CMK
Hort + Arb Ltd.

ARBORICULTURAL ASSESSMENT
&
IMPACT REPORT

CLONBURRIS SHD

DUBLIN 22

Project No.	Project name	Date	Revision
TCLO002	Clonburris SHD	25/04/22	B

Report Prepared by
Ciaran Keating
BSc Pl. Sci. & Ecol
H.N.D. Hort
AA Tech Cert Arb,
PG Dip. Arb & Urban Forestry

E-mail: cmkhortandarb@gmail.com
Mobile: 087 1182343
Drumone, Oldcastle, Co. Meath

Metropolitan Workshop
Architecture + Urbanism

Comhairle Contae
Átha Cliath Theas
South Dublin County Council

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1. Client brief & Methodology

CMK Hort + Arb Ltd. were commissioned to undertake an assessment of trees at Clonburris, Dublin 22 in order to provide base-line information on existing trees within Phase 1 of the Strategic Housing Development on the site. This report also outlines the impact of the proposed development on existing trees and provides broad guidelines for the management of retained trees during the construction phase of the development.
The field work was undertaken on a number of occasions during January & March 2022. The survey methodology, supporting drawings and documentation follow the recommendations contained within BS 5837 (2012). The analysis of the trees was undertaken using the VTA methodology as developed by Mattheck and Breloer (1994).

This report is supported by the following drawings:
TCLO002 101-104 Tree Survey & Constraints
TCLO002 105-108 Arboricultural Impact
TCLO002 109 –112 Tree Protection

2. General description of trees

The trees within the site are a mixture of screen and nursery plantings with occasional individual trees self-seeded across the site or deliberately planted such as those within the SDCC operations yard. The screen / shelter-belt plantings are composed of hybrid black poplar (*Populus nigra* var) with original spacings of 1m (image 1). There has been no discernible management of the trees to date with the result that competition between trees has resulted in poorly developed specimens predominating throughout the planting. The corresponding loss of vigour could be a contributary factor in the development of bacterial canker throughout the plantings resulting in many of the trees becoming structurally weak. This species has also a limited lifespan particularly within urban areas where issues such as deadwood and structural weaknesses can be considered hazardous.

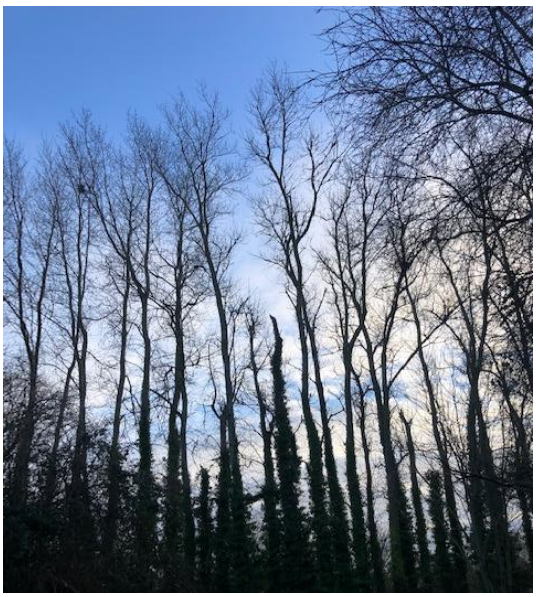

Image 1. Typical view of poplar screen plantings. Note the drawn-up nature and poor quality of the trees.

The internal linear plantings (image 2) were originally designed to be nursery stock for planting by SDCC with species such as Norway maple (*Acer platanoides*) and fastigiate hornbeam (*Carpinus betulus 'fastigiata'*) predominating. The abandonment of tree production by SDCC has resulted in these linear planting developing without the normal thinning and pruning operations to select trees for installation into parks and streetscapes. The trees are now generally poorly developed and of poor quality. The relocation of any of these trees for use within the open space provision of the proposed development would be unlikely to be successful as normal practices to prepare trees for lifting such as root pruning and crown management have not been undertaken.

