

Planning Committee

15 January 2025

Planning Application - TPA/24/1201 57 Cambridge Road, Rainham, Gillingham, Medway, ME8 0JH

Report from: Dave Harris, Chief Planning Officer

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Summary

This report concerns an application to remove a privately owned oak tree protected by tree preservation order (TPO), due to the need to prevent further subsidence damage to No 57 Cambridge Road and to facilitate repairs. The Committee has the authority to grant permission to fell the tree with or without a condition to replace it. If consent to fell the tree is refused, Medway will be liable to pay compensation for alternative measures subsequently needed to stabilise the property, if it is proven that the tree is responsible for the subsidence to the property. The Committee must decide on whether the removal of the tree is appropriate, balancing the liability to the Council and the environmental impact of removal.

1. Recommendations

1.1 The Planning Committee have two options before them;

1.1.1. The Committee approves the application to remove the tree with or without a condition to replace it.

1.1.2. The Committee refuses the application to remove the tree in the knowledge and understanding that there will be financial liability attributed to the Council by doing so.

2. Budget and policy background

2.1 The tree is listed individually as T20 within TPO No. 98 1009, confirmed on the 1 February 1991.

2.2 The relevant legislation is the Town and Country Planning (Tree Preservation)(England) Regulations 2012. No exemptions for the need for application apply¹.

¹ Section 14(1)(a)(1)(ii) Town and Country Planning (Tree Preservation)(England) Regulations 2012

- 2.3 The 2012 Regulations allows for compensation to be payable for any loss or damage caused as a direct result of refusal of an application². This would include the costs of repairs that would otherwise be unnecessary if the application were approved, such as underpinning, and is likely to include entitlement to annoyance, discomfort and inconvenience.
- 2.4 If the Committee approves the application, the matter does not need to be referred to the Forestry Commission for a felling licence.

- 2.5 The relevant council policies are as follows:

Medway Tree Policy 40 – “Where an application to work on a tree protected by a tree preservation order is received Medway council will require sufficient evidence to show that the tree in question is, on the balance of probabilities, an influencing cause of any damage cited in the application. Medway council will follow industry best practice when considering any request to remove a tree based upon it allegedly causing damage. Where it can be demonstrated on the balance of probabilities that a tree is an influencing cause, permission to remove or prune the tree will not be unreasonably withheld.”

- 2.6 Whilst there is no formally accepted best practice document for the arboricultural industry, the applicant has provided a PRI Arb report; PRI statement of reasons; Engineering Appraisal Report; Site Investigation Report; Root Sample Report; Soil Sample Report; and Monitoring Report.

3. Background

- 3.1 Tree T1 is a mature oak approximately 100-150 years of age, which grows within the front garden of No. 57 Cambridge Road. The tree is prominent and visible from the public highway of Cambridge Road.
- 3.2 Cracking to the bungalow at No. 57 Cambridge Road was first noted three years ago.
- 3.3 Two bore holes were dug; one at the front left-hand corner of the building (bore hole 1) and one close to the rear left-hand corner of the garage (bore hole 2). Geotechnical data has been provided and confirms the presence of a highly plastic shrinkable clay soil. Engineering evidence confirms tree root related subsidence.
- 3.4 Tree roots belonging to oak and sweet chestnut have been found within the bore hole profile. The application does not list all trees within known zones of influence and omits the presence of nearby oak and sweet chestnut within the front garden of No. 59. No DNA evidence has been provided to determine whether the oak roots belong to T1 or the mature oak growing in the front garden of No. 59 and whilst T1 is closest, both oak trees have the capacity to

² Section 24(1)(a) Town and Country Planning (Tree Preservation)(England) Regulations 2012

³ BRe Digest 251; Assessment of damage in low-rise buildings 1995

extract a higher-than-average amount of moisture from the soil beneath foundation depth.

- 3.5 No works have been proposed to offsite trees to mitigate the potential for root involvement in the existing damage or future damage cases. Despite this, Medway's liability concerns the current application, and the potential involvement of other trees should not influence the Committee's decision.
- 3.6 The foundations of the bungalow are 500mm deep and leaking drains have been found in the vicinity of T1. However, moisture abstraction from tree roots is considered the primary cause of damage and whether or not leaking drains or shallow foundations will have contributed to the damage is irrelevant, as soil drying would not have occurred but for the presence of nearby trees.

4. Options

4.1 The Planning Committee have two options before them:

- (i) The Committee approves the application to remove the tree with or without a condition to replace it.
- (ii) The Committee refuses the application to remove the tree in the knowledge and understanding that there will be financial liability attributed to the Council by doing so.

4.2 A condition on replacement would ensure establishment of a new tree but would offer protection only so far as to allow establishment. Thereafter, the replacement tree would not be protected by the original TPO and a new order would need to be made to secure enduring protection for the replacement tree. Replacements can be the same species or a low water-demand species less likely to be involved in future damage to the property. Low water demand species would typically be recommended on clay soil with a history of movement and would include species such as birch or hornbeam.

4.3 The Committee can decide to approve the application without a condition requiring replacement of the tree, though this would result in environmental loss as well as loss of screening. The application bundle notes a commitment to an offsite carbon offset capture scheme but no evidence of this has been provided and so this should not influence the Committee's decision.

