

Description of Development:

Fell one oak tree in front garden. SUBJECT TO TPO 2459

Considerations

This application has been made by an arboricultural consultant acting for insurers of the adjoining property, no.8 Crab Hill. Originally the application was to fell two oak trees in the front garden of no.10. It was alleged that the trees are implicated in subsidence of no.8. The two oak trees are growing on the front boundary of the front garden of no.10, they are both about 18 metres in height, have been previously pollarded and have regrown a full canopy. They are in a reasonably healthy condition, are highly visible in the street scene and are at the end of a line of oaks in several front gardens. The trees that are the subject of this application are numbered 1 and 2 in the reports accompanying the application; no.1 is that which is closest to the area of damage. The trees are 15 and 18 metres from no 8. This is a two storey detached house of traditional construction with rendered walls and hipped tiled roof built in the 1930s, it has two conservatories at the rear and an attached garage at the side closest to no.10. The damage to the property is to the front elevation and the front of the attached garage where there is downward movement.

Cracking was first noticed in September 2011 and became rapidly worse. The damage falls within category 3 which is described as moderate (the categories run from 1, very slight to 5 very severe). The pattern and nature of the cracks is indicative of subsidence. The drains and water main have been investigated and are not a contributory factor.

Trial holes have been dug at the front of the property and the foundations are 750mm under the front bay and 800mm beside the front corner of the house adjacent to the garage. The soil in both was found to be desiccated highly shrinkable clay. Roots were also found in both trial holes and have been identified as oak.

Level monitoring has been carried out and this indicates seasonal movement, with upward movement as the clay swells during the wetter winter weather and downward as the clay shrinks in the drier summer months.

As there were two oak trees implicated DNA tests were requested. Twig samples were taken from both trees and were compared to root samples taken from both trial holes. These results show that the roots from T.1 (closest to no.8) were those found in the trial hole. There was no correlation with T.2. On the basis of this the application has been amended to the felling of one oak tree only, the tree proposed to be felled is T>1, the tree closest to no.8.

Concerns have been raised that a root barrier could be installed rather than felling the tree. The agent has confirmed that a root barrier will only be considered if the Council refuse consent. However root barriers are expensive and disruptive to install and are not always successful.

There have been a considerable number of objections to this application, including the owners of the trees. They have advised that their property was underpinned in 1990 and several other properties in the road have also been underpinned. During the 1990s

and earlier it was not necessary to fell trees and insurance companies carried out underpinning. However recent cases involving trees and subsidence almost always seek felling if implicated trees. If implicated trees are felled properties are repaired and no underpinning is done. However where trees are retained properties are almost always underpinned and if the tree is covered by TPO and the Council has refused consent compensation for the additional costs of underpinning are sought from the Council.

Concerns have been raised that the level monitoring used a temporary benchmark on the side of no.8. The fact that this is part of the house which is moving rather than using a stable fixed point was queried with the agent and he has replied that the test results show a clear pattern of movement and there is no sign that the readings are inaccurate because of the temporary benchmark. This datum point was chosen by specialist monitoring contractors as appropriate. The movement relative to the datum point is measured rather than movement to a fixed point.

The clay soil in this area has the ability to swell and shrink during wet and dry periods of weather and this movement can be exacerbated by the presence of trees. The evidence in this case shows that there is movement to number 8 and this is related to shrinkage of the clay under the foundations. The evidence also shows that roots from T.1 have been found under the foundations of no.8 and are implicated in the movement. Whilst other roots (the source is unidentified) have been found there is undisputable evidence that roots from T.1 have been found in both bore holes beside the house and the tree is an influencing factor in the movement of the property.

