

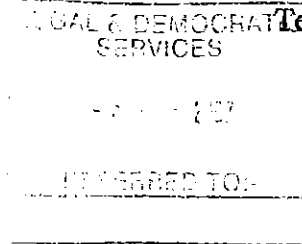
Appendix 3

50 Lea Green Lane
Wythall
Birmingham B47 6HN
1st August 2007

LEGAL & DEMOCRATIC SERVICES
Tel 01564 824486

Your Ref. PR/PL171

Mrs V Brown
Bromsgrove District Council,
The Council House,
Burcot Lane,
Bromsgrove. B60 1AA



Oak Tree on Land at 48, Lea Green Lane, Wythall, B47 6HW

Dear Mrs Brown,

Like most people these days I am aware of the value of trees to our environment and would normally wish to preserve rather than destroy. On this occasion I wish to object to the Interim Preservation Order (No.8) placed on the tree at 48, Lea Green Lane for the following reasons.

During the hot dry summer of 2006 serious cracks, up to 7mm, opened in my Dining room which is situated closest to this Oak Tree. I contacted both my Insurance Co and Mr Steve Jones who very promptly came to inspect the damage. He agreed the cracking was significant and as bad as he had seen in this area. He was unable to put me into contact with an ex colleague of his who could have given me an independent "expert" assessment on possible causes. The appearance of nearby plants and shrubs confirmed that the ground in this area had become extremely dehydrated.

The Insurance Company appointed Cunningham Lindsey (and OCA) to carry out an assessment in the form of test measurements and trial borings at the front and back of the Dining Room. A copy of this report is being sent to you by OCA but I enclose the 3 relevant pages that describe the contribution of The Oak Tree in drying out the soil, which subsequently led to the cracking.

I am objecting to the preservation order as this evidence presented to me strongly suggests that The Oak Tree is the major contributor to the cracking problem. Its removal would minimise the chance of further cracking in periods of very dry weather.

I look forward to your response in due course and if Mr Jones wishes to inspect the cracks again please feel free to contact me.

Yours faithfully,

K C Butt

History and Timing of Damage:

We are advised that damage appeared suddenly during summer 2005. A builder was asked to inspect the damage, reporting it may be subsidence related and that insurers should be notified.

Engineers Description of damage and diagnosed mechanism of movement:

The main area of damage is to the right hand flank of the front right flank of the front right hand extension and takes the form of tapering diagonal cracks externally and internally. The level of damage is classified as category 3 in accordance with BRE Digest 251-"Assessment of damage in low-rise buildings" (1995).

The pattern of damage indicates a mechanism of downwards movement to the right hand side.

Review of Site Investigations:

Excavation in Trial Pit 1 to the front right hand corner of the single storey elevation revealed that foundations extend to a depth of 1000mm. Beyond this depth the ground is described as a very stiff, mid-brown, mottled grey, very silty clay.

Excavation in Trial Pit 2 to the right hand side of the main building elevation revealed that foundations extend to a depth of 1000mm. Beyond this depth the ground is described as a very stiff, mid-brown, mottled grey, sandy, very silty clay.

Modified Plasticity Indices range between 12% and 39% between both Trial Pit/Borehole 1 and 2 to the right hand side of the property. The soil is classified as being of low to medium plasticity (NHBC 4.2 (1999)) i.e. it is capable of significant volume change.

The soils analysis results clearly demonstrate desiccation in both Trial Pit/Borehole 1 and 2 underside of foundations. In particular the Moisture Content of the soil is below that of the Plastic Limit, which results in a negative Liquidity Index. Also the observed Moisture Content Profile displays a characteristic bulge with depth in Trial Pit 2.

Roots were observed in Trial Pit 1 and to a depth of 1400mm and to a depth of 2500mm in Trial Pit 2. Samples of these roots were taken from both trial pits. These samples were formally identified as having emanated from *Quercus* (Oak).

The integrity of the drainage system is confirmed by shear vane analysis of the soils which are classified as stiff indicating that the soils are capable of withstanding the load applied and that damage cannot be attributed to damaged or leaking drains.

