Subject: Arboricultural assessment of Young/mature Ash tree with TPO, adjacent to but not within the curtilage of the grounds of The Lion public house Wendlebury. Answering those points raised by Cherwell District Councils planning enforcement reference 17/00344/ENFC and covering the following points:

Instructions and Overview

Having been contacted by Kerr Smith and Sarah Robinson-Smith on the 3rd of November I was first able to attend the site of the tree in question on the 7th of November this year. I was shown the construction site and was able to take various measurements and make observation with regard to the ash tree in question and the works which had been conducted up to the enforcement notice being issued. I have had forwarded to me a list of four points which I shall cover in the following communication.

My observations with regard to the Ash tree are that this tree is situated in adjacent land not owned by Kerr Smith and Sarah Robinson-Smith.

There is a fence separating the stem of this tree from the construction site of a new accommodation block. The crown of this tree overhangs the site considerably and one new pruning cut on a small lateral limb has been carried out recently in order for workers to carry out their tasks safely whilst on a scaffold. There has been an incursion into what should be a Root Protection Area (RPA) and some fine roots have been severed up to but not exceeding 15 mm diameter. At this time of year with leaf fall it is difficult to make an assessment for certain infections or the presence of pathogens through visual assessment alone. However a significant proportion of that foliage which was still holding in the crown was showing asymptomatic evidence of an infection of *Hymenoscyphus Fraxineus*, more commonly known as Ash dieback. No fruiting bodies of the aforementioned fungus were observed in the leaf litter but it would be prudent to have a re-inspection in order to assess this particular point, the best time for such a re inspection would be September 2018. When you consider that the percentage of English countryside affected by this pathogen as of the 1st of November this year stands at 61% "Forestry commission" Ref this particular pathogen is quickly becoming endemic in our wider environment and will undoubtedly affect the expediency of application and sustaining many TPO s on Ash trees.

This last point may well be significant with regard to the possible removal of the TPO on this Ash Tree if the point is proven through further examination "BS5837:2012 4.4.2.5 (i), re categorization of this tree as "U" because of the estimated contribution as an amenity asset may be equal to or less than 10 years and therefore no expediency could be applied in specific regard to the retention of a protection order on this tree.

The condition of the crown shows that over many years poor pruning works have been conducted leaving many wounds which have not occluded well. The neighbouring ground which this tree stands in as the end tree of an old hedge line shows significant evidence of vehicles having crossed over the rooting area of this tree. Without a doubt the soil will have suffered some compaction on both sides of the boundary fence and amelioration of this factor and subcequent mulching of the rooting area post construction will be our principal option for retention probability notwithstanding the findings of further investigations for the presence of *Hymenoscyphus Fraxineus*, should the maintenance of the TPO be deemed desirable and or efficacious.

1. Method statement to be followed in order to protect the tree in question including its roots and in order that construction may be resumed on the accommodation block new build at The Lion Wendlebury.

- 1. Where roots have been severed already several layers of hessian matting to be laid over any exposed roots and damped down weekly in order to prevent desiccation to these exposed roots.
- 2. One of two options must be applied to the protection of the rooting area of this tree. The first of these two options is the installation of bog matts for ground protection. Using a sandwich of two bog matts with a layer of 150mm deep woodchip between. This protection can be used in areas where it is not reasonably practical to exclude construction traffic from the RPA through technical constraints. This protection must be in addition to and not exclude the hessian application over severed roots.

The second option and favoured criteria is to install a physical barrier 2 meters tall in line with recommended design within section 6.2.2.1....6.2.2.3 of BS 5837:2012 where reasonably practical this option is to be favoured over and above the bog matt solution. Clearly marked notices saying construction exclusion zone must be affixed to and areas for root protection and the upper layer of scaffolding yet to be raised, see below point 4.

