

Appendix 1: Retention of trees on the Holy Cross site

This submission regarding the protection of the trees on the grounds of Holy Cross College is part of a wider submission, aiming to maintain public access to the grounds as part of a linked North City Walk, to protect the wildlife habitat and green corridor of the Tolka riverbank, and to maximize green space and tree canopy as part of a necessary local contribution to environmental protection and the fight against climate change.

We are aware that not all the site is proposed for development, but since the boundaries of what is proposed are not known to us, we have included in this document all the trees contained on the full extent of the grounds. In sum, the site contains approximately 330 mature trees, most of them above 15m in height and therefore corresponding to what the [Dublin City Tree Strategy 2016-2020](#) classifies as large trees, specifying that ‘evidence shows that large-species trees are key to creating climate-proof, happy and healthy cities for the future’ (p.36). The predominant species are lime and sycamore. The site’s hedgerows and undergrowth have not been quantified.

We are aware that planning regulations include specific requirements concerning trees on the site to be developed. Dublin City Council’s *Dublin City Tree Strategy 2016-2020* states:

‘The successful retention of suitable trees is a benchmark of sustainable development. Trees of good quality and condition are an asset to a site and significantly increase its attractiveness and value. (...) The Tree Strategy for the City provides the vision and direction for long-term planning, planting, **protection and maintenance of trees**, hedgerows and woodlands within Dublin City, and will be a material consideration in the determination of planning applications and other development.’ (p.18, our underlining)

The document further states that ‘Where development is proposed it is essential that existing trees are considered from the very earliest stages of design and prior to an application for planning permission being submitted’ (p.18). Our submission is an attempt to contribute to that process at the earliest possible stage, in accordance with the strategy’s stated goal of enhancing community involvement in the management of local green spaces (p.39)

Planning requirements with respect to trees include a survey by a qualified arborist, information on which trees are to be retained, and a tree protection plan. It appears that a survey has been done of the trees on the site, since many but not all have fresh number tags. These identifying numbers are referred to where appropriate in the inventory of the tree canopy on the Holy Cross site (see below). The trees are presented in groups from A to N, which refer to the spatial groupings on the map of the site (see end of document).

Context: Dublin Trees

The [*Dublin Tree Canopy Study*](#) (UCD, 2017, p.7) provides information about the extent of tree cover in the city. The Dublin City Council area, at 10.2%, has less tree cover than both the Dun Laoghaire-Rathdown (18.9%) and South Dublin County Council (17.3%) Within the DCC area, the spread of tree cover is not uniform: the North inner city is not well provided, and an area of very low tree cover is identified, extending from the docklands through the inner city and out to Crumlin and Tallaght. On the north side, there is a band of richer tree cover extending East from the Botanic Gardens, along Griffith Avenue and through Clontarf to St Anne's Park (p. 9). Geographically, the Holy Cross site falls between these two contrasting bands. The only other significant green spaces available for those living close to the site are Griffith Park and Fairview Park. It is clearly the case that the grounds have served as an unofficial green amenity for the local community for many years, and that the complete loss of access would be of significant detriment to that community.

Trees and the environment

There is international scientific consensus that, globally, deforestation is an important component of the climate crisis, and that the protection of trees is one of the ways in which we can limit environmental damage. In such a context, the destruction of trees should not be undertaken lightly, even if a small site like Holy Cross may appear to be a drop in the ocean.

Trees, particularly, as mentioned earlier, large species, contribute to environmental protection in a number of ways:

- CO₂ emissions are captured in their foliage and in the wood as it grows (respectively 'sequestration' and 'storage')
- Tree cover can reduce other forms of pollution by absorbing them through their stomata (pores), providing surfaces on which pollutants can settle, and reducing the circulation of pollutants by limiting air movement. The pollutants to which these procedures apply are carbon monoxide (CO), sulphur dioxide (SO₂), nitrogen dioxide (NO₂) and nitrogen oxides (NO_x), ozone (O₃), as well as particulate matter (tyre fragments, road dust, emissions from combustion).
- Stormwater runoff. The canopy slows down the arrival of water at ground level, and the root structure allows water to penetrate the soil rather than running straight off into the drainage system.
- Trees, depending on their location, provide shade, shelter from prevailing winds, and a barrier to traffic noise.