4.4 Alternatives to soil stabilisation can include underpinning of the property and/or installation of a root barrier. A root barrier could feasibly be installed at the front of the property without causing significant harm to T1. However, root barriers are not completely effective as roots can grow around or under the plastic. A root barrier is equally likely to prevent movement of water through the soil and there is some emerging evidence to indicate that root barriers delay soil rehydration, prolonging the claim period. Should T1 remain, it is likely that a root barrier will affect the availability of soil water and may affect the long-term health of the tree.

5. Independent Review

- 5.1 Medway has obtained an independent arboricultural and geotechnical review of the case. The independent assessment finds that whilst geotechnical evidence is limited, liquid limits satisfactorily demonstrate desiccation at 0.5m in bore hole 1 (front of property), and 0.42m and 1.42m in bore hole 2 (rear of property). In comparison, plasticity analysis shows desiccation at 0.42m in bore hole 2 only.
- 5.2 Soil suction tests show stiff soil in bore hole 1 at 0.5m (which is not atypical of clay), but this stiffness decreases at depth where moisture content would naturally be expected to fall. In summary, this indicates that soil in bore hole 1 is dryer than it should naturally be at 0.5m. The same can be said for soil suction tests in bore hole 2 at 1.42m, where tests indicate very hard soil and desiccation at this depth relative to soil moisture contents across the remainder of the profile.
- 5.3 Liquid limit and plasticity tests are unreliable but do support a picture of soil drying at 0.5m in borehole 1 and desiccation at 1.42m in bore hole 2. When viewed in combination with the level monitoring readings, which show cyclical movement of the property consistent with clay shrinkage (vegetation related) subsidence, the evidence satisfactorily demonstrates nearby trees are contributing to soil drying beneath foundation depth.
- 5.4 Based on the evidence provided, it can reasonably be assumed that tree roots from an oak are contributing to differential movement and a proportion of blame should be assigned to the closest oak tree, T1. On the basis of the evidence provided, there is sufficient evidence to indicate that soil movement (and property damage) will continue unless nearby trees are removed, or the soil is stabilised by underpinning or similar engineering alternatives.

6. Advice and analysis

- 6.1 Medway's policy mandates that subsidence cases be assessed based on the balance of probabilities. That balance would rest on whether the evidence provided within the application has satisfactorily demonstrated that tree roots are contributing to seasonal movement of soil beneath the foundations of the property.
- 6.2 The evidence demonstrates that the damage is caused by factors external to the structure and independent review confirms tree root related soil desiccation. T1 is unlikely to be the only tree involved but, on the balance of probabilities, damage can be at least partly attributed to T1.

7. Climate change implications

- 7.1 Despite the importance and value of trees, the ecosystem services trees provide are not without their costs and the Committee will need to balance the environmental value of the tree against the damage and inconvenience to private property and Medway's financial liability for refusal.

- 7.2 Independent arboricultural review of the case has offered two indicative values for the tree, based on the level of ecosystem services it provides and a replacement value for the tree using CAVAT⁴.
- 7.3 CAVAT⁵ determined a value of approximately £77,500. This valuation reflects the amenity value of the tree and reflects what is essentially a like-for-like replacement cost.
- 7.4 An iTree environmental valuation indicates that if the tree is retained it may present the following ecosystem services over the next 20 years⁶:
- 1,183.4kg carbon sequestered
 - 39,000ltrs storm water intercepted
 - 359g carbon monoxide intercepted
- 7.5 The applicant has proposed a carbon footprint equivalent value for underpinning. Assuming that these engineering values are accurate, the retained tree would need to provide ecosystem services for a further 111 years to compensate for the carbon footprint of underpinning. The oak tree is unlikely to reach full maturity as it is already showing signs of age-related decay, but a life expectancy of approximately 100 years could reasonably be assumed.
- 7.6 The above valuations are replacement-centred and cannot consider immediate ecological loss of roosting and foraging habitat, or the tree's value as a food source for invertebrates. Any replacement oak tree will take a century to compensate for this loss, and a replacement species other than oak would not be able to offer the same ecosystem services or equivalent carbon capture value in its lifetime.

8. Financial implications

- 8.1 The applicants have submitted that the estimated repair costs are likely to vary between £23,000 and £75,000 depending on whether the tree can be removed or remain. In other words, if permission is refused and the tree remains the cost for repair will be significantly greater than if the tree is removed and the applicant will lodge a claim against the Council to meet that cost.

9. Legal implications

- 9.1 Should the application be refused, Medway Council and the applicant's insurance team will discuss a settlement of costs incurred as a result of the refusal. If agreement cannot be met, a case can be lodged at the Land Tribunals Court for decision on costs. This will result in additional legal costs

⁴ https://cdn.forestresearch.gov.uk/2022/01/FCRN008_lcXvkLV.pdf

⁵ <https://www.ltoa.org.uk/resources/cavat>

⁶ iTree valuation, based on USDA Forest Service data (approximate benefits in ideal conditions)

for the applicant and for Medway Council as well as lengthy delay during which time the applicant's property and insured value will be affected.

- 9.2 The engineer's report does not consider heave likely, but no heave assessment of the soil has been calculated. The tree predates the property and so it is possible that soil levels dehydrated prior to construction of the bungalow. In which case, Medway is advised to consider a heave indemnity in their decision, to satisfy their own insurer, should permission be granted.

Lead officer contact

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Appendices

None.

Background papers

None.