

**Application No:** 20/00556/TPO

**Ward:** Chislehurst

**Address:** Updown House, 5 Oakleigh Park Avenue  
Chislehurst, BR7 5PB

**OS Grid:** E: 543363 N: 169537

**Applicant:** Subsidence Management Services **Objections:** Yes

### **Description of Development:**

Oak (T1 on site plan) - Fell.

Oak (T3 on site plan) - Fell.

SUBJECT TO TPO 2679 (22.10.2019)

### **Proposal**

1. This application has been in connection with a subsidence investigation at 5 Oakleigh Park Avenue. The felling of the two subject oak trees (T1/T3) is proposed to achieve building stabilisation in accordance with the professional recommendations.

### **Location**

2. The application site is comprised of a detached dwelling located on the west side of the cul-de-sac. Properties on this side of the road are situated on a falling gradient. The property is subject to the provisions of the local conservation area, applying broad protection to trees. Tree Preservation Order (TPO) 2679 was made in October 2019 following a threat to trees in the format of a conservation area notification (19/03850/TREE) received in respect of trees at No. 3 & 5 Oakleigh Park Avenue. The sylvan environment characterises the conservation area and this part of Chislehurst.

### **Consultations**

3. Three representations were received and are summarised below:
  - “We believe that this tree should be removed given the size and weight of the tree. The weight of the tree increases the risk of damage towards the land and subsequently our property. We have no objection towards the removal of this tree and welcome any attempt to protect the integral structure of the land.”
  - “Please provide location of tree as no map provided with the letter nor online.”
  - “Please provide further details in respect of the location of the Oak tree. No location or map/plan has been provided.”
4. No comments were received from Building Control.

### **Considerations**

5. The dwelling was constructed in 1947 with extensions added in 2004, as permitted under planning permission 04/04828/FULL6.
6. The presence of the TPO reflects the important contribution the tree makes to the locality and the high amenity value merited. No recent management has been noted within the supporting tree survey or by the officer during inspection.
7. Damage was first noticed on 10<sup>th</sup> August 2018. Damage is occurring across the rear elevation of the dwelling. The Claim Assessment Report supplied in support of the application may be referred to for information on specific areas of damage. The degree of damage is category (5-15mm) as listed in the Building Research Establishment; Digest 251. Historic damage is mentioned in The Claim Assessment Report dating back to 2005, 2011 and 2016. Repairs prior to this insured event were carried out under the policyholder's expense. The past damage was deemed to be caused by thermal movement.
8. The following supporting documents have been appended to the application:
  - Arboricultural Report (26.03.19)
  - Claim Assessment Report (11.01.19)
  - Level/Crack Monitoring (09.01.20)
  - Engineers Addendum Report (03.01.20)
  - Soil analysis (01.05.19)
  - Root identification (14.03.19)
  - Geotechnical Report (12.03.19)
9. Officers made a site visit on 23<sup>rd</sup> April 2020. The subject trees are confirmed to be within the zone of influence. The zone of influence is calculated to be 25m for T1 and 22.5m for T3. T1 has been measured at 9.5m from the rear projection of the dwelling, which consists of the extension. Tree survey data has been submitted as part of the application supporting documents and reference tree dimensions. No defects have been noted by the tree surveyor.
10. Three boreholes (BH1/BH2/BH3) were excavated as part of the investigation. Foundations are revealed at depths of 800mm in BH1, 1300mm in BH2 and 1100mm BH3. Root identification in the boreholes BH1 and BH2 reveal oak roots are beneath the foundations of the dwelling. Roots identified in borehole BH3 were related to birch trees.
11. Level monitoring results indicate movement associated with seasonal soil moisture loss. Movement is most severe at monitoring stations positioned on the extension. The period of monitoring is 7 months from late May 2019 to early January 2020.
12. Soil analysis has proven that the plasticity index is high, indicating an increased potential for volume change.
13. The Engineer has recommended the trees be felled to remove the influence on the local soil conditions. The Arboricultural Consultant has agreed that tree felling is required.
14. Drainage has been excluded as an implicating factor by the structural engineer.
15. The estimated cost of repairs if the trees remain is £50,000 and £15,000 if the trees

are removed. Heave risk has been assessed by the structural engineer and is not a threat. The Engineers Technical Addendum indicates a street tree under Local Authority Control is responsible for the subsidence related damage. Officers confirm that trees implicated in this case are under private ownership.

