Printed on: 02/03/2020 09:10:06

Application No:	Consultees Name:	Received:	Comment:
2020/0667/T	Maurice Whitby	28/02/2020 03:36:18	OBJ

Response:

This application is in essence a rerun of an application Ref 2015/0131/T of 2015. Then agents of Mrs Coveney at 11 Shirlock Rd applied for permission to remove two trees in the conservation area, the Arbutus unedo (Strawberry tree) in our front garden (13 Shirlock Road), and a street tree, a Sorbus belonging to the Council. The Council rejected the application, and made the Arbutus subject to a TPO, but subsequently (2017) agreed to remove the Sorbus, despite the loss of amenity (it has not been replaced). The present application asks for permission for work on the Arbutus under the TPO, namely to fell it and treat the stump to inhibit regrowth. It ignores the thorough survey by Simon Pryce supplied in 2015 with the conclusion: "5.4: None of the available evidence implicates the strawberry tree or indicates that it presents a risk sufficient to warrant major work. Felling would eliminate any question of it causing problems, but would be disproportionate." It also ignores information we have supplied on the specific nature of the Arbutus.

The reason given for the application, as before, is a claim that the Arbutus is responsible for subsidence damage to the frontage of 11 Shirlock Road. It will be shown that the claim is baseless, that they ignore compelling contrary evidence presented to them, and that although they purport to present new evidence in the form of crack and level monitoring this in fact weighs against their claim.

The case made in 2015 for implicating the arbutus is wholly contained in these words on p.2 of 'Tree Report' among the related documents supplied to the Planning Committee:

"There is currently no positive root identification to implicate T4 (Strawberry Tree), however based on our assessment on site we consider that the footings of the subject property fall within the anticipated rooting zone of this Vegetation."

This is accompanied by a chart showing a "root exclusion zone" with a radius of 4.75m [the distance to the bay of no.11 is shown as 4.5m: the more accurate laser measurement by Mr Pryce shows it as 5.4m]. The figure betrays it as based on the formula in BS5837, taking no account of what is known of this genus. Arbutus is not mentioned in connexion with subsidence in P.G.Biddle, Tree Root Damage to Buildings. Dr Biddle writes to me: "I have never encountered an Arbutus causing subsidence damage... It is up to your neighbour to prove it is the cause of damage, and if they cannot find roots below foundation level in the alleged area of movement, it seems they do not have any evidence to support their claim. If they produce evidence, I would be happy to review it for you." He considers that, if it could be shown, it would be a contribution to science. Cutler and Richardson use 1310 cases from the Kew Root Survey (1981, 1989), which identifies at least occasional implication of 35 genera, but not Arbutus. Later research (Arboricultural Journal 2011) expands and confirms the Kew data. Mr Pryce in his report cites his file of 2636 cases since 1996: no Arbutus implicated, though he writes to me that in some cases an Arbutus was present and not implicated. It might be suggested that Arbutus is not found because it is an uncommon tree, though rarer trees (Liquidambar, Tree of Heaven...) are found in the Kew Survey. The history shows that this is not the explanation. The Arbutus was introduced into England in 1586 specifically as a tree which did no damage to its surroundings (Alice M. Coats, Garden Shrubs and Their Histories (1964) s.v. "Arbutus"). In consequence, as a useful tree to plant near houses, a disproportionate number are so found. In our letter to Messrs Crawford in 2015 we pointed out that we had planted it in the early 1990s on professional advice that it was harmless to our foundations. When we later suspected subsidence (it turned out to be the usual seasonal variation in these houses) the expert sent by our then insurers, Abbey National, advised us to remove a vigorous climbing rose, but dismissed the Arbutus as irrelevant. Mr Hamish Cathie, as the holder of the National Collection of Arbutus (400 specimens), writes to me: "I can tell you unequivocally that A. unedo will not cause root damage to buildings", and sends a photo https://bit.ly/2PtnkXI of an Arbutus unedo 10m high happily adjoining a house of traditional construction, a garden wall, and paving. An interesting example is St Mary's House, 64 Church Square, Rye a listed

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16th-century house (and so closely monitored), with a large Arbutus unedo within 1.5m. https://bit.ly/2VqrNhv Examples within this neighbourhood are 70 Gloucester Crescent and 26 Park Square East. The superb specimen in Waterlow Park was probably planted on the advice that (unlike some large trees) it would not be a danger to the terrace of Lauderdale House: if the Council believed the calculations proposed by the applicant it would have to consider destroying it.

The Arbutus is an anomalous tree, a semi-arborescent form of the Ericaceae family (heather, azalea, blueberry...). Its original habitat is the dry mountains of the Mediterranean, where it evolved to be self-sufficient, developing a long tap root in maturity. Could an Arbutus turn rogue and attack buildings? If this had happened in the last 400 years it would have lost its reputation as a safe tree. Solid evidence would be needed, but I am told it depends on its relation to mycorrhizal fungi. A botanist friend gives a reference (which may be more useful to others than to me) to Smith & Read, Mycorrhizal Symbiosis (2008). Mycorhiza are hugely varied, but discussing the peculiar arbutoid mycorrhiza (Arbutus, Arctostaphylos) the authors write: "The vast majority of studies point to these organisms as being facultative biotrophs rather than mycorrhizal symbionts." But whatever the science, the fact that it is self-contained seems to be firmly established.

The applicant's tables and charts of crack and level monitoring undoubtedly show seasonal variation, though far from suggesting that underpinning is appropriate by the BRE Digest classification. This is to some extent normal in these Victorian houses on clay soil, with heavy two-storey bays with less adequate foundations than the main house. This construction can lead to actual subsidence without the influence of trees, and, with climate change, damage is becoming more prevalent. The applicants propose the hypothesis that this movement is exacerbated by moisture extraction by vegetation. In 2015 they put the main blame on the Council's sorbus: it is a tree with a medium water demand (if at the limit of the suggested distance), and roots (though very small) had been found. The Council agreed that this was not unreasonable, and in 2017 removed it, with a not negligible amenity cost (it has not been replaced). The applicants now find that this makes no difference. The rational conclusion is to abandon the vegetation hypothesis. Instead they declare that if the likely tree is absolved, they must blame the unlikely tree, the tree which in 2015 they believed might have a minor secondary role. The claim is that, in the first recorded case in over 400 years, an Arbutus, ignoring a building at 1.5m, has sent out invisible roots to attack a building at 5.4m, causing such damage that underpinning is necessary if and only if it is not removed. This is simply not rational.

The Council must not countenance the destruction of this beautiful tree, but recognise the virtual certainty that again, with its removal, no difference in the movement would be found, and the applicants would have to look for another hypothesis.

The Arbutus is the finest tree in the neighbourhood, and remains of significant amenity value. As an evergreen it provides pleasure throughout the year. It is particularly beautiful in summer, when it produces red strawberry like fruits and white flowers simultaneously. The upper branches are colonised by bees, who can be seen at work from the 2nd floor window; the fruit provide food for birds.

There is an important addition to the application this time. Previous to the former application No.11 had threatened us as the owners with legal action up to the cost of underpinning if we did not agree to remove the tree. That proved unavailing, and they now threaten the Council with a legal claim for compensation up to the cost of underpinning if they do not get their way. This claim has no merit, and the Council should fulfil its duty to protect the environment.