Cause of damage:

We are advised by Chartered Engineers that based on the evidence detailed above, in their professional opinion the damage to the property has occurred due to clay shrinkage subsidence. This has been exacerbated by moisture abstraction by roots altering the moisture content of the clay subsoil resulting in volume changes, which in turn have affected the stability of foundations.

Engineers consider that the damage will not progress if appropriate measures are taken to remove the cause.

NB Recommendations with respect to tree felling are associated only with the risk address following consultation with engineers who must consider the issue of ground heave following tree removal. The owners of trees in third party control must obtain their own advice in respect of the possibility of any damage to their own structure or any other structure outside the control of our client or their insured.

General Observations and Opinion:

The timing, type and mechanism of damage and the description of subsoil as clay are all consistent with vegetation related clay subsidence.

Investigations have revealed that foundations of the damaged property bear onto clay soils of low to medium plasticity i.e. soil capable of significant volume change.

Soils analysis indicates desiccation underside of foundations. In particular the Moisture Content of the soil is below that of the Plastic Limit, which results in a negative Liquidity Index. Also the observed Moisture Content Profile displays a characteristic bulge with depth in Trial Pit 2.

Roots emanating from *Quercus* (Oak) were identified underside of foundations. Taking into account all the available evidence and following our survey of the site it is our opinion that these roots emanate from the Oak tree (T1) as indicated on our plan.

Cypress roots have been identified and associated with subsidence claims at distances of up to 20m (Cutler & Richardson, 1989) however, in the majority of cases the damage occurred when the trees were in close proximity to the property.

In this instance we consider that removal of the Oak tree (T1) and the group of Cypress trees (G1) will be sufficient to mitigate in the current subsidence event.

Recommended vegetation management to address the current subsidence:

| No: | Species | Works Required | Ownership | *Est. Cost of Tree works |
|-----|---------|---|-----------|--------------------------|
| T1 | Oak | Fell to ground level and treat stump to prevent re-growth | 3P | £750.00 |
| G1 | Cypress | Fell to ground level | 3P | £350.00 |

* Estimated cost of tree works should not be regarded as a firm quotation.

We have made enquiries with the local authority to determine if any statutory controls exist in respect of the trees implicated. We are currently awaiting their response.

Recommended vegetation management to address risk of future subsidence:

We do not consider any vegetation to present an imminent foreseeable risk of future subsidence.

NB: Recommendations with respect to tree felling are associated only with the risk address following consultation with engineers who must consider the issue of ground heave following tree removal. The owners of trees in third party control must obtain their own advice in respect of the possibility of any damage to their own structure or any other structure outside the control of our client or their insured.

Vegetation Survey

| | |
|------------------------------------|--|
| Age Class | Y-Young / EM-Early Mature / M-Mature / FM-Fully Mature / OM-Over Mature |
| Condition | A - Good / B - Minor problems / C - Major problems / D - Dead / Dying / Dangerous |
| Height / Crown Spread / Dimensions | Approximate measurements |
| Owner | (PI) Within property boundary / (3) 3rd Party / (L.A) Local Authority / (.) Unknown |
| Vegetation | (T) Tree / (G) Group / (W) Woodland / (H) Hedge / (S) Shrub / (C) Climber / (SU) Stump |

The trees have been assessed from ground level

| Tree No. | Species | Age Class | Cond. | Height (m) | Crown Spread (m) | Diam. (mm) | Dist. to bldg (m) | Owner |
|-----------|---------|-----------|-------|------------|------------------|------------|-------------------|-------|
| G1 | Cypress | EM | B | 3.0 | - | 100 | 0.75 | 3P |
| Comments: | | | | | | | | |

| Tree No. | Species | Age Class | Cond. | Height (m) | Crown Spread (m) | Diam. (mm) | Dist. to bldg (m) | Owner |
|-----------|---------|-----------|-------|------------|------------------|------------|-------------------|-------|
| T1 | Oak | EM | B | 12.7 | 10.0 | 450 | 9.0 | 3P |
| Comments: | | | | | | | | |