

## Technical Note 001

### F/24/97945 – Response to tree officer comments

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#### Background

Application reference F/24/97945 is before the Council for consideration.

Comments in respect of trees (dated 14<sup>th</sup> November 2024) have been made by the Council's consultee.

This note has been prepared to add to those comments and seek a mutually agreeable way forward in respect of trees.

#### Response to comments

It appears from the comments that the only tree-related concern in respect of this scheme is in relation to the sub-station relative to the group of oak trees that lie along the northern boundary, close to the footpath.

In accordance with BS5837: 2012: Trees in relation to demolition, design and construction – Recommendations we treated the row as a group. They are a cohesive unit, forming a contiguous crown and with overlapping rooting areas. They have an elevated value as a group over each individual tree.

For that reason an average stem dimension informed the size of the root protection area, reflecting the diminished crown size of each individual and acknowledging the intermingling of roots.

The tree officer comments direct us to an earlier application for the site (taken to be F/21/89989) that had treated the group of trees as individuals. It had therefore identified individual root protection areas.

Using that information we prepared the extract at Figure 1 that shows the root protection areas identified for that earlier application (taken from Sapling Arboriculture's *Tree Protection Plan* reference J1130.07). Those root protection areas are shown with a magenta circle.

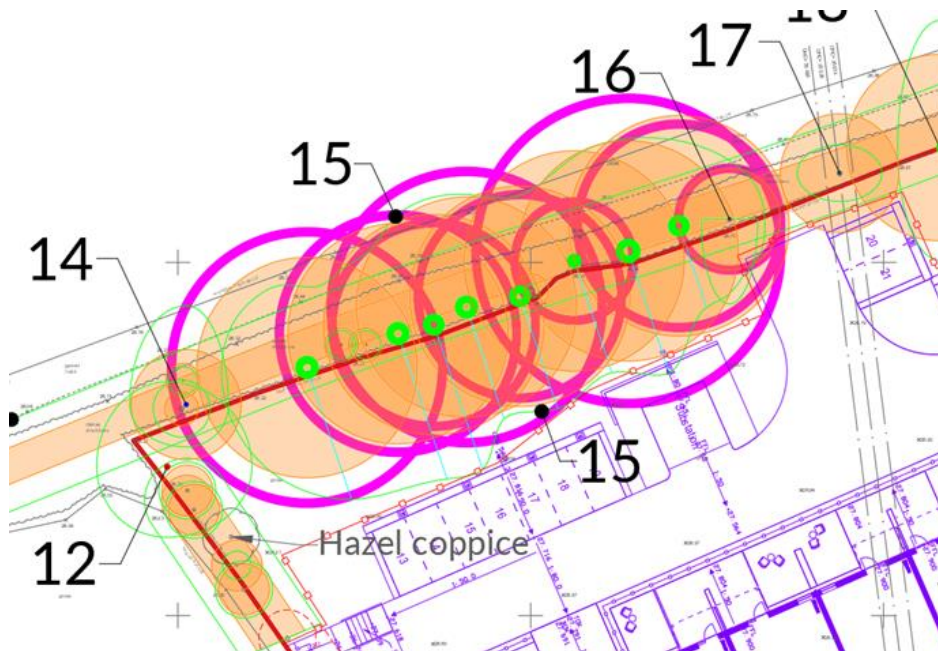


Figure 1: Magenta circles show root protection areas from earlier application

It can be seen that even if we apply the same root protection areas the current scheme is mostly outside those individual root protection areas, but the perimeter to the substation intrudes within the larger magenta circle.

The gravel perimeter that lies around the substation does extend within the outer fringes of the root protection area. The gravel margin is set above existing levels and can be achieved without the need for excavation. In essence it will be an area of permeable, no-dig surface.

Currently, the scheme shows a retaining wall along the northern edge of the gravel margin. This would require excavation for its formation. Whilst it is at the outer fringes of the root protection area, and represents a small intrusion, other options are available to marry existing and proposed levels that would avoid the excavation needed to form wall foundations.

The most suitable option is a simple grading of the earth from the edge of the gravel, down to existing soil levels. Using a soil with high sand content will provide a porous layer that will not materially alter the gaseous and aqueous exchange within the root protection area.

Other options, such as earth banks, reinforced with geotextiles, are also an option but this would appear to be unwarranted.

### Recommendations for consideration

The substation can be achieved outside the root protection area of the adjoining trees and there is no need to change its location.

The perimeter to the substation, being a gravel margin, can be formed above existing levels and therefore represents no material harm to the tree. There is no need to change this aspect.

The retaining wall has the potential to cause some root loss at the periphery of the root protection area, albeit not to an extent that would likely result in any material effects to the tree. However, that impact could be reduced if the wall was omitted and replaced with a simple soil bank.

An improvement to the scheme could therefore be made by omitting the retaining wall north of the substation and replacing it with a simple soil bank.

### Summary

A prior application for the site identified root protection areas for individual trees, rather than root protection areas that reflect its group value.

If we relate those root protection areas to the current scheme we see that the substation is outside the areas but the gravel margin perimeter and retaining wall are within.

The substation and gravel margin can be achieved without material harm to the tree and the impact to the tree could be further lessened by omitting the retaining wall.

Levels could be married by a simple soil bank, the composition of which could be designed to avoid any material change in the gaseous and aqueous exchange needed by the tree roots.

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28 November 2024