Proposed Tree works Brickfield Park, 2021

14th January 2021

Brickfields Park, Drimnagh is a former landfill that was developed as a public park in the early 1970's and subsequently planted. Approximately 500 of these trees have established and matured and they create a wonderful sylvan ambiance in this local park. The park has been improved in recent years with the playground up-graded and a new all-weather community facility which is a great asset for local children. Plans are also in preparation to improve the changing room pavilion in future years.

In 2020, the Council's Tree Officer carried out a survey of trees in Brickfield Park. This is the first such survey of trees in this park. It is an action of the Dublin City Council Tree Strategy 2016-2020 to survey and create a baseline inventory of urban trees in public ownership with the goal of ensuring the City has a good and healthy unban forest which includes woodlands, copses and individual trees whether in open spaces or streets. A healthy tree population is important both for public safety and the multiple benefits for people and the environment that trees provide.

The outcome of the tree survey has found that 71 trees have defects and disease to such an extent that they have become a health and safety issue to park users. Details concerning the several causes for tree removal in Brickfield Park are provided in Appendix 1. Removal in 2 phases (winter 2020/2021: 41 trees and winter 2021/2022: 30 trees) was recommended with the felling of the most dangerous trees to be carried out in December 2020/January 2021.

The works will be carried out in periods October to March so as to avoid the bird nesting season. 9 of the trees were removed in December 2020. Crown lifting (a regular maintenance work which consist in removing all branches up to 2 metres in order to improve sightlines) was carried out earlier in 2020. Urgent pruning of three trees is also recommended by the tree officer.

Where possible the trees to be removed, will be left as standing monoliths – the practice whereby a tree is reduced in height and without branches and left to naturally decay in order to provide habitat for wildlife- birds, bats and insects will live, shelter and feed in and off the timber.

In order to protect wildlife and as per regulations, trees will be checked for bat roots by a licensed tree surgeon before removal or pruning. The license allows for the examination of potential bat roosts, including all bat species and all roost types. A bat survey carried out during October 2020 found no evidence of bat roosts in the park.

As per good arboricultural practice, park staff have planned for replacement planting which will diversify the species and age profile of the tree population, making it more resilient to diseases and the challenges brought by climate change. The re-planting programme will take place over the winter months of each phase to plant in total 70 trees of the following genera: pines, birches, rowans, hawthorns (see appendix II).

We would welcome the participation of the local community in the planting programme and those interested can contact the undersigned.

Brid Brosnan, Brid.Brosnan@dublincity.ie,

Executive Parks and Landscape Officer

Ludovic Beaumont, Ludovic.Beaumont@dublincity.ie

Tree Officer/ Executive Parks Superintendent

APPENDIX I

Tree removal/Monolith

In Brickfield Park, there are 8 main causes to the removal of the 71 trees

1 Diseases: 3 trees (approx.4%)

2 Fungal infection: 1 tree (approx., 1.5%)

3 Vandalism: 11 trees (approx. 15.5%)

4 Trees with cavities, decay and significant dieback: 36 trees. (approx. 50.5%)

5 Dying trees: 6 trees(approx. 8.5%)

6 Storm damaged trees: 4 trees (approx. 5.5%).

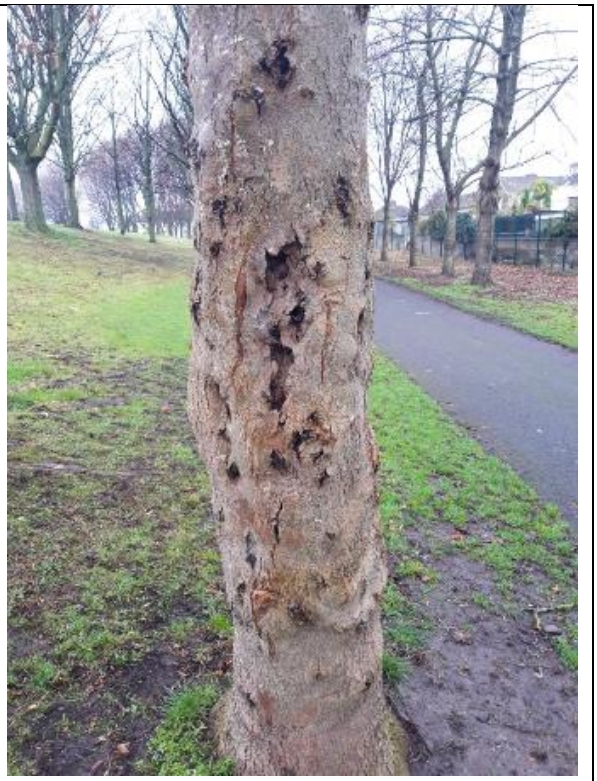
7 Trees with compression fork and included bark. 8 trees(approx. 11%)

8 Trees with pronounced lean (approx. 2.5%)

1) Diseased: 3 trees.