These benefits are recognized by the *Dublin City Tree Strategy 2016-2010* (p.10-11). The *Dublin Tree Canopy Study*, for its part, recognizes that the capacity of trees to absorb pollutants should not be overstated, and is only one of a range of possible responses to the climate crisis (p.21-22). But it is an element of our response, and this should guide planning decisions at a local level also.

Wildlife habitat

Trees provide a habitat for birds, bats and small mammals. If trees at Holy Cross are lost, some of this habitat will disappear. Maintaining a wild riverbank on the south side of the Tolka appears to be the most crucial issue here: dippers, kingfishers, wagtails, herons and egrets frequent this stretch of river, as they do further upstream, and the trees and bushes provide important cover for them.

Green space and community wellbeing

As stated above, the grounds have provided a green space for the local community. People come to the grounds to find quiet, to breathe unpolluted air, to see the river, to be in contact with nature. But there is also an aesthetic dimension to the wellbeing which such a space promotes: mature trees are beautiful, and none less so than certain individual trees (the horse chestnut at area N) and the long stands of mature limes (areas B, C, L).

Priorities for tree retention in light of the above rationales

Ideally, the development plan would accept the retention of all the trees on the site, and work around them. Even if a policy of replanting to compensate for lost trees were to be pursued, it would be many years before the new trees attain the maturity needed to fulfil the functions of those destroyed.

If such a forward-looking strategy were to be rejected, we would argue that the trees in the following blocks (see attached map) are priorities:

L: Forming a block with K, the trees here form a pollution and traffic noise barrier adjacent to the busiest road adjoining the site, Drumcondra Road, and protect the Western part of the site from the prevailing Westerly winds. Surely this is a benefit which would be enjoyed by residents of any development. Furthermore, this section, together with K, contains a long line of approximately 37 mature limes which, in aesthetic terms, are outstanding.

M: This block of trees and associated brush provides a wildlife habitat and maintains the wild character of the riverbank.

N: Freestanding horse chestnut of outstanding size and proportions (tag 1007)

B, C, and I: Aesthetically outstanding rows of mature limes and other trees

H: Block of mixed trees in proximity to a protected building. Outstanding old yew 959

A, J: Blocks of trees in proximity to existing buildings or boundaries.

Holy Cross Trees by spatial grouping (refer to map below)

The identification numbers correspond to the recent tree survey

- A 12 limes and sycamores. Untagged and 930-935
 - B 12 limes 912-921.
Horse chestnut and sycamore 922 and 923
 - C 6 limes 935-940
 - D 3 horse chestnuts and 2 sycamores 941-945
 - E Area in front of college: approx. 20 dispersed trees, including
 - 5 holm oaks 989, 991-995
 - 3 Atlantic cedars 988, 996, 1008
 - 1 willow 995
 - Red maple 1005
 - Locust 1001
 - F 3 limes 946 947 949
12 birches including 1010, 1013 - 1015
 - G Horse chestnut 948
Beech 950
8 limes including 951, 952, 956
 - H South of Buck Jones House 20 mixed
North of Buck Jones House 1 lime, 1 horse chestnut 987
Front of Buck Jones House 1 yew 959
 - I Alley on both sides of Avenue, E-W
25 plane, sycamore, horse chestnut and lime, 961-985
 - J 14 mixed, some untagged, including 1054-1065, and 4 mature birches
 - K Approx. 65 mixed, untagged
Row of 12 limes untagged
 - L Forming a block with K, this is the biggest concentration of mature trees on the whole site
- Along Drumcondra Road boundary wall:
25 mixed including lime 1056 and oaks at northern end 1034, 1036, 1037

On East side of boundary path: row of 18 limes beginning 1031 and ending 1029, middle 16 apparently untagged

7 more limes and 3 sycamores where path turns to east at corner of property.

There is a broad band of smaller trees and bushes on the East side of this block, bounding the meadow.