The construction exclusion zone where tree roots have not been already severed must be not less than 6.12 meters from the stem of the tree in all directions within the curtilage of the site in question. Where roots have been severed this exclusion zone must protect the hessian material protecting these roots from desiccation.

- 3. The protection of the stem of this tree is not necessary as it already is protected by the boundary fencing
- 4. The crown of this tree clearly impedes the safe working practices for those workers conducting construction works on the new build. It is reasonable to expect that had permission been sought for minor pruning works to be carried out on branches overhanging a boundary in order to facilitate safe working practices and compliance with HSE recommendations for safe working, that an application in this regard would in all probability have been granted. Ash trees nominally respond well to pruning works and as long as such works are carried out in accordance with BS3998:2010. Having spoken to the construction staff on site it is my understanding that the scaffolding currently in place needs to be raised no more than 2 meters above its current height. This will cause damage to the tree unless target pruning of a proportion of the crown of this tree is carried out by a competent arboricultural contracting company. My observation show that the removal of one scaffold branch on the south side and crown raising by 2.5 meters would facilitate works to be continued on this build. We will be advising our clients that permission for these works needs to be applied for to CDC.

When installing roofing and moving trusses etc. up to the raised scaffolding no lifting equipment and or any associated products or materials must come into contact with the remaining crown of this tree. Also site safety talks with hired in plant and or elevator drivers must include this information.

- 5. Only when all construction works have been completed and landscaping and making good the ground have been completed may the construction exclusion zone be removed.
- 6. At each stage of the aforementioned method statement a competent person must assess its application in accordance with BS5837:2012 and sign off such works as compliant.

<u>The extent of damage that has occurred to the rooting area of the Ash tree in question</u>, has been determined through visual means and the use of a DBH measuring tape along with a normal metric tape measure and desk based calculations. A diagram showing our measurements and calculations has been included in order that third parties may check the accuracy and validity of our findings.

In summary the Diameter of this Ash tree at breast height is 51cm. The Root protection area being calculated by a factor of twelve is a radius of 6.12 meters from the stem in all directions. The closest trench dug to this tree is 4.8 meters away and if you look at our drawing root severance has occurred to 4.54% of the RPA an area of 5.345meters squared the whole RPA being 117.67meters squared. Of the RPA not affected by trenching works the level of ground disturbance within is very light. Please see our recommendations for amelioration works

Amelioration of RPA soil compaction and root severance.

Whilst it is not my determination of the outcome of the planning enforcement order Reference 17/00344/ENFC. If as would seem reasonable to a determining body, our client were to take reasonable steps to ameliorate the evidentially small incursion within the RPA of this protected Ash tree. It would be reasonable to think that such consideration of our client's commitment to the continued health and vitality of this protected tree would be a reasonable position to be acceptable when reviewed by a determining body.

Method statement of ameliorating works to a compacted RPA

The use of air injection equipment on the affected area post construction and the addition of an organic mulch over a permeable geotextile such as GU10 or terram to a depth of no more than 150mm deep but not less than 80mm would allow the correct cultural conditions to prevail in respect of tree root functions i.e. Gaseous exchange hydration and nutrient uptake.

<u>Pruning works necessary for works to be completed in order that work may commence on the accommodation block.</u>

In order for the scaffolding to be raised for workers safety whilst working a small amount of pruning works must be applied for through application to CDC.

These works are one scaffold branch on the south side to be pruned out and thereafter the crown that remains to have lateral limbs crown raised to a height of 2.5 meters above the current level of scaffolding. This crown raising would include the targeted reduction of those limbs which would cross through the scaffolding and where this is the case must be effected by reduction to a lateral limb of suitable size as to not cause xylem dysfunction. All and any works of pruning this tree must comply with best practice as outlined within BS 3998:2010

The above report findings and recommendations were carried by Mr Timothy C Rose director of Treetops. COM LTD company registered office 8 Bettina crescent Banbury Oxfordshire Tel 01295 262247 email: treetopscomltd@btinternet.com