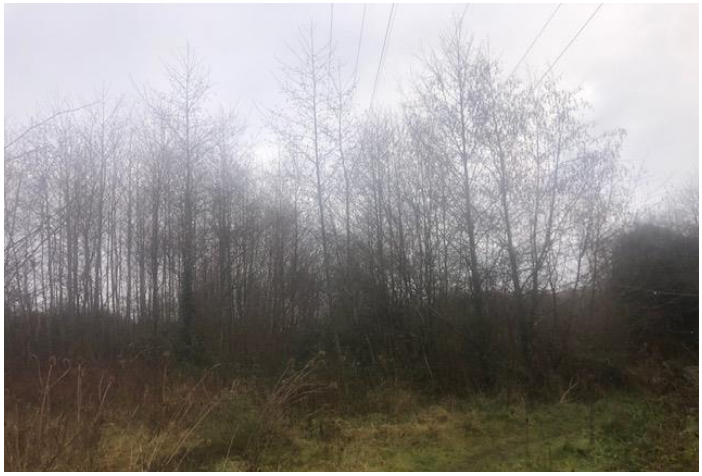

Image 2. Typical image of internal nursery plantings

An internal screen planting of birch (image 3) has developed relatively well though the close proximity of trees has led to the development of a sub-dominant element within the planting.

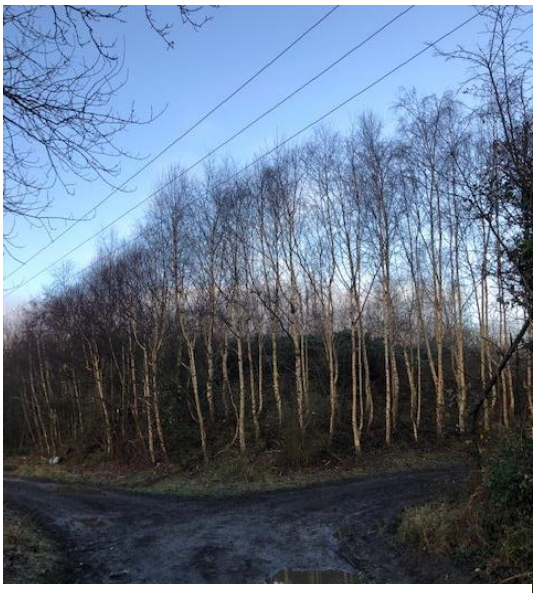

Image 3. Birch screen planting

The SDCC depot accessed from Kishogue Lane contains a number of mature trees located within a small green space beside a stream within the yard (image 4). These trees which are primarily sycamore (*Acer pseudoplatanus*) appear to have been incorporated into the depot and probably originate from a former hedgerow. The condition of these trees is generally good though they contain varying degrees of management and age-related decay. A small number of trees most likely originating from this group are located by the roadside and are included within this report. Leyland cypress (*xCuprocyparis leylandii*) have been planted in this area but are of poor quality overall.

A ditch with a hedgerow on both sides is located along the track leading from the depot into the main area of the site (image 5). This is primarily populated by alder (*Alnus glutinosa*) which have developed relatively well.

In addition to the linear plantings described above the internal areas contain occasional self-seeded trees (image 6) such as sycamore, birch, goat (*Salix caprea*) and white willow (*Salix alba*). The condition of these trees is varied with the sycamore and willow generally multi-stemmed having been browsed or cut back in the past. Open areas are dominated by bramble (*Rubus fruticosus* agg) and buddleia (*Buddleia davidii*) forming impenetrable thickets.