## **Conclusion**

16. The foundations are not considered deep enough to withstand the influence of the subject trees within the zone of influence. The required foundation depth has been calculated to be a depth exceeding 2.5m. This is based on the highest actual plasticity index record. A full structural foundation design is required to address the risk of subsidence.
17. Damage to the building occurred shortly after construction. This suggests that the structural integrity of the extension was at fault upon completion. No information has been supplied to demonstrate that the junction with the dwelling has been built to resist the risk of movement. It would therefore be prudent to request an assessment of the construction design. The absence of construction joints in the construction of the extension in 2004 may result in presiding differential settlement. At this stage it is therefore possible that the trees are exacerbating an existing issue. Underpinning is likely to be required, regardless of nearby tree influence on the soil.
18. The age of the property dates back to 1947 and the trees are estimated to be older than the property.
19. Level monitoring is usually required for a period of 12 months or more to demonstrate seasonal movement. The 7 months of data supplied, indicates the building has sunk and then risen. The reports submitted in support of the application have concluded that seasonal movement is occurring. Movement is most severe at the southern elevation monitoring stations, on the face of the extension. No evidence has been presented to discount defective drainage. The route of drainage is unknown.
20. A monetary value has been applied to the tree adopting the CAVAT (Capital Asset Value for Amenity Trees) system. CAVAT provides a method for managing trees as public assets rather than liabilities. It is designed not only to be a strategic tool and aid to decision-making in relation to the tree stock as a whole, but also to be applicable to individual cases, where the value of a single tree needs to be expressed in monetary terms. CAVAT is recognised in the English court system.
21. The combined value for the subject Oak trees (T1/T3) is £193,004. The evaluation was extended to other significant oak trees within the zone of influence. These trees are also listed within the tree survey data contained presented at 6.2 of the Arboricultural Report. The combined value of these trees is £211,498. The total value of trees that could be implicated in the subsidence case is calculated to be £404,502. Considering the value of trees situated within neighbouring properties, the value is expected to exceed £500,000. The costs of repair are therefore substantially less than that of the trees value.
22. Alternative methods of stabilisation by way of root barrier installation have not been considered.
23. The investigation findings have demonstrated on the balance of probability that at least one of the subject trees is causing seasonal movement of a cyclical nature.

24. Members are recommended to refuse the application to defend the implicated trees. Further detail would be required to address the concerns raised in this report. Members should consider the value of the trees against the costs of repairs in this case. Should consent be granted, it will be necessary to apply planning conditions in mitigation to require replacement planting.

### **Financial Implications**

25. Attention is drawn to section 202E of the Town and Country Planning Act 1990. This allows the applicant to make a compensation claim in respect of a refused decision.
26. Members are informed that no budget has been allocated to the defence of a compensation claim, should the application be refused. A claim may include and is not restricted to any further damage from the date of the decision, costs incurred in respect further repairs, costs incurred in further monitoring and legal costs. Members are also reminded of the officer costs involved in defending against a compensation claim.

### **RECOMMENDATION: Refusal**

Oak (T1 on site plan) - Fell.

Oak (T3 on site plan) - Fell.

SUBJECT TO TPO 2679 (22.10.2019)

### **Reason:**

**The application has failed to acknowledge the adequacy of the dwelling's foundations and the construction design. Defective drainage has not been ruled out as a contributing factor. The value of the trees exceeds the estimated costs of repair. The proposals would negate the objectives of the TPO and therefore conflict with Policies 73, 74 of The Bromley Local Plan (adopted January 2019), Policy 7.21 of The London Plan (adopted March 2016) and The London Borough of Bromley Tree Management Strategy (2016-2020).**

### **INFORMATIVES**

1. You are advised that formal consent is not required for the removal of deadwood, dangerous branches and ivy from protected trees.
2. Alternative repair options should be explored and presented to the Council in an appraisal, should further applications be submitted.