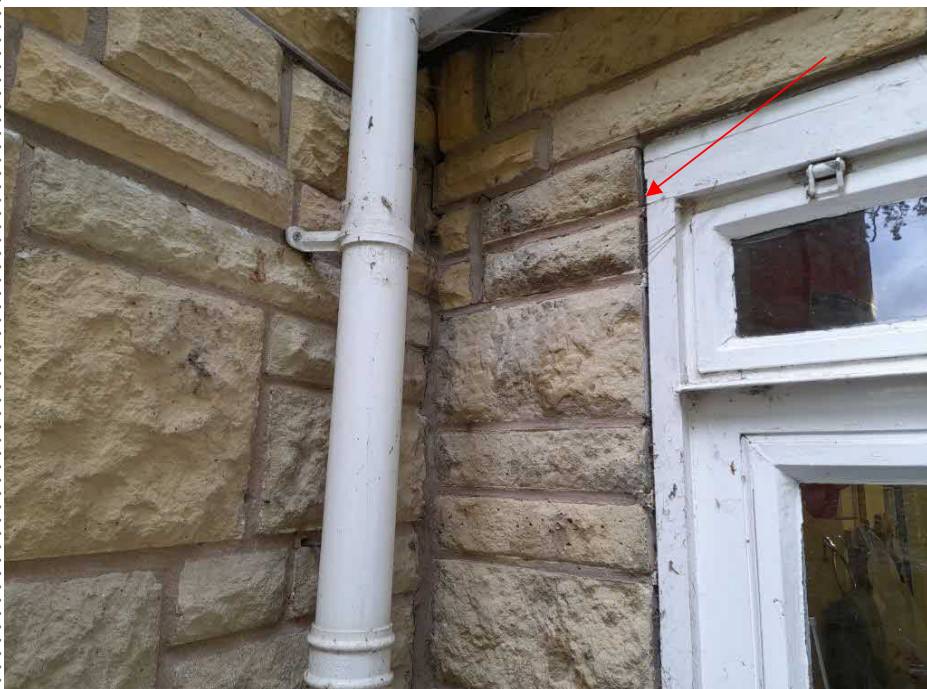


Plate 6. Vertical cracking to front elevation of single-storey addition.



Plate 7. Stepped cracking front elevation of single-storey addition.



Plate 8. Stepped cracking to right-hand elevation of single-storey addition (garage/workshop).



Plate 9. Stepped cracking above single-storey right-hand elevation window (garage/workshop).

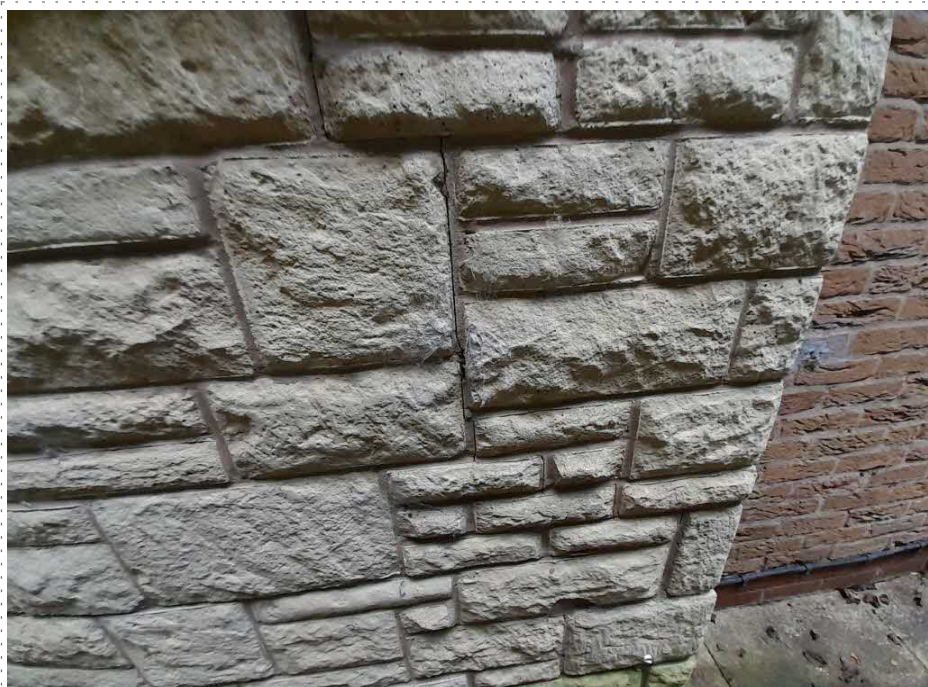


Plate 10. Stepped cracking below single-storey right-hand elevation window (utility).



Plate 11. Stepped cracking above single-storey right-hand elevation window (utility).



Plate 12. Vertical cracking to right-side single-storey addition external door opening.

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Plate 13. Vertical crack to front wall of garage/workshop at junction with original property.



Plate 14. Vertical crack to rear wall of garage/workshop at junction with original property.

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Plate 15. Diagonal crack above external door opening.



Plate 16. Cracking to junction between single-storey addition and main property.

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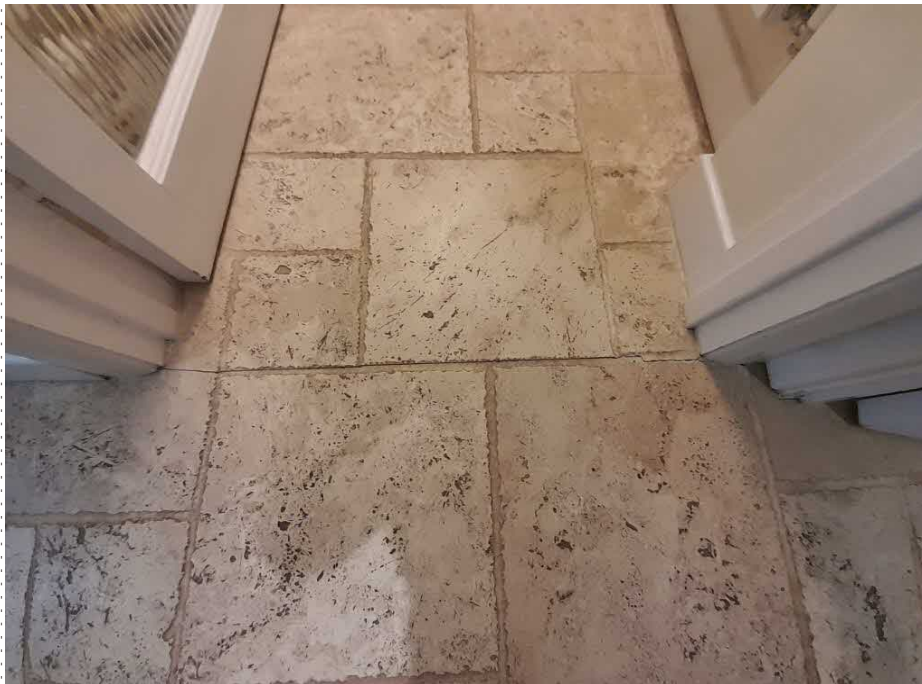


Plate 17. Cracking to floor tile.



Plate 18. Diagonal cracking above second kitchen door.