3 *Fraxinus excelsior* (Ash Trees) will be removed due to a disease called Bacterial Canker of Ash. It is caused by the bacteria *Pseudomonas syringae ssp. savastanoi pv. Fraxini* and it is not related to Ash Dieback disease. Previous wounds are invaded by the pathogen which develops into lesions that may exude a sticky fluid. Over time the bark dies and peels back. In some cases, trees with Bacterial Canker live for many years and be hardly affected; others develop large lesions and fail especially if the lesions ring the trunk or branch.

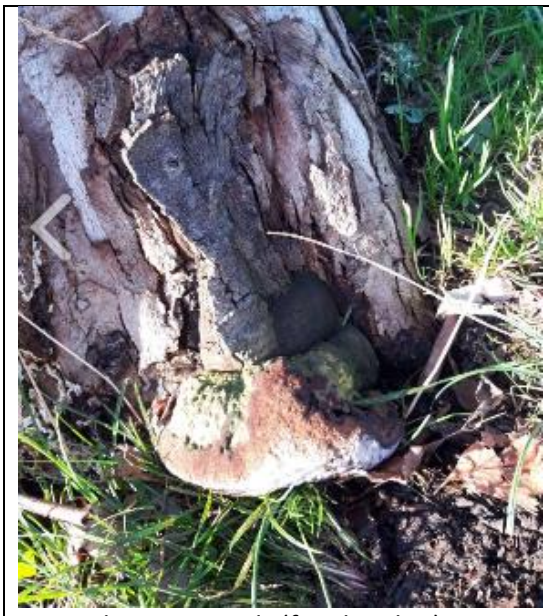
Ash Tree. Number: 01KP



Ash Tree. Number 01KR

2) Tree with fungal infection: Eucalyptus (tree 01AM) with Ganoderma australe fungi.

Ganoderma australe is a perennial woody fungus bracket. It can extend from damaged wood to previously sound sapwood. When advanced and extensive, the decay can result in failure of the stem, base and rootplate. The presence of 2 brackets shows that the fungi have started to successfully colonise the base of the tree. As the tree is located beside a playground, as the Eucalyptus is a brittle species in Ireland, and due to the fact that the tree has basal wound and codominant stems, the removal is inevitable.