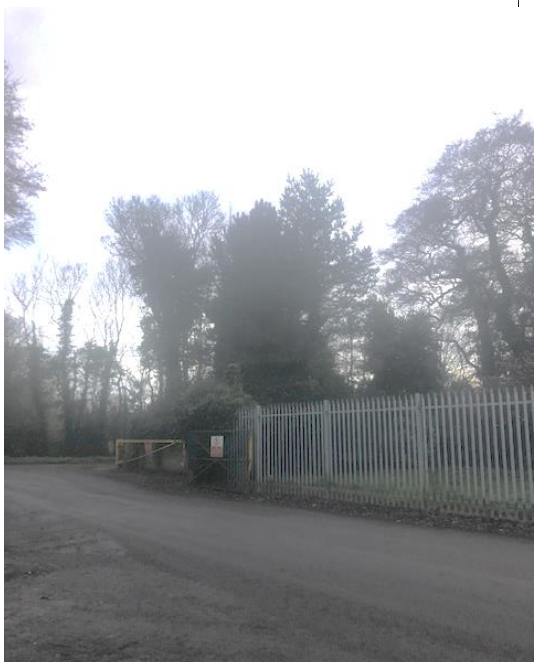

Image 4. Trees within depot lands

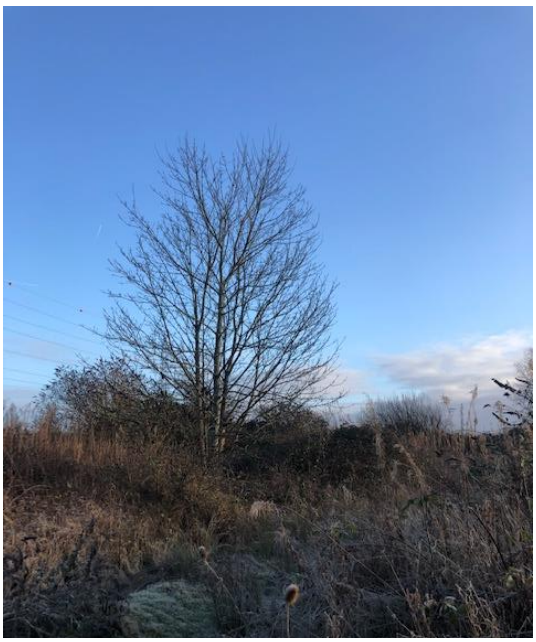

Image 6. Typical view of self-seeded sycamore within bramble scrub

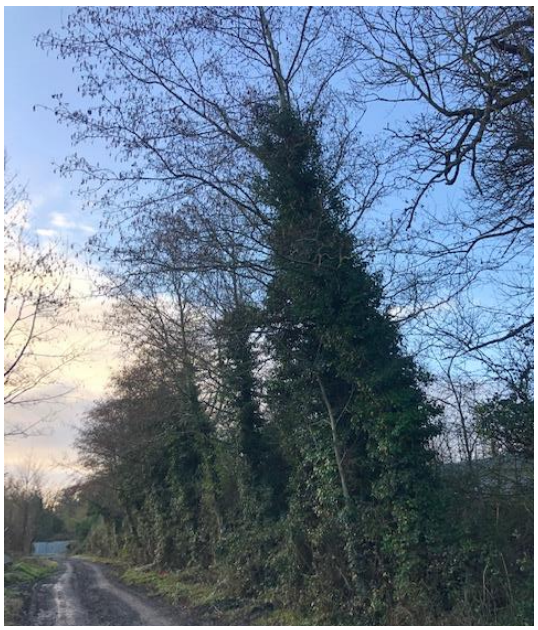

Image 5. Alder along track leading from Kishogue Lane

3. Impact of the proposed development

The retention of trees on this site has been largely confined to those that are located within the SDCC compound and along the stream that is located to the east and north of the compound. The tree populations within the compound represent the better-quality trees on the site.
The alder along the stream provide a natural edge to the stream and ecological value as native species.
SDCC have requested the retention of a screen planting of poplar to the north of the compound adjacent to the stream. The quality of these trees is moderate to poor and they will need a degree of thinning in the short-term and regular longer-term management if they are to be retained in a condition compatible with this areas development as an open space facility.
The impact in terms of tree numbers is significant however in terms of tree quality and long-term potential the impact could be considered to be moderate only. Those trees that are to be removed are located as isolated self-seeded individuals and within the nursery and screen plantings. As discussed previously these trees are generally in poor condition and have limited long-term potential. The poplar are succumbing to bacterial canker and storm damage and the close proximity of trees within the nursery plantings has reduced their long-term potential for retention.
The impact of the proposed development is shown on drawings TCLO001 105 – 108.
The landscape masterplan prepared by AECOM provides for a range of tree planting within streetscapes and parkland. These trees will, in time, and with appropriate management provide a new generation of trees which can enhance both the natural and built elements of the project.

4. Limitations of Survey

This survey should be regarded as a preliminary assessment of the trees and deals with the current condition as identified during this survey only. Every attempt was made to identify hazardous trees in this report; however, this survey was carried out from the ground and therefore cannot be held to have identified elements of decay, which may be hidden out of sight within the crown or beneath ivy or other obstructions. To counter this limitation in the survey process it is vital that during tree works any additional defects found by the climbing arborist are communicated to the consulting arborist to allow appropriate action to be taken.
The details within this survey are based on the condition of the trees during the survey period only. The findings in this survey cannot be held to be valid after any site disturbance, man-made or natural, which may have an adverse effect on any trees present.

