

Stratfield Mortimer Parish Council
Fairground and Cemetery 18/01/2024
Lime Tree Replacements

Agenda item 23/029 6.0:

To receive a report and resolve:

- a. The type of replacement trees and associated budget for these and any required work.**
- b. The Clerk seeks quotes for work identified.**
- c. The Clerk, in conjunction with the Chairman, places an order for the trees and required work.**

Background

In 2011 the Council agreed to replace the avenue of Horse-chestnut trees along the southern boundary of the Fairground because of the disfiguring or lethal attack simultaneously by the invasive bacterium *Pseudomonas aesculi*, the leaf fungus *Phyllosticta paviae* and the invasive moth *Cameraria ohridella*. This avenue was replaced by an avenue of 21 lime trees, *Tilia* spp., mostly *Tilia cordata*, at a cost of £11142 including 2 years maintenance. The work was done over winter 2013-14.

By 2023 the majority of trees had a diameter of about 15 cm 1.5m above ground level , but a minority had grown substantially less, to about 10 cm The tree survey in 2020 identified a number of poorly growing trees and recommended removing the turf at the base of the trees and replacing it with 75mm of woodchip or bark mulch. The work was done in two batches, the first in Feb 2021 the second in 2022, completed by March 2022.

In May 2023, as the leaves were expanding, one tree (number 9 from the western start, ie #9; remaining individual trees are counted in the same way) died completely: leaf expansion ceased within a few days and leaves and flowers dried out throughout the tree. Bark was loose and fractured near the base and the cambium appeared black. Actions and replacement depend on uncertain hypotheses about why the tree died. The tree (#8) adjacent on the west was apparently completely healthy. The adjacent tree on the east (#10) was growing poorly but had healthy shoots springing from the base. Tree #11 was one of the small diameter trees and leaves yellowed and died in September. Trees #12 and #13 were healthy.

The isolated and exceptionally rapid death of all the branches at once is a strange pattern of death and damage. The tree affected had grown well for several years so the source of the disease is unlikely to be the nursery. *Tilia* is susceptible to a number of root diseases, but none are specific to the genus *Tilia*. Multiple possible root pathogens exist; the only defence to avoid a recurrence is to choose replacement species as evolutionarily diverse as possible. At present there are no signs of *Armillaria*, and no signs that the disease (if that is what it is) is spreading sequentially along the avenue) but it cannot be ruled out. A possible explanation lies in the mulch: if the particular batch used accidentally included chip from

herbicide treated plants (eg rhododendron) an isolated death would be explicable; however, the mulching was done a year before the death.

Replacement

Criteria to be considered:

- Final height moderate but “tree-size”
- Different from lime
- Not ash (because of ash dieback) or oak (risk of acute oak decline)
- Native if possible, or at least native to Europe
- Good food-source for insects and birds, but not prone to complete defoliation
- Not too dramatically different from the rest of the avenue?

So (a bit arbitrary) Yew, Hornbeam, wild service tree, field maple. Having a single evergreen by using Yew loses the “avenue” aesthetic. We could plant one of each of the latter three (my preferred option to spread risks) or two or three or four of one species.

The cherry circle by the pond has lost a member. This is common. *Prunus padus* has very attractive flowers, is native and is fairly tolerant of poor soil. It should NOT be planted on *exactly* the same site as the tree that died.

All are available from the Woodland Trust as 2 year saplings at £11 each. At this size they will need protection, which is probably the major cost – the Trust quotes £20 for a stake and spiral protector. Woodchip mulch should be applied to a distance of 1m from the main stem. In view of the strange pattern of death, the soil should be excavated when the dead sapling is removed and fresh soil used to a depth of 50 cm.

Works

Remove canopy and major roots of trees #9, #10 and #11 and the dead cherry at the E end of the avenue

Remove old mulch to a depth of 20cm

Purchase 2 year old saplings of 1 hornbeam (*Carpinus betulus*), 1 wild service tree (*Viburnum lantana*), 1 field maple (*Acer campestre*) and 1 bird cherry (*Prunus padus*) from Woodland Trust

Plant trees to the same depth as the soil mark from the nursery using fresh soil, stake and tube protector.

Cllr. M. Shaw

Email information provided by Cllr. Shaw:

04/12/2023

The specifications given by Treesonline for the draft order were:

"A 6-8cm girth tree will be around 180-240cm tall and 8-10cm around 240-300cm. Some 8-10cm trees are around 400cm.

"[Girth is guaranteed, height is not]

*We could increase the spec to 8-10 cm girth for an extra £54 per tree, so an extra £162 added to the order. The trauma to the transplanted tree is a bit greater, but obviously you gain in size. Any bigger than this gets a **lot** more expensive, and if a tree does not survive the loss is correspondingly greater - but I think you only meant "a bit" larger...*

01/12/2023

*Along the southern edge of the Fairground, 3 Lime (*Tilia cordata*) trees are dead or unhealthy and need replacing. They need to be up-rooted and roots and mulch removed and disposed of safely by a reliable contractor. Replacements should be hornbeam (*Carpinus betulus*), which is not closely related to lime, but is attractive, hardy and native.*

*One of the ornamental cherry trees in the triangle before the fence near the easternmost pond is dead. This needs replacing by a similar flowering tree, preferably not too closely related. Rowan (*Sorbus acuparia*) is worth trying.*

Tree Suppliers include

<https://www.trees-online.co.uk/Bare-Root-Common-Hornbeam.html>

Hornbeam bare rooted with girth 6-8 cm, standard £102 each, total £306

Rowan bar rooted, girth 6-8 cm, standard £117, total £117

Grand total for trees £423.

Please let me know what else we need to know before ordering or investigating contractor costs.

(Smaller trees are much cheaper but will take longer to blend in as an avenue

eg

<https://www.ashridgetrees.co.uk/p/hedging/hornbeam/carpinus-betulus>

bare rooted no girth guaranteed, 150 cm tall, £6.99 each, total £20.97)