<table>
<tr>
<td> 
Ganorderma australe (first bracket)</td>
<td> 
Immature form of *Ganoderma australe* (second bracket)</td>
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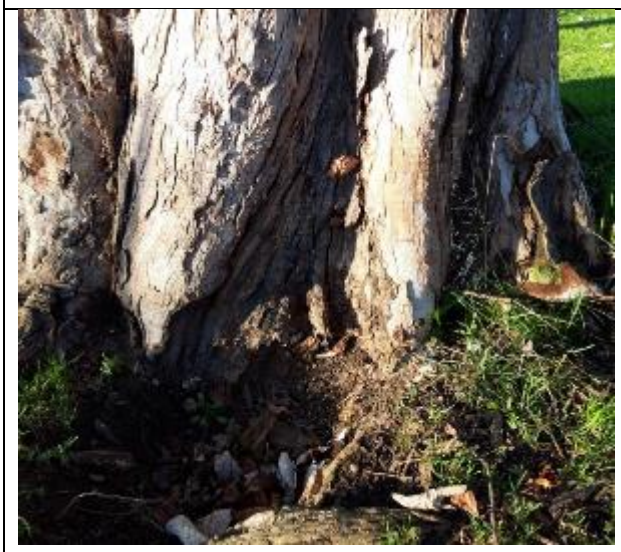
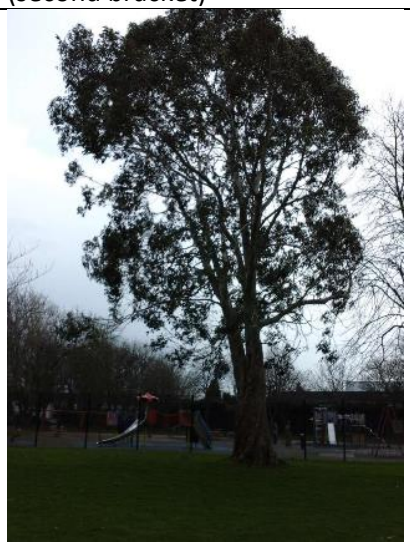
<tr>
<td> 
Basal wound and *Ganoderma* brackets</td>
<td> 
Tree with compression fork, codominant stems, basal wound, and fungi beside playground.</td>
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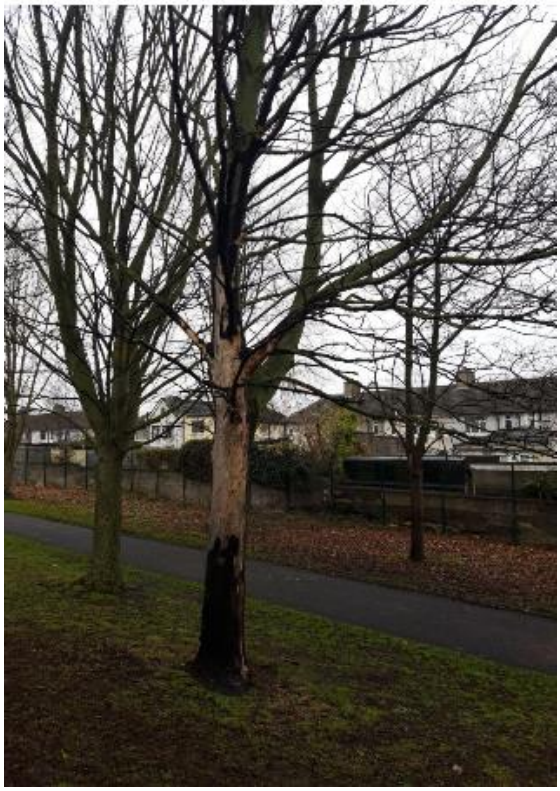
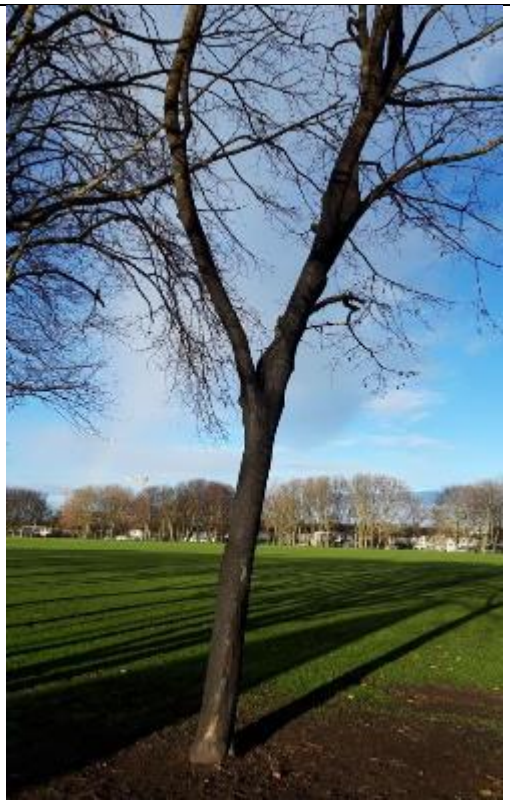
</table>

3) Vandalism:

The inventory noted that 11 trees have been severely burnt by fires lit at their bases. The damage done is so extensive that the trees have to be removed.



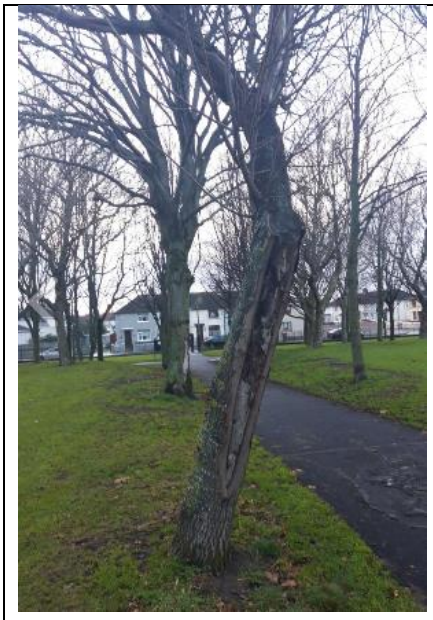
Norway Maple Extensive damages due to fire. Tree Number 01KS



