

Object

The development proposed is incompatible with the preservation and long-term health of the trees alongside.

Summary

The many deficiencies in the development design proposals and methodology mean the standard for discharge of conditions has not been met, and the proposed development should not be permitted.

Value of trees affected

The reasons behind the protection of trees in the council's policies include biodiversity, character and urban greening, and action to limit climate change.

On biodiversity, Lime tree leaves are food for the caterpillars of numerous moth species including the lime hawk, vapourer, triangle, peppered, and hook-tip. They support large populations of aphids, which in turn are food for hoverflies, ladybirds and many species of bird. The flowers provide nectar and pollen for insects, particularly bees. Like all trees, they provide nest sites for birds, while older trees provide dead wood for wood-boring beetles and holes for bats and birds.

On character, trees are important in providing green infrastructure and green character to the Conservation Area (CA). At 7 Church Road, the trees achieve compartmentalisation from nearby dwellings and the GP practice and car park.

On climate change adaptation, these trees are a key resource that will be contributing to urban cooling through transpiration, and micro-climatic effects including limiting wind that will reduce energy demands of the 7 Church Road dwelling.

It is a matter of regret that the applicants, who, after all chose Highgate as the place in which they wished to live, have so little regard for these wider benefits.

Long term health of nearest trees

The proposed building works are within the Root Protection Areas and will impact the health of at least three and perhaps six or more of the most affected trees. The works include foundations that will permanently seal off the ground that the trees rely on for significant proportions of their anchoring, moisture, air and nutrients.

The following statements made by the arboricultural advisor are neither wholly compatible with each other, nor do they recognise (i) the future development of these trees, nor (ii) site history.

The applicant's advisors say: "The foundations will be designed to limit the amount of excavation required within RPAs to retain roots that are important to the trees stability as identified during the site investigations." (Arboricultural Method Statement p.19)

And

"The site investigations demonstrate that rooting activity from these trees within the site boundary is minimal. As a result, it is considered that standard foundations would not detrimentally impact these trees." (Arboricultural Impacts Summary, in Arboricultural Method Statement p.10)

And

"Any roots found with a diameter of less than 25mm shall be cleanly severed by the arboricultural consultant. Any roots of 25mm and above shall be excavated around without damaging them; the arboricultural consultant shall decide if it's feasible or necessary to retain the root, if not it shall be severed." (Arboricultural Method Statement p.20)

And

"The line of the proposed root pruning is to be situated at the boundary line. Excavations for root pruning within RPAs of trees numbers 1, 2, 3, 10, 11 and 12 will be undertaken using an Air-spade to a minimum of 800mm deep. The total depth of the excavation will be determined by the arboriculturist whilst on site." (Arboricultural Method Statement p.21)

The methods proposed for the work at 7 Church Road are in complete conflict with the future development of these trees.

The life expectancy of a Lime tree is 200 - 300 years. Severing roots is not compatible with ensuring the long term health of the affected trees over their expected lifespan, over which time, roots left to grow naturally would increase in diameter and length.

