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Planning Tree Team (Poole)
BCP Council
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Bourne Avenue
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25th January 2024

Dear Mr Sir / Madam,

Application for 'Lesser Works' to Pedunculate (English) Oak at 8 Laurel Gardens, Broadstone BH18 8LT

On behalf of my client, Mr Richard Hudson, I applied to dismantle an Oak at 8 Laurel Gardens, Broadstone in October 2023. (Application Ref: TP/23/00977/X).

The decision notice, (a refusal of permission), was received on 11th January 2024. I subsequently had a telephone conversation with the case tree officer, Mr Samuel Bottomley on 15th January 2024 to discuss the Council's reasons.

1. *Insufficient compelling reasoning or evidence has been demonstrated in the application to outweigh the tree's contribution to the landscape, especially when lesser works could alleviate the alleged concerns.*

2. *The works would result in the loss of a tree that makes a positive contribution to the landscape.*

I reiterated our concerns in relation to my observations as detailed in the tree inspection report dated 23rd October 2023. We cordially agreed to disagree on both of the above reasons. When pressed with my question of *"what level of lesser works would be permitted subject to a new application?"*, Mr Bottomley was understandably reluctant to be specific.

Whilst we still believe the removal of the tree is justified for reasons provided and have a fair degree of confidence that the case for its removal would be upheld at appeal, we are mindful of the potentially lengthy timescales for this process. Mr Hudson is keen to proceed with some crown reduction and remedial pruning to alleviate the load on the root plate, deal with broken branches and provide some lateral clearance from his dwelling.

I have cut and paste the findings of my tree inspection from 26th September 2023 into the following pages with revised management proposals for 'lesser works' in blue font on the final page.

Inspection of Pedunculate (English) Oak at 8 Laurel Gardens, Broadstone

After the structural failure of a co-dominant fork from a mature Beech on the 12th April 2023, and substantial damage to your dwelling, you have had concerns about the integrity of a mature, companion Oak (T1) that grows c. 12 metres to the north of the failed Beech.

Following my site visit on 26th September 2023, I write to confirm my observations, appraisal, and recommendations for the Pedunculate Oak (T1) growing in the front garden at the above address. Please refer to the appended Tree Location Plan.

The tree has been subject to an inspection from ground level with the use of binoculars, a steel probe and a sounding mallet. The tree's dimensions (height, spread and stem diameter) have been measured. The dimensions of all other features within the tree have been estimated unless stated otherwise. I have not been instructed to inspect any other tree.

<u>The tree in its setting</u>

The Pedunculate Oak, T1 - (*Quercus robur*) grows near the western edge of the front garden. The garden is elevated above the gravel drive and walkway around the dwelling and separated with a retaining brick wall. The Oak has an understory of Rhododendron, Cherry Laurel, Holly, Yew and Hazel. **Photos A, B, C, D**

Other sub-dominant trees in the vicinity include a semi-mature to early-mature Oak 5.6 metres to the north and an early-mature Silver Birch growing 7 metres to north-north-west on neighbouring land. On the other side of the gravel drive circa 20 metres to the east are a semi to early-mature Sycamore and Norway Maple. A belt of early-mature Scots Pines grow on a verge c. 20 metres to the north-north-west. Broadstone Heath Nature Reserve lies to the south of the rear garden and the neighbourhood is generally well furnished with groups and belts of mixed aged trees affording a moderate degree of shelter and a sylvan character.

The subject Oak tree (T1) contributes to the sylvan character of the area, but by virtue of its irregular form (due to significant companion competition from the recently failed Beech), it is not a specimen of good shape and it offers limited visual amenity value. With the numerous other trees in the locality, its crown can only be viewed by the owners and their three immediate neighbours.