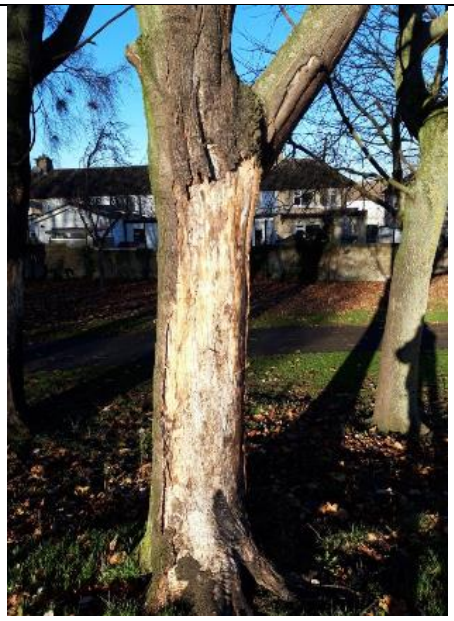
Lime tree, entirely scorched. Tree Number 01KA

4) Trees with cavities, decay and significant dieback:

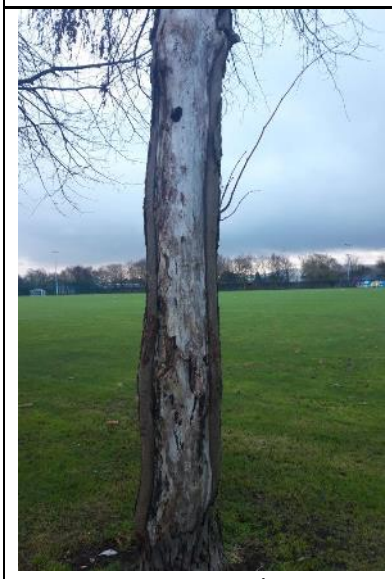
The inventory has uncovered 36 trees with large cavities associated with extensive decay and leading to dieback and decline. The origins of the wounds are not clear but it is likely that vandalism has been a major issue.