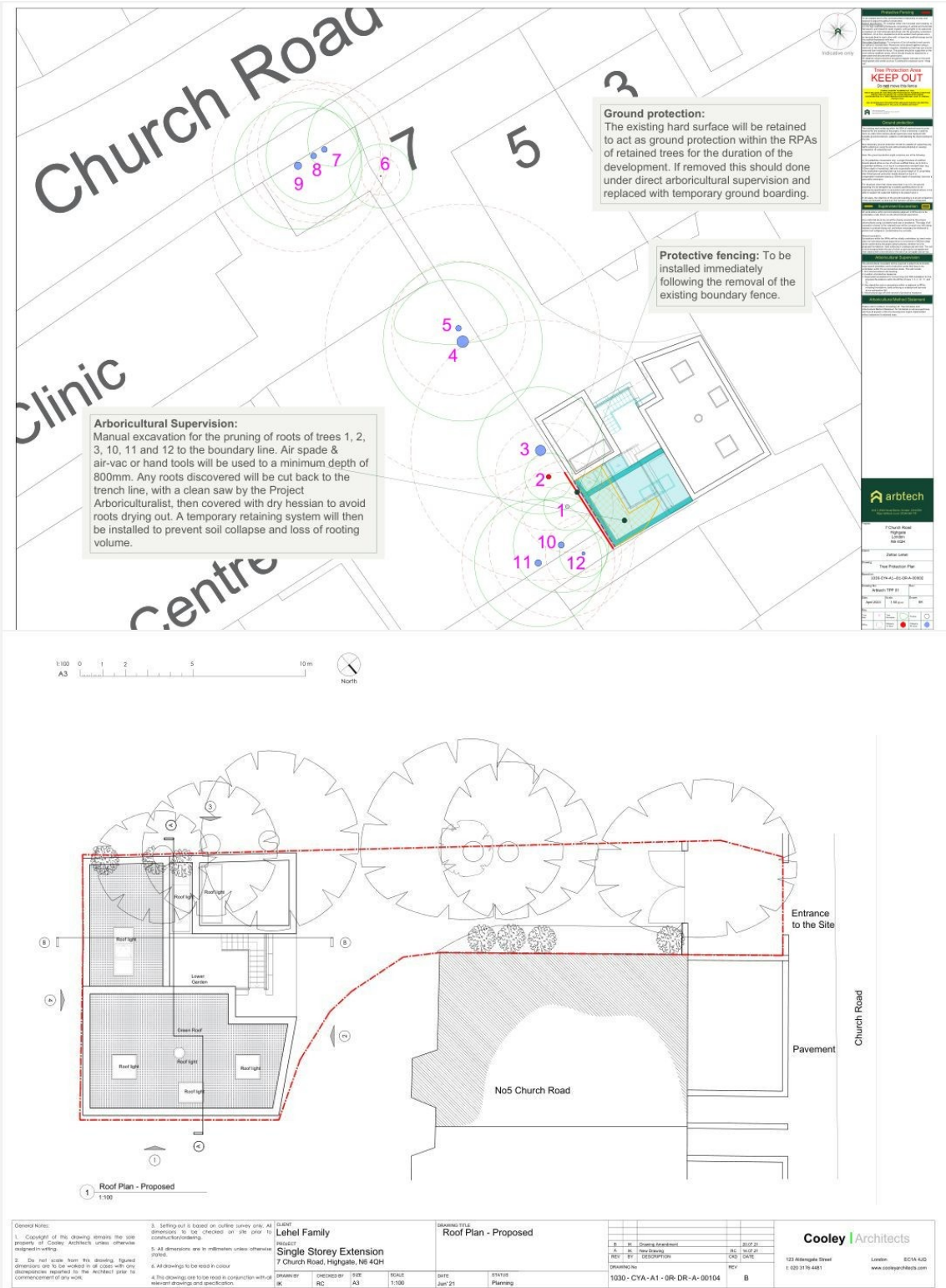
The approaches laid out in the Method Statement also do not take account of the history of the site.

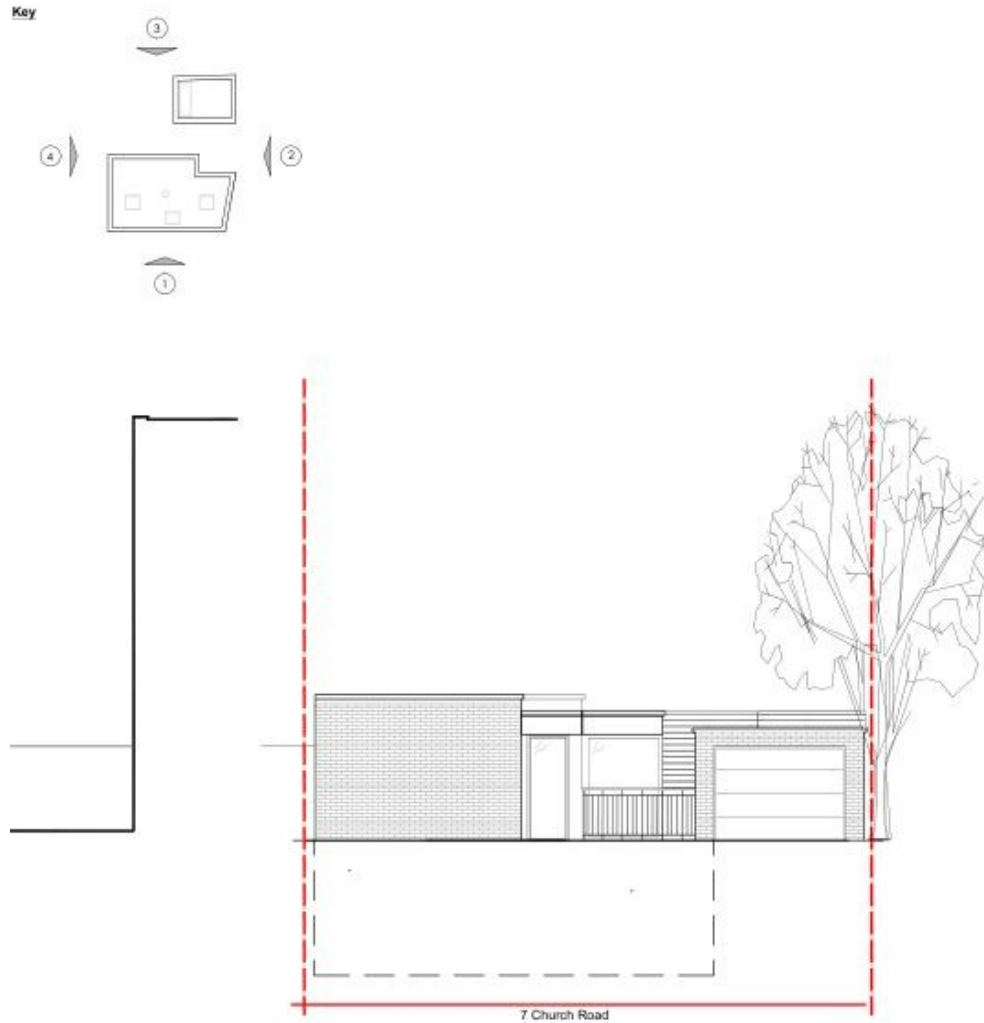
The vertical drop between the site and the ground containing the trees is indicative of a substantial change in ground profile caused by excavation. In normal growing conditions, the vast majority of the roots of a mature trees are found in the top 300 mm of soil. The finding of a high number of roots at a depth of 600 mm or deeper below the level of the ground on the other side of the boundary is strongly suggestive of compensatory root development to achieve anchoring, water and nutrition on that side of the trees. If the large change in ground profile occurred in 2015-2016, then the root development photographed has occurred at this unusual depth in just the subsequent 7 years. It is inevitable that the root diameters are small