<u>Potential targets:</u>

The following 'targets' (structures and areas that may or may not be occupied and subject to harm or injury in the event of structural failure of the tree, part of whole) are either under the crown or within the falling distance of the Oak T1:

- The dwelling, front & side garden and driveway of No. 8 Laurel Gardens
- The dwelling, front garden, driveway and side path of No.14 Laurel Drive
- The rear garden at 9 Laurel Gardens (improbable due to tree's lean to the west)

<u>Soil and ground conditions</u>

Samples of soil were taken from a few locations within 3 metres of the base of the tree using a 15mm diameter x 900mm long soil-coring rod. Within the shrubby understorey, the steel rod could be inserted into the ground to its full depth with considerable ease. The soil was dry, dark, sandy and friable, with a high organic content and no cohesion. I am informed that the area to the south of the tree was used many years ago as a compost heap, yet there was no evident raising of levels at the base of the tree and the depth of the sample was taken from the tree's natural root flare. Conversely, when attempting to take a soil sample from the lawn c. 10 metres to the north-east of the Oak (T1), the sandy loam was heavily compacted, and it was not possible to insert the rod any deeper than 20cm.

UKSO datasets broadly describes soils in this locality as *'deep, sandy loam on clayey loam on a parent material of sandstone'.*

Two metres to the north of the Oak (T1) is the stump of a twin-stemmed Oak (c.600mm & 400mm diameter at ground level) which was windthrown to the south-east c. 11 years ago causing some limited damage. I have been informed that this tree was healthy with no notable features prior to its rootplate failure. The soil around this windthrown stump also reveals a very friable sandy soil with a high organic content. **Photo I**

The retaining wall separating the elevated garden (where the Oak T1 grows) and the gravel drive/path is 4.3 metres to the south-east at the closest point from the base of the Oak. **Photo E**. I am informed that the garden formerly sloped down to the corner of the house. This was excavated and the maximum 1.5-metre-high retaining wall was built c. 30 years ago. The owner does not recall encountering any significant woody roots, yet the radial extent of all roots (woody and/or fibrous) are likely to extend (to an unobstructed distance) exceeding the height of the tree. Structural and conducting roots on the tension side of a leaning tree are generally of greater importance for anchorage. The oak's trunk has a natural lean to the west. **Photo G.**

Within a few metres west of the Oak (T1) the neighbours at 14 Laurel Drive are currently constructing a driveway. There is no evidence of any deep excavation, but potential for some disturbance of surface rooting.

Tree dimensions

The tree has a stem diameter of 640mm, measured at the conventional height of 1.5 metres above ground level. The tree has a current height of 18.5m, and the radial crown spreads are as follows: North-3.5m, East-5.5m, South-7.5m, West-6m.

Structural and physiological condition

Loose leaf litter and debris was cleared from around the basal flare of the tree to facilitate an inspection of the buttress roots. The buttresses and lowest 2.5 metres of the trunk was tapped with a sounding mallet revealing normal acoustics and no indication of internal decay. **Photo F.**

One buttress root on the east side (tension side) has a wound / cavity on the upper side approximately 70mm wide, 300mm long and 40mm deep. Even woundwood is present and the back of the small cavity has only a couple of millimetres of superficial decay with hard, xylem below. I have no current concerns with the tensile integrity of this root. **Photo H**

The trunk leans to the west by c. 10^{o} off the vertical for the first couple of metres but then accentuates to c.25^{o}-30^{o} off the vertical between 2 to 5 metres above ground level. **Photo G & K**

The trunk supports some clumps of epicormic* growth, some of which has failed to establish due to light suppression from the surrounding evergreen vegetation. **Photos J & K** **Epicormics are shoots that grow from adventitious buds under the bark of older stems (trunk and branches). They are usually activated into growth following increased light levels or hormone imbalances created by pruning, branch loss and disease. They can serve to rejuvenate a tree by developing an inner crown following damage*.

A primary branch has been historically removed from the lower trunk with normal woundwood development.