As indicated above, under the terms of the legislation protecting trees, an owner can claim compensation where consent to work on a protected tree is either refused or given subject to conditions. Compensation is only payable if it can be demonstrated that any loss or damage is as a result of the Council's decision. Where a tree is implicated in subsidence compensation payments are based on the additional costs of repairing the building, this is usually underpinning. In this case the comparative costs of repairs have been estimated at £12,000 if the tree was to be removed and £88,000 if the tree was retained. Therefore if consent were to be refused a compensation claim could be in the region of £76,000 that is the costs of underpinning and other associated costs. Also if consent was refused the Council could not insist on the installation of a root barrier.

Conclusion

There is clear evidence showing that no.8 has suffered subsidence and there is also clear evidence linking this damage to T.1. However the DNA evidence does not show a link to T.2 and this tree has been removed from the application.

DECISION CONSENT CONDITIONS

**B09 - Tree Commencement
B06 – Replacement Planting**

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Considerations

This application was considered at the Plans Sub Committee meeting of 13th June and the making of a decision was deferred to seek the views of the applicant in respect of a root barrier. This information has been provided.

The previous report is repeated:

"The application has been made by an arboricultural consultant acting for insurers of the adjoining property, no.8 Crab Hill. Originally the application was to fell two oak trees in the front garden of no.10. It was alleged that the trees are implicated in subsidence of no.8. The two oak trees are growing on the front boundary of the front garden of no.10, they are both about 18 metres in height, have been previously pollarded and have regrown a full canopy. They are in a reasonably healthy condition, are highly visible in the street scene and are at the end of a line of oaks in several front gardens. The trees that are the subject of this application are numbered 1 and 2 in the reports accompanying the application; no.1 is that which is closest to the area of damage. The trees are 15 and 18 metres from no 8. This is a two storey detached house of traditional construction with rendered walls and hipped tiled roof built in the 1930s, it has two conservatories at the rear and an attached garage at the side closest to no.10. The damage to the property is to the front elevation and the front of the attached garage where there is downward movement.

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refuse consent. However root barriers are expensive and disruptive to install and are not always successful.

There have been a considerable number of objections to this application, including the owners of the trees. They have advised that their property was underpinned in 1990 and several other properties in the road have also been underpinned. During the 1990s and earlier it was not considered necessary to fell trees and insurance companies carried out underpinning. However recent cases involving trees and subsidence almost always seek felling of implicated trees. If implicated trees are felled properties are repaired and no underpinning is done. However where trees are retained properties are almost always underpinned and if the tree is covered by TPO and the Council has refused consent compensation for the additional costs of underpinning are sought from the Council.

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Comments on the above report have been made on behalf of the owners of the tree as follows:

1. The figures about the depth of foundations are misleading and it is pointed out that the foundations are typical of properties of this age, making the buildings vulnerable to movement in dry periods. Many of the properties in Downs Hill have been underpinned.

In response the figures are those provided as part of a number of technical reports accompanying the application. It is agreed that the construction is typical for properties built in the 1930s and that the houses in the area do suffer movement. However this is not in dispute, the application has been made because the reports obtained on behalf of the insurers of no.8 clearly demonstrate that the oak tree at the front of no.10 is a contributory factor in the movement.

2. The distances of the trees from the building is disputed and it is alleged that the tree is outside the zone of influence of this type of tree.

In response the tree that is the subject of this application is 18 metres from the garage at no 8. The maximum recorded tree to damage distance recorded is 30 metres. However site specific evidence takes precedence over theoretical zones and in this case the evidence clearly shows that roots from the oak tree have been found under the building. They will therefore have taken water from the clay soil under the foundations.

3. Concern is expressed that the damage to the building is also at the rear of the house, not only the front.

In response the agent who has submitted the application is an arboricultural consultant and the evidence submitted has clearly demonstrated that the oak tree has influenced the movement at the front of the property. Any damage to the rear of the property is a matter for the insurers.

4. This point relates to the finding of roots in the trial holes and the DNA evidence.

In response the agent has clearly demonstrated that the oak tree has influenced the movement at the front of the property.

5. Root barriers, this is dealt with below.

6. The final point is repeats concerns about the measurement of the movement and this has been addressed earlier in the report. The measurements have been taken by a specialist company and the insurers do not consider that they are inaccurate.

