Purpose of Report

1. To consider an application submitted by Mr. David Mahon of MWA Arboriculture, on behalf of the Insured Mrs. Langford 56 The Yews, Oadby, LE2 5EF to fell 4 Corsican pine trees located on her property.
Background

2. The 4 Corsican pine trees T1, T2, T3 and T7 are protected by an Area order (5.75ha) that includes broadleaf and conifer trees located in the gardens of 70 residential properties.

3. Crawford and Company Adjusters (UK) Ltd. were instructed by the Applicant’s insurers, NIG Personal Lines, to undertake an investigation of the cracking damage to the property. The technical report submitted with the application includes a soil survey, root identification, level survey, and tree report.

Consultations

4. The Planning Officer for Oadby and Wigston Borough Council objects to the proposal and suggests that underpinning work could be carried out.

5. A letter of objection has been received from a resident objecting to the removal of the 4 Corsican pine trees on the grounds of loss of habitat for wildlife and amenity.

6. A letter of support for the felling proposal has been received from a resident of the North Memorial Homes, Stoughton Close.
Issues

7. The Applicant’s property was found to have signs of movement and cracking damage to the utility room, rear porch, and right hand side of the garage. The pattern and nature of the cracks is indicative of subsidence caused by clay shrinkage below the foundations that has been induced by the roots of the four Corsican pine trees T1, T2, T3 and T7 taking moisture out of the shrinkable clay subsoil. The structural engineer has advised that this damage can be mitigated by removal of the four trees; this will allow the clay to re-hydrate in the winter months, causing the clay to swell and the cracks then to close.

8. The four Corsican pine trees T1, T2, T3 and T7 are part of a line of 36 protected Corsican pine trees 273m in length on the north boundary of The Yews and the south boundary of Stoughton Close and the North Memorial Homes. The 36 trees are located in the gardens of 3 residential properties and on the highway verge of The Yews.

9. The four Corsican pine trees T1 T2, T3 and T7 are located 6.0m from the north facing garage wall of 56 The Yews. The trees have an average stem diameter of 50cm and a height of 20.0m. The crowns are 7x7m and branches overhang Stoughton Close. There is some minor die back of foliage in the crowns. The trees are estimated to be 65 years old with an estimated life expectancy of 35 years. The trees can be viewed from residential properties and the public highway on The Yews and Stoughton Close. Corsican pine trees are not native and do not support a wide diversity of insects and birds.

10. The Applicant’s garden is laid to lawn with shrub beds, 7 protected Corsican pine trees, an unprotected early mature Lawson cypress, western red cedar, cotoneaster and an ornamental cherry tree.

11. The technical report dated 15th July 2011 states that the detached bungalow with an integral garage was built in 1975. The cracking damage to the bungalow and garage was first notified to the insurance company on 23rd June 2011. The cracking damage is summarised as follows: internal stepped crack below the rear porch window; cracking to the utility room ceiling indicating that the garage is pulling away from the utility wall; jamming of utility doors; externally there is a stepped crack below the rear porch window and the kitchen window frame has pulled away from the wall. The cracking damage is 1 to 5mm wide and is classified as category 2 of the Building Research Establishment 251 classification. There are five categories of damage, category 1 being the slightest cracking and category 5 indicating the most severe structural damage.

12. An addendum to the technical report dated 15th June 2012 stated the foundations of the bungalow and integrated garage are 1.15m thick concrete to a depth of 1.45m below ground level on a stiff moderately shrinkable clay subsoil. Roots of the Corsican pine trees were found below the foundations to a depth of 3.0m. It was concluded that the cracking is due to root-induced clay shrinkage subsidence and recommends that the four Corsican pine trees T1, T2, T3 and T7 adjacent to the garage are felled to remove the cause of the movement. Should the trees not be felled it is estimated that the cost of underpinning work could be over £50,000.
Corsican pines T1, T2 and T7

Corsican pine T3

Cracking below porch window
Internal cracking showing movement of garage away from utility room wall