Running W-E along southern edge of portion for sale: 25 Leylandiae beginning (W) 1051 and ending (E) 1052

M Riverbank West to East

15 mixed trees including Lime 1027

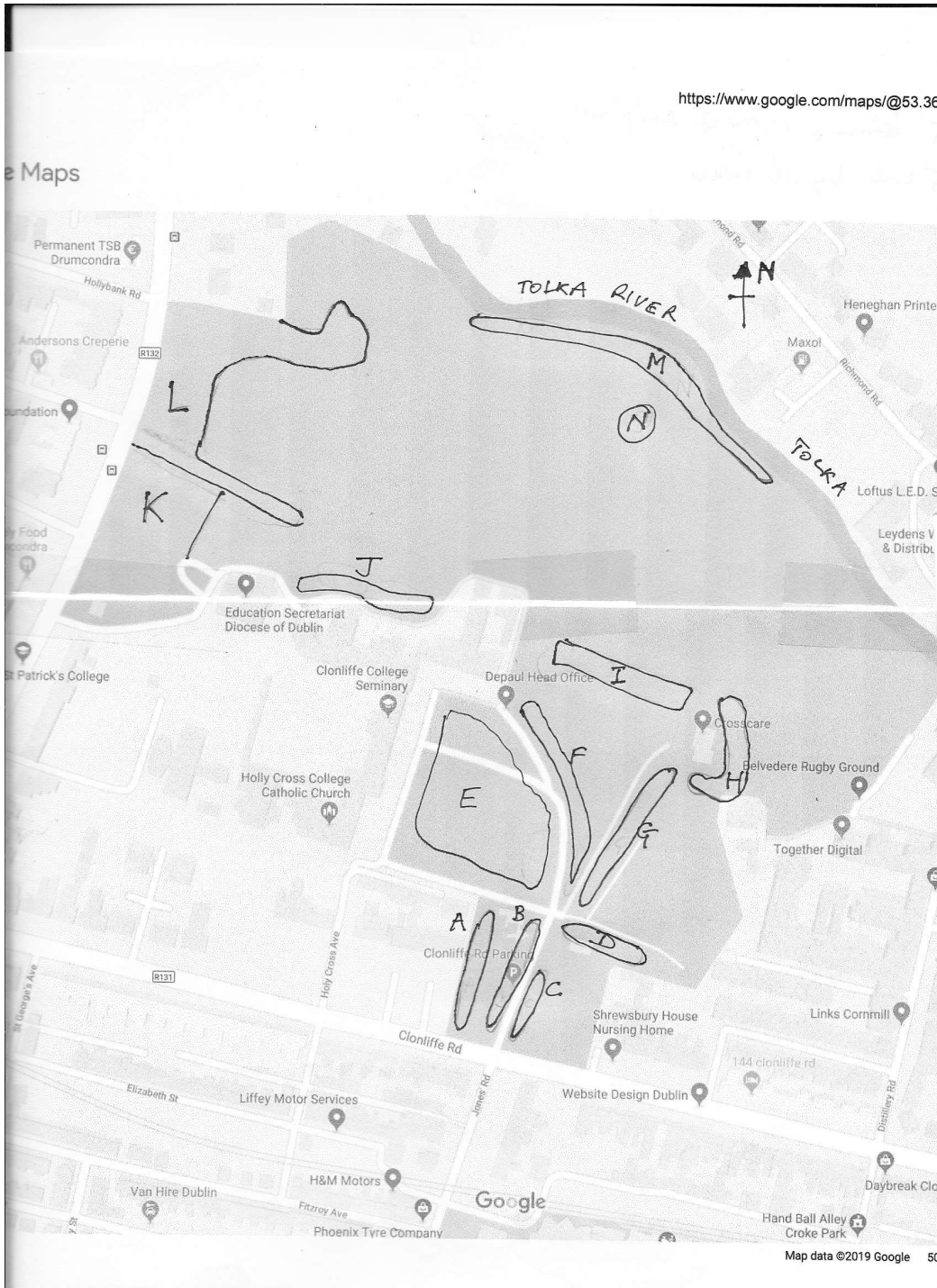
6 cypress

13 poplars, 1 ash, 1 sycamore. Last poplar 1018

N Freestanding horse chestnut 1017

The single most magnificent tree on the site

Site map with spatial grouping of trees



References

[Dublin City Tree Strategy 2016-2020](#), Dublin City Council

Michael Brennan, Gerald Miles and Tine Ningal, *Dublin Tree Canopy Study*, University College Dublin, March 2017. Available online at https://www.researchgate.net/publication/316441902_Dublin_Tree_Canopy_Study_Final_Report