at this time, and equally, that the roots that have been found could be expected to increase substantially in diameter over the many decades of future growth of these trees.

Conflicts between drawings

There are differences in the locations of trees 1, 2 and 3 shown in the drawings below. Given that the RPAs of trees 1 and 2 have radii of 1.5 m and 1.7 m, differences of 1 to 2 m in trunk locations mean large differences in impact. The close locations of the nearest trees are reinforced by the drawing of the trees alongside the garage.





Ground levels

We note that there is no section in the present or previous application showing

2 Elevation 2 - Existing
1:100

DRAWING TITLE Elevation 1 & 2 - Existing		REV		RC	
DATE Jun' 21		BY		DATE	
STATUS Planning		DESCRIPTION		REV	
		DRAWING No		REV	
		1030 - CYA - A1 - ZZ- DR - A - 00006		A	
				Cooley Archite	
				123 Adenigade Street London 1 020 3176 4481 www.cooley	

existing and proposed ground levels that include the land aon the other side of the boundary. This is crucial to understanding the rooting environment of the trees, and the building development constraints that should apply.

The BS 5837:2012 Trees in relation to design, demolition and construction states:

"The RPA of the retained trees should contain sufficient roots and rooting volume to maintain the tree's viability... the protection of the roots and soil structure [should be] treated as a priority."

and

"7.2.1 To avoid damage to tree roots, existing ground levels should be retained within the RPA. Intrusion into soil (other than for piling) within the RPA is generally not acceptable, and topsoil within it should be retained in situ. However, limited manual excavation within the RPA might be acceptable, subject to justification. Such excavation should be undertaken carefully, using hand-held tools and preferably by compressed air soil displacement.

"NOTE Due to the demands that manual excavation places on a development project, and limitations arising from health and safety considerations, it is not realistic to plan for excavation using hand-held tools where there is a need for trench shoring or grading the sides of the excavation to a stable angle of repose"

It is clear that these recommendations in the British Standard cannot be met at this site.

Site Investigation and Meeting Record

The photos show significant density of roots. The trees are still actively growing, and the roots are the anchoring and developing network structures important for nutrition and health.

It is clear that the building of the property at number 7 seems likely to have required considerable excavation of soil to level the site. This cannot be undone, but the roots now visible are at a depth that would not have been the case had the excavations not been carried out. Typically, tree roots are found within the top 30 - 40 cm of soil.

This means that, far from the proposed construction design and methods simply removing and pruning back roots that are not essential, the roots that will be removed would be the future essential roots.

Trees alongside entrance road

The trees alongside the site entrance road have block paving over nearly 50% of their root zones. Block paving cannot protect tree roots from ground compaction by heavy vehicles such as those delivering building materials. This is because the blocks that make up the paving are not interlocked so as to prevent vertical movement, whether that movement is upwards by expanding tree roots or, more importantly here, downwards by the weight of a heavy goods vehicle. Hollowing of the wheel tracks along the entrance road at the site 7 Church Road is visible in the attached Streetview image, and presumably, this has occurred through the movement only of cars or light goods vehicles. Prevention of further ground compaction along the entrance road would require ground protection over the surface of the roadway by boarding suitable for supporting the expected loading to be placed upon it, for example large, steel sheets.

Highgate Conservation Area Advisory Committee