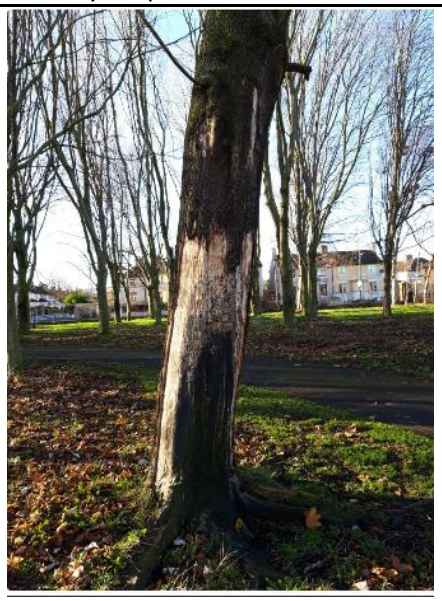
Lime tree. Tree Number 01K8



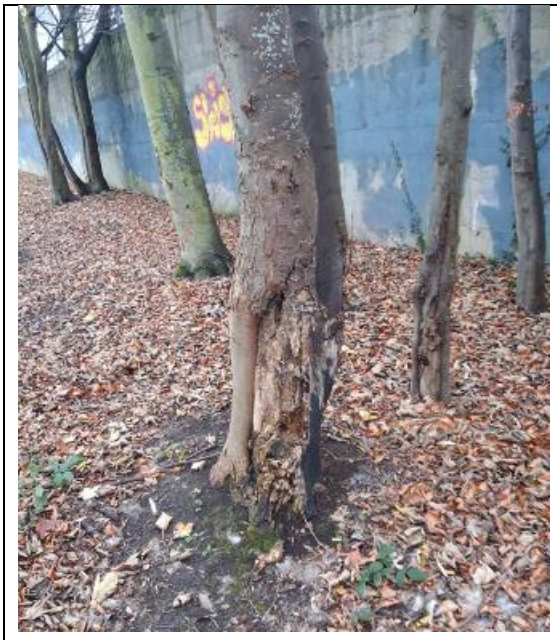
Norway Maple. Tree Number: 01kM



Lime tree. Tree number 01K5

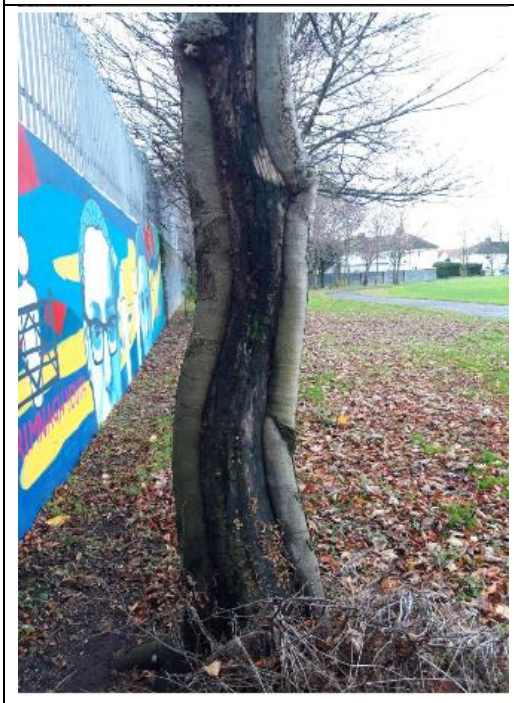


Norway maple tree: Tree number 01KL

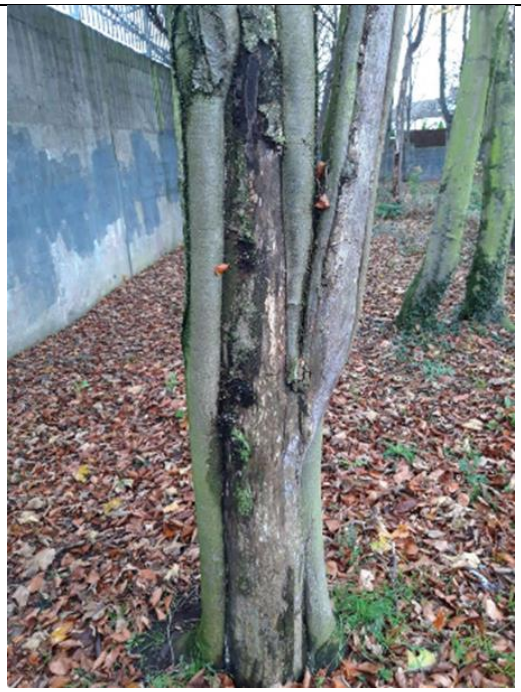


Beech tree. Cavity with extensive decay. Tree number 01J7

Beech tree. Tree Number 01J5



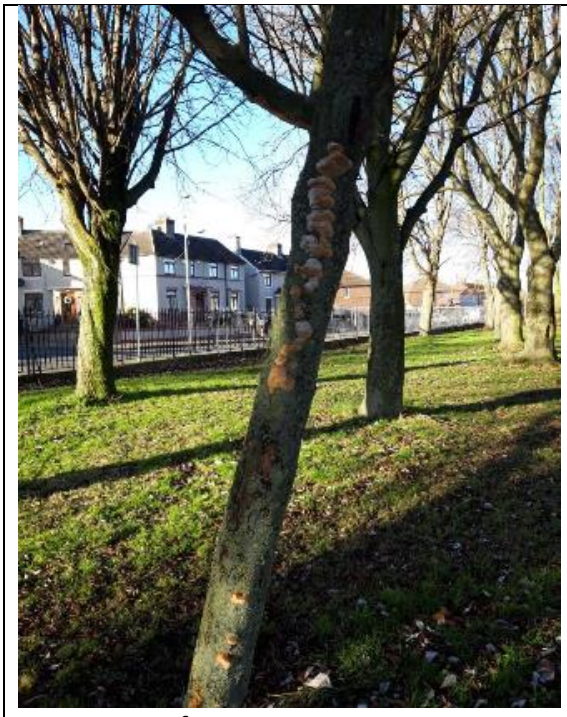
Beech tree: tree 01J0



Beech tree: tree 01J3

5: Dying trees

The inventory found 6 dying trees, notably 2 *Prunus cerasifera nigra* with fungal infection (*Phellinus pomaceus).* The reason for the decline of the other 4 trees is likely to be due to them being on the losing side of competition for light and water.