The first primary branch at 2.5 metres above ground level extending to the east is dead and has been truncated at 4 metres distal from the trunk. It poses no risk of any significance. **Photo J**

At c. 5 metres above ground level the trunk divides with a broad, normally formed union into one dominant upright stem (450mm diameter) and the other primary branch (c. 300mm diameter) extending to the west over land at 14 Laurel Drive. **Photos T & U**

Above this the branch structure comprises largely of established epicormic growth. At c. 6.5 metres above ground level extending to the south-east is a primary branch extending towards and almost in contact with the dwelling at No.8 Laurel Gardens. **Photo L**

At c. 14 metres above ground level on the north side of the crown is a broken, yet partially intact secondary branch. **Photo M.** Above this a is an additional branch with some splintering on the upper side (view is poor with binoculars due to obscuring vegetation). **Photo N**

The south side of the tree's crown is flattened, exposed and supporting no inner branch structure rendering many of the branches 'lion-tailed'. **Photos O & P.** *(Long branches, unfoliated or unbranched except near the periphery, rendering them prone to greater flailing and potential failure in strong wind due to lack of resonant damping).*

The Beech which grew c.12 metres to the south of the Oak and failed in April 2023 at its fork (compounded by decay from *Ganoderma spp.*) **Photos Q & R** was a dominant tree of greater stature and crown spread than the Oak (T1). A satellite image from Google Earth dated 19th April 2018 (in the photomontage) **Image S**, shows the extent of the crown and the substantial level of companion shelter afforded to the Oak. Beech is a densely foliated species and whilst its presence will have suppressed foliar development in the substantially shaded parts of the Oak, it will also have afforded the Oak a high degree of shelter from wind when in leaf. Trees adapt to wind exposure over a long period of time by restricting their extension growth and /or laying down stronger 'reaction wood' where it is required. Sudden or significant loss of shelter can render an unadapted tree and branches weaker and more prone to structural failure.

The west side of the crown overhangs the neighbour's roof and chimney stack at 14 Laurel Drive by c. 3 metres. **Photos T & U**

The crown supports occasional pieces of deadwood, typical for a tree of this age, but no peripheral dieback or indication of physiological decline. Crown irregularity from former companion competition aside, the foliage is of normal size and density, indicative of a tree with normal physiological health.

Appraisal

Based on the above observations, I consider that the structural integrity of the Oak (T1), in its current size and form, to be potentially compromised following the loss of the dominant companion Beech. There are several factors that are a cause for concern. In order of priority, they are as follows:

- Significantly increased exposure following loss of companion shelter from the failed Beech
- Loose and friable sandy / organic soils with negligible cohesion to a minimum of 900mm depth (the tree officer is advised to check this themselves with a long thin metal rod)
- Windthrow of seemingly healthy adjacent Oak 11 years ago
- Moderate natural lean and crown weighting towards neighbour's property
- Lion's tailed branch structure in upper crown
- Historic disturbance to the rooting environment 30 years ago (excavation for retaining wall)

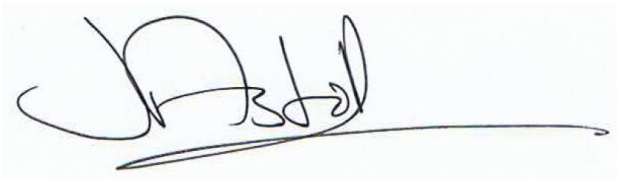
Application TP/23/00977/X was submitted for the removal of the tree and consent was refused (dated 11/01/2024).

The following lesser works are now proposed:

1. Reduce the height of the tree's crown by between 2.5 to 3 metres pruning back to nodes wherever possible.
2. Reduce the radial crown spread by the following distances in each of the following directions pruning back to suitable branch nodes wherever possible:
   - North by 1 metre
   - East by 1.5 metres
   - South by 2.5 metres (primary branch extending south-east at 6.5m above ground level)
   - West by 2 metres
3. Remove broken branch at c. 14 metres above ground level on the north side of the crown

If you have any further questions, please do not hesitate to contact me.

Yours sincerely,



Jonathan Astill ***Dip.Arb.(RFS) M.Arbor.A***

Attached – Tree location plan
Photographs

Arboricultural ASSOCIATION
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