5. Relevant legislation

There are no Tree Protection Orders (TPOs) on any of the trees on this site. However, unless planning permission which clearly identifies trees for removal has been granted then under Section 7 of the Forestry Act 2014 a person wishing to fell trees must apply to the minister for a licence to do so.
Exempted trees: Section 19 states that the requirement for a felling licence for the uprooting or cutting down of trees does not apply where:

- The tree in question is standing in an urban area
- The tree is considered dangerous and hazardous.
- The tree is within 10m of a public road and regarded as hazardous
- The tree in question is less than 100 ft. / 30m from a dwelling other than a wall or temporary structure;
- The tree in question is a hazel, apple, plum, damson, pear, or cherry tree grown for the value of its fruit or any ozier;

Other exceptions apply in the case of local authority road construction, road safety and electricity supply operations.

The Act is administered by the Forest Service (Department of Agriculture, Fisheries and Food). The Felling Section of the Forest Service is based in Johnstown Castle, Co. Wexford (053-9160200 or 1890-200223).

If you have any queries about felling in general or are unsure whether or not the trees fall under any of the above cases, it is recommended that you seek the advice of the Felling Section or of your local forestry development officer for further information.

Trees may contain bats. Bats are protected under Schedule 5 of the Wildlife Act 1976 and Schedule 1 of the European Communities (Natural Habitats) Regulations 1997. Professional advice from a licenced surveyor should be sought prior to any works commencing on trees.

6. Terminology

Tree categories

A	Trees of high quality and value due to their size, age, condition, historical/visual merit and/or conservation potential (a minimum of 40 years).
A1	Mainly arboricultural values. Particularly good examples of species, essential components of groups or of formal or semi-formal arboricultural features.
A2	Mainly landscape values. Trees, groups or woodlands which provide a definite screening or softening effects to the locality in relation to views into or out of site, or those of particular visual importance.
A3	Mainly cultural values, including conservation. Trees, groups or woodlands of significant conservation, historical, comparative or other value (e.g. veteran trees or wood-pasture).
B	Trees of moderate quality and value (a minimum of 20 years).

Terminology cont.

B1 Mainly arboricultural values. Trees that might be included in high categories but are downgraded because of impaired condition (e.g. presence of remedial defects including unsympathetic past management and minor storm damage).

B2 Mainly landscape values. Trees present in numbers, usually as groups or woodlands, such that they form distinct landscape features, thereby attracting a higher collective rating than they might as individuals, but which are not, individually, essential components of formal or semi-formal features (e.g. trees of moderate quality within an avenue that includes better A category specimens) or trees situated internally to the site, therefore individually having little visual impact on the wider locality.

B3 Mainly cultural values including conservation. Trees with clearly identifiable conservation or other cultural benefits.

C Trees of low quality and value (a minimum of 10 years).

C1 Not qualifying in higher categories.

C2 Trees present in groups or woodlands but without conferring on them greater landscape value and/or trees offering low or only temporary screening benefit.

C3 Trees with very limited conservation or other cultural benefits.

U Trees in such condition that any existing value would be lost within 10 years and which should, in the current context, be removed for reasons of sound arboricultural management. Trees that are dead, dying or showing immediate and irreversible decline.

Comments: Refers to the tree's condition and suitability for the site.

Common name: Most widely used non-botanical name.

Co-dominant: Two branches assuming the role of leading shoots. When growing close together may form a weak attachment (included bark) at their point of contact. Trees with this defect may be in danger of splitting at this weak attachment.

Crown Spread: Measured in meters north, south, east and west.

Decay fungi: Refers to those species of fungi which degrade living wood and which may, depending on the degree of degradation, render the tree structurally unsound.

Defects: Refers to cracks, storm damage and any other damage mechanical or biological.

Diameter: Diameter of the trunk (millimetres) at 1.5m. M.S. after the measurement refers to the tree being multi-stemmed.

Genus & Species: Refers to the botanical names for the tree.

Height: Measured in meters.

Monitor: Refers to trees which need to be re-surveyed on a yearly basis to assess their condition. This timescale may be sooner where works or adverse weather conditions have impacted negatively on the trees.

Terminology cont.

Overhaul: A reference to standard tree surgery work which consists of the removal of deadwood, crossing branches and balancing where appropriate.

Recommendations: Indicates surgery work necessary for the retention or, where necessary, removal of the tree.

Tree No. Refers to numbered tag fixed to tree during survey.

References

BS 5837 (2012). Trees in Relation to Design Demolition and Construction

Mattheck and Breloer (1994). The body language of trees