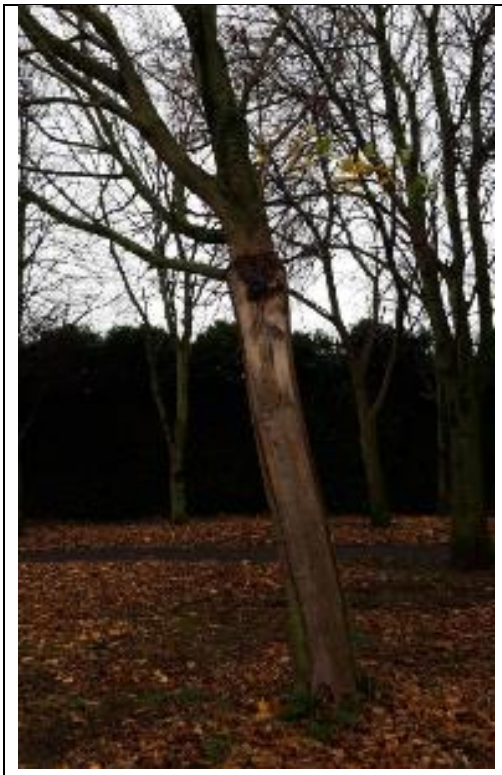


Prunus cerasifera nigra. Tree 01KJ

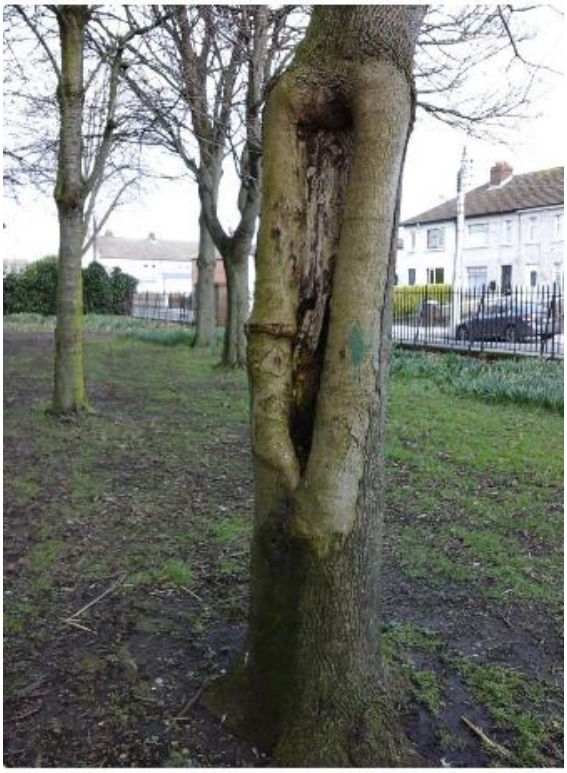
Prunus cerasifera nigra: Tree 01KH

6) Storm damaged trees:

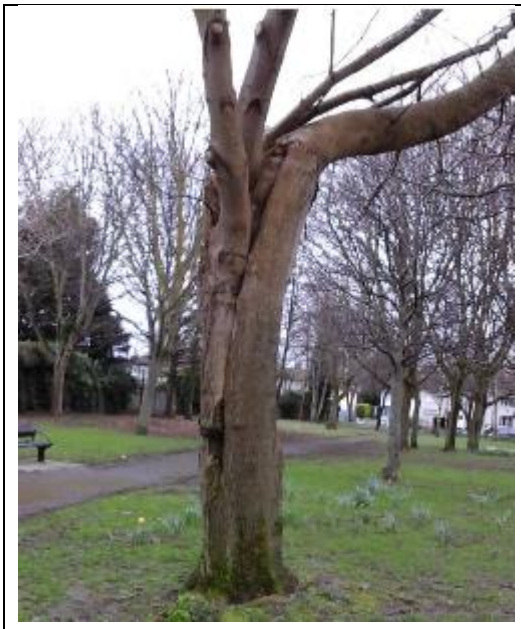
The assessment found 4 trees which suffered catastrophic damages during wind events. All 4 are Norway maples (*Acer platanoides*) which lost major limbs as a compression fork failed.



Norway maple has broken in 2 when compression fork failed during high wind Tree Number 01HS



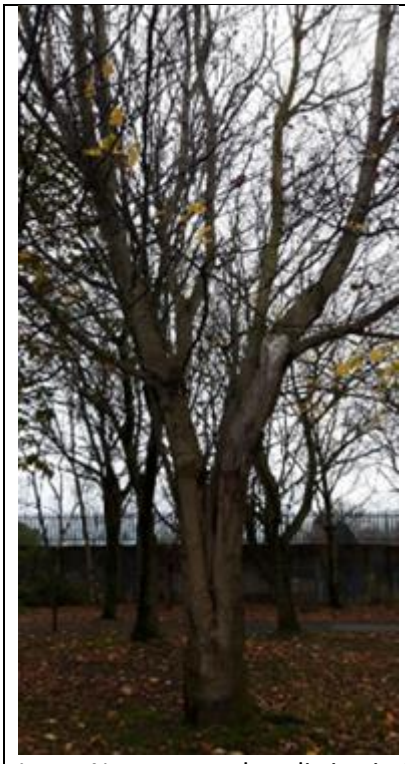
Norway maple with large cavity and decay due to compression fork failure during high wind Tree Number 01HS



