ARBORICULTURAL ASSESSMENT
&
IMPACT REPORT

42A PARKGATE STREET
DUBLIN 8

Project No.	Project name	Date	Revision
TPAR002	Parkgate Street	27/10/23	-

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Summary

Four early-mature trees are located within a small, enclosed area to the north-east of Parkgate House at Parkgate Street. The condition of the trees is generally good (categories B) however there is strong competition between individual specimens.
The proposed development of the site aims to retain all the existing trees.
Tree protection measures and works in the vicinity of trees will be monitored by the project arborist.

1. Client brief & Methodology

CMK Hort + Arb Ltd. were commissioned by Ruirside Developments Ltd. to undertake an assessment of trees at 42A Parkgate Street, Dublin 8 (image 1). The fieldwork was undertaken on the 25th of October 2023.
The initial descriptions of trees within sections 2 and Appendix i of this report provide an independent analysis of the trees without any consideration of plans for the future development of the site. The arboricultural impact of the proposed development is discussed within section 3 of this report.
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).

2. General description of trees

The site is a small parcel of land to the edge of Parkgate House adjacent to Seán Heuston Bridge and Parkgate Street (image 1) containing four early-mature lime cultivars (*Tilia cordata* cv, images 2 & 3). The trees appear to be even-however competition between trees has led to some becoming more dominant than other. The condition of the trees is generally good (appendix i) though structurally most have tight unions between stems which is a common feature in lime and trees growing in close proximity. Management to date has been confined to crown reductions particularly to the trees nearest the Parkgate House building. This has reduced the visual quality of the winter profile of these trees but is unlikely to have had a significant structural impact.

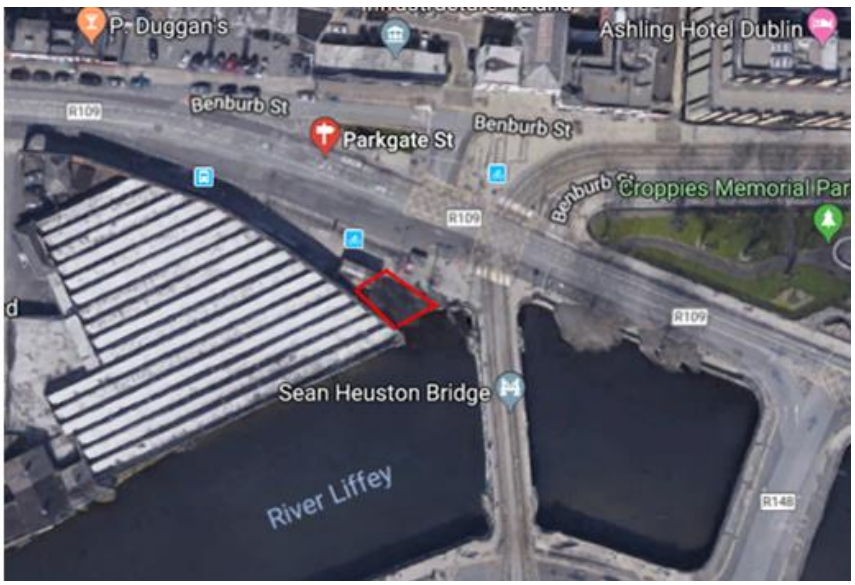

Image 1. Tree location (redline)

The root development of these trees can be considered to be restricted by the River Liffey wall, the Parkgate House building and the ESB sub-station. The public paving toward north may also restrict root development but to a lesser degree. Root protection areas (RPA) can only be estimated unlikely to follow the convention within BS5837 (2012) of 10xdbh. Reference should be made to drawing TPAR003 101 for a more accurate estimation of root spread.

