We refer to all recent correspondence in relation to your claim and as means of an update, we can advise that we are now in receipt of the site investigation report and a copy of our findings are below.

Nature and Extent of Damage

Rotational movement and associated cracking and separation affecting the left hand extension.

Trial Hole 1

A trial hole was excavated against the front elevation of the left extension, which revealed a concrete slab foundation with an overall founding depth of approximately 200mm below ground level. It is likely that this may be a pad and beam arrangement to bridge over the drainage system. It was seated upon moist firm brown sandy fine to course gravelly silty clay.

The trial hole was extended by hand auger to a depth of 3100mm below ground level. Soils within the borehole are described as moist and very stiff brown fine to medium gravelly silty clay.

Trial Hole 2

A trial hole was excavated against the rear elevation of the left extension and revealed a concrete strip foundation with an overall founding depth of approximately 700mm below ground level. It is seated upon moist very stiff brown sandy fine to medium gravelly silty clay.

The trial hole was extended by hand auger to a depth of approximately 2600mm below ground level where it struck mudstone and was unable to pass further. Soils similar to that found at the base of the foundation were recorded throughout the excavation.

Trial Hole 3

A remote borehole was excavated by hand auger in the front drive to an overall depth of approximately 3100mm below ground level. Throughout the excavation, a moist very stiff gravelly silty clay soil was recorded.

Laboratory Analysis

Analysis of soil samples have shown soils at the onset of desiccation when comparing the moisture content to the liquid limit of each of the samples. Suction testing provides more useful information. This clearly demonstrates quite significant influence on the part of nearby vegetation at a depth of 2200mm below ground level in Trial Hole 1 and from the underside of the foundation down to 1700mm below ground level in Trial Hole 2. Trial Hole 3 provides a useful comparison showing extremely low suction values throughout its excavation. Trial Hole 3 is remote from the area of concern and nearby trees.

Samples of roots have been retrieved from both Trial Holes 1 and 2 that have been identified as emanating from Quercus which includes Oak trees.

CCTV Drainage Survey

The investigating contractors were unable to survey the entire drain due to a lack of access. There is a buried inspection chamber below the extension, and it will be necessary to break into the system within the extension to survey it further. However, there is evidence to suggest that the drains here are in modern plastic materials and it would seem unnecessary to undertake such disruptive further investigation. This is particularly the case when one considers that there is no evidence of overwatering from the drains in either of the excavations.

Of some slight concern was the fact that the rainwater pipe to the rear left side of the extension was observed to discharge directly into the ground. This should be re-routed into a drainage system (if the system is combined foul and surface water) or to a

soakaway. We do not consider this is influential; however, considering the moisture content observed in the soil sampling and analysis, we would recommend that you complete these works at your earliest convenience.

Level Monitoring

The level monitoring from September 2021 to November 2023 shows a typical pattern of cyclical subsidence movement to the foundations. There is an initial recovery in 2021/22 but then in the hot dry summer of 22 the level readings dropped significantly by September 2022.

There was a recovery again in the winter of 2022/23 then further downward movement this summer which was most significant at pins 12 and 13 located on the rear wall of the rear extension of this property. This is nearest to T2 the oak tree at the rear.

Extent of Damage

The extent of external and internal crack damage at this property is within BRE Digest 251, category 2 (slight).

Conclusion

Based on foregoing, we consider that the movement to the extension is due to shrinkage of the underlying clay soil exacerbated by moisture extraction by the roots of the nearby Oak tree.

Liability Considerations

At this stage, we can confirm that a valid subsidence claim has been accepted for the reported damage. The claim is subject to the policy terms and conditions as well as the application of the [redacted] policy excess.

Further Evidence

The arborists confirmed that there are two trees implicated, one, a Cypress, being owned by a domestic third party and this was removed in June 2021. We moved to repair the property, as the monitoring showed stability following the tree removal. However, further movement was noted. The other tree implicated is an Oak, owned by the Local Authority.

The readings show cyclical movement. During the summer of 2023, this showed downward subsidence movement, particularly at points 8, 12 and 13, which are closest to the Oak tree. The readings have started to recover, which ties in with the wetter weather experienced past October.

Therefore, the property will not stabilise unless the Local Authority Oak tree is removed.

If the tree is not removed, we will have to consider a stabilisation scheme that will likely cost over £50-60,000.00. However, if the tree is removed, we will be looking at repairs in the region of £20,000.00.

Edsel Meneaud MRICS MBuildE CABE

Chartered Building Surveyor and Building Engineer