Cracking damage to ceiling of utility room

Internal cracking of garage wall
13. The Arboriculture Research and Information Note 142-98 Tree Roots and Foundations by P. G. Biddle states that if the movement and amount of damage is unacceptable and it is clearly established that tree root activity is involved, it may be preferable to re-stabilise the building by dealing with the cause (i.e. the tree). The Note advises that where the movement is entirely seasonal it may be possible to reduce the movement to an acceptable level by reducing the crown of the tree. Where large trees are in close proximity to a building crown reduction will have little benefit. In cases where there is a persistent moisture deficit pruning work will not be effective. If the persistent deficit is not too extensive and the soil is reasonably permeable, felling the tree will allow the soil and foundations to re-stabilise within a few years.

14. The National House Building Council Practice Note 3 (1985) *A quick way to find the right depth of foundations on clay soils* states that buildings constructed on medium shrinkage soils at a distance of 6.0m from a pine tree 20.0m in height should be 1.06m in depth.

15. In April 2012 a change to the tree preservation legislation removed the ability of a Local Planning Authority (LPA) to certify under Section 5 of the Act that a tree protected before August 1999 has ‘special or outstanding’ amenity value. This certification removed the LPA’s liability to pay compensation for any damage that could arise from the decision to refuse consent to fell a protected tree. The revised legislation enables an Applicant to claim compensation where loss or damage over £500 has been caused by or incurred in consequence of a refusal of consent by the LPA.
16. The Land Tribunal decision 2011 of *Wright v Horsham* states that the LPA, when coming to a decision on an application to fell a protected tree that is implicated in subsidence damage to a property, must decide the matter on the ‘balance of probabilities’ and not on the criteria of ‘beyond reasonable doubt’. The implication for this application is that if there is sufficient evidence to confirm that the tree is contributing to the property damage but the LPA refuses consent to fell it, the Authority could be liable to pay the Applicant compensation for underpinning works to repair the structural damage caused by the protected tree.

17. There is insufficient space to plant 4 replacement trees of any size on the Applicant's property without potentially increasing the risk of subsequent subsidence.

**Equal Opportunities Implications**

18. There are no discernible equal opportunities implications.

**Conclusion**

19. The four Corsican pine trees T1, T2, T3 and T7 have been identified in the technical report as the principle cause of unacceptable movement to the walls of the bungalow and integral garage that is resulting in cracking of the brick work and distortion of window and door frames in the utility room and rear porch. The removal of the 4 trees will allow the clay beneath the foundations to rehydrate and swell during the winter months closing the cracks to the brick work and stabilising the door and window frames. As stated in the Arboricultural Research Note 142-98 crown reduction is not advised where trees are in close proximity to the building and where foundation depth is adequate underpinning should not be necessary if the trees are removed.

20. The four Corsican pines trees T1, T2, T3 and T7 are part of a line of 36 trees located in the gardens of 3 residential properties and on a highway verge the removal of a block of 4 trees will not have a significant detrimental impact on the visual unity of the line of trees. As Corsican pine trees are non native the loss of habitat for insects and birds will be minimal.

21. Should consent be refused to fell the 4 Corsican pine trees and it can be determined that the refusal leads to further damage to the property the County Council may be liable for costs of over £50,000 to carry out underpinning works to the property.

22. There is insufficient space on the Applicant's property to plant 4 replacement trees that would not be at risk of causing subsidence to the bungalow.

**Recommendations**

23. It is recommended that consent is granted to fell the four Corsican pine trees T1, T2, T3 and T7 at 56 The Yews, Oadby.
Reason for Recommendations

24. The four Corsican pine trees T1, T2, T3 and T7 are causing cracking damage to the Applicants’ property and the removal of the trees will allow the foundations of the bungalow and integrated garage to re hydrate and the cracks to close.

Background Papers

The background papers used in the preparation of this report are held on Environment and Transport File No. 2012/0394/LCC, The Arboriculture Research and Information Note 142-98 Tree Roots and Foundations by P. G. Biddle and the . National House Building Council Practice Note 3 (1985) *A quick way to find the right depth of foundations on clay soils*

Circulation Under the Local Issues Alert Procedure

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