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Image 2. View of trees from Parkgate Street

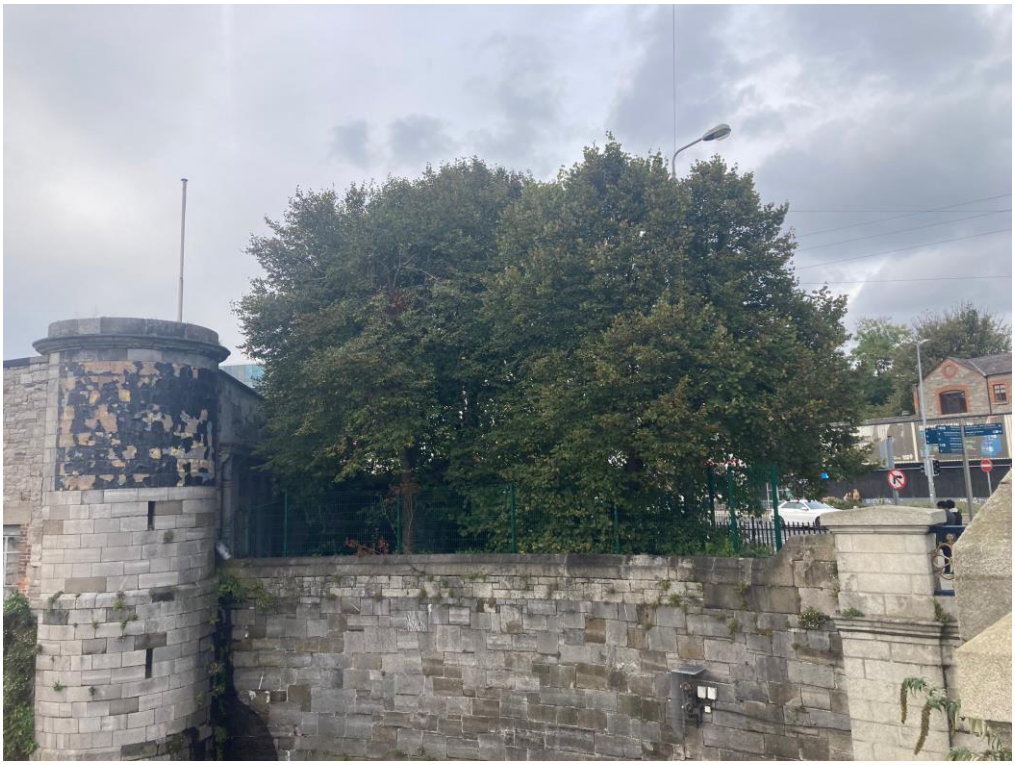

Image 3. View of trees from Seán Heuston bridge

3. Arboricultural impact and tree management during construction

All of the trees within the site are to be retained and incorporated into a new plaza area. A project arborist will be engaged for the duration of the construction period. Tree protection will be in place from the commencement of the project and will initially consist of braced Herras fencing or similar approved (refer to drawing TPAR003 102). This will be replaced when works to construct the plaza paving etc commence by trunk protection.

Paving will be installed over existing tree roots and where existing soil is required to be removed it will be loosened using an airspade and removed using hand tools. Exposed roots to be covered with damp hessian until paving and base materials are installed. These base materials shall include structured tree soil to promote root growth and support paving. The need for root barriers and/ or irrigation systems will be addressed at construction stage by the project arborist.

Canopy management may be required to facilitate demolition and construction works. These works will be minimal and undertaken following consultation with Dublin City Council. All works which will be specified and monitored by the project arborist will be undertaken to the recommendations set out within BS3998 (2010).

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. There are no restrictions on removing trees (Forestry Act 2014) within an urban area however trees should not be felled when nests are present. A suitably qualified ecologist should be engaged to assess trees for nests prior to felling if within the bird nesting season (1st of March – 31st of August).

Mature 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).
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.

Terminology cont:

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.

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.

8. References

BS 3998 (2010). Trees Work - Recommendations

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

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

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Appendix i. Arboricultural Assessment & Preliminary Recommendations

Tag number	Species	Age Class	Vigour	Comments	Preliminary