The comments conclude that the minimum work would be the underpinning of the front bay and possibly the underpinning of the front of the garage.

In response it should be pointed out that the insurers need to stabilise the building in the most cost effective way. In the past underpinning was often carried out as a matter of course but currently underpinning is seen as a last resort. Where subsidence is shown to have occurred and vegetation is a contributory factor insurers will always seek removal of the offending vegetation. Where this is done it is then usually not necessary to carry out expensive and disruptive underpinning.

In respect of a root barrier the agent has confirmed that this would be possible if the tree were retained. He has indicated that the root barrier would be across the front gardens of both numbers 8 and 10 (subject to the agreement of the property owners). It would be to a depth of 4 metres and special works would be needed in respect of sealing around underground services. The work would take up to 10 days to complete and would disrupt both front gardens. The excavation work would be within the root protection area of both oak trees at no.10 and a separate consent under the TPO may be needed in respect of cutting roots. The costs for this work are estimated to be £22,000.

The owner of 10 Crab Hill has been advised of the root barrier proposals and has stated that they do not need a root barrier at their property as they have been underpinned to a depth of 2 metres, the root barrier would be too close to their trees and could destabilise them, the root barrier would need only be to the depth of the Blackheath Beds and not 4 metres. Installing a shorter length of root barrier to a lesser depth would be cheaper and they have received a quote of £5000.

The agent has commented that they do not install root barriers if this would threaten the stability of a tree, the barrier would be to a depth necessary to protect the property, costs would vary according to the works actually undertaken and the tree owners may install a barrier although they and their contractors would be liable for its efficacy.

To assist Members an assessment to establish a value for the tree has been carried out. This assessment has been carried out in accordance with the Heliwell system and was devised as a means of achieving logical decisions in the planning and management of trees and woodlands by assessing their relative contribution to the visual quality of the landscape. Various factors are taken into account – size of tree, expected life span of tree, importance of the position of the tree in the landscape, presence of other trees, relation to setting and form of the tree. The factors are multiplied together and assigned a monetary value. It is accepted that some of the values are subjective and in this case the value of the tree varies between a minimum value of £2818 and maximum of £5166.

Conclusion

There is clear evidence showing that no.8 has suffered subsidence and there is also clear evidence linking this damage to one oak tree in the front garden of 10 Crab Hill. The application originally related to both trees. However the DNA evidence did not show a link to the oak tree furthest from no.8 and it has been removed from the application.

If consent were to be refused it would be open to the insurers to claim compensation for loss or damage due to the additional costs of either installing a root barrier or underpinning no.8. Solicitors acting for the insurers have clearly indicated that they will be making a claim for compensation if consent for the felling is refused.

If the tree is felled the property could be repaired at a cost of £12,000 and there would be no need to either underpin or provide a root barrier. Both of these options would be costly and disruptive. It should be pointed out that if consent were to be refused the Council has no powers to insist which method the insurers use to safeguard the property. In light of the uncertainty in respect of the agents preferred location of root barrier it is likely that the insurers would seek to underpin no.8 if consent were to be refused. .

The maximum value of the tree to the community is £5166 and this should be weighed against the cost to the Council of a compensation claim of between £10,000 and £76,000.

DECISION CONSENT CONDITIONS

B09 - Tree Commencement
B06 – Replacement Planting

Arboricultural and Woodland Consultants



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EXPERT OPINION

by

Jim Quaife

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 AA Registered Consultant, Chartered Environmentalist

as to whether the London Borough of Bromley should grant consent for the removal of a Turkey oak at 10 Crab Hill, Beckenham, BR3 5HE

Instructed by Mrs Gibson, Principal Tree Officer of the London Borough of Bromley

Date Written: 28th November, 2013

Quaife Woodlands Ref: AR/3085/jq

London Borough of Bromley Ref: DC/03084/TPO

Mrs C. Gibson Ref: CG/12/03084

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