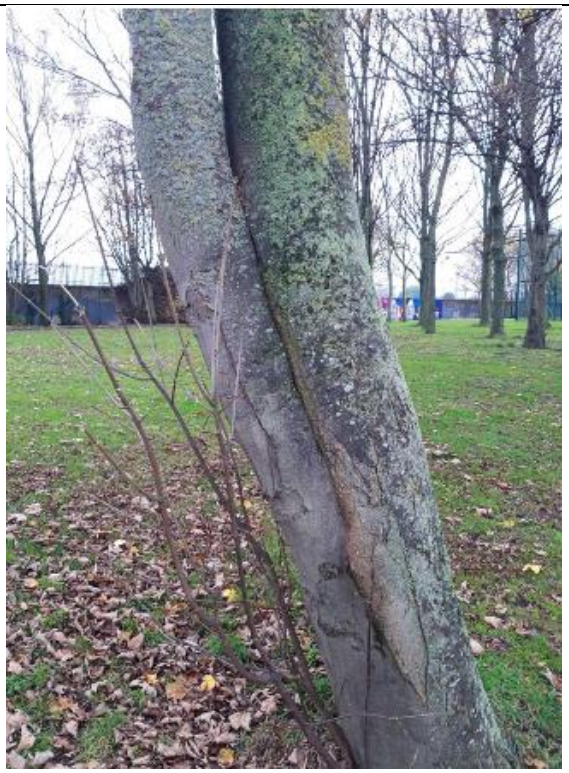
Norway maple compression fork failure. Tree Number 01Ak

7) Compression fork with included bark

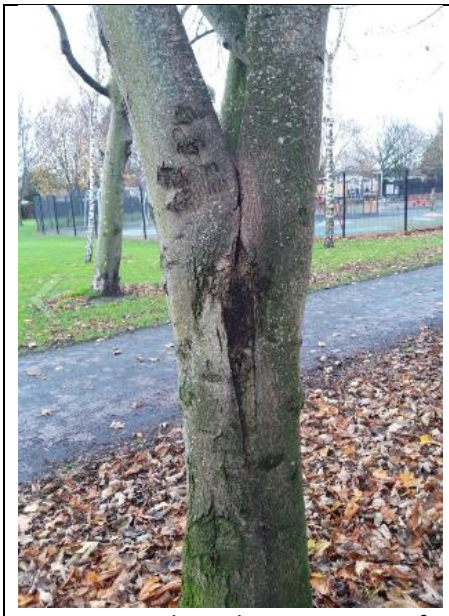
During the assessment, 8 trees were found with advanced stage of compression fork with included bark. Compression fork with included bark is a V-shaped narrow fork in which continued radial growth results in pressure which tends to push the limbs of the fork apart and lead to limb failure. This structural defect is common in Norway maples.



Large Norway maple splitting in 2. Tree Number 01HZ



Norway maple. tree number 01HV

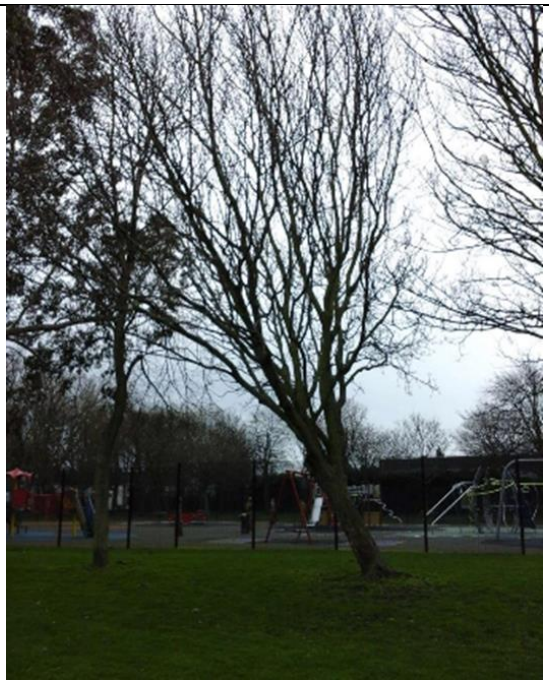


Norway maple with compression fork starting to split. Tree Number 01HP

8) Trees with pronounced lean

While trees can “correct themselves” by developing a balancing canopy, 2 Trees will have to be removed as the lean is too advanced and due to their locations close to paths and playgrounds.

Beech tree with extensive lean close to footpath. Tree Number: 01B5.

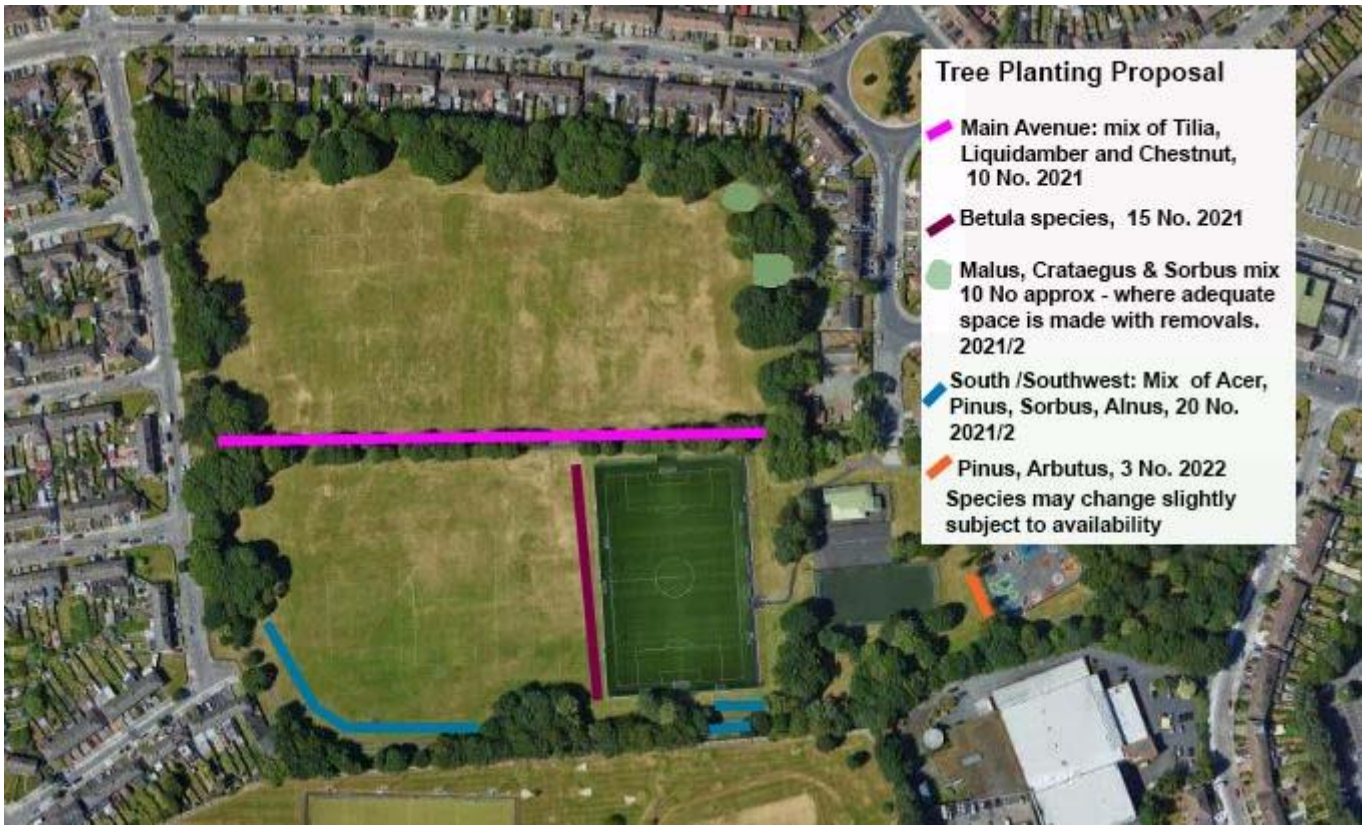


Sorbus aria with severe lean beside playground Tree Number: 01AL

Pruning Requirements

Unique Tree ID	Species	Requirements	Timeframe
01HU	Acer platanoides	Prune back damaged limb.	Completed by February 2021. Will be scheduled for the same time as the Eucalyptus felling
01HX	Quercus robur	Crown reduction: reduce damaged leader to growth points	February 2021 as above
01LO	Salix sp	General Crown reduction by 30% due to the tree species brittleness and location beside entrance and paths. Salix (willows) is one of the few species that can take heavy pruning. Crown reduction will have to be carried out every 3-5 years.	February 2021 as above.

Appendix II: Tree Planting Proposal



Appendix III Location of Trees to be removed (in Red) and to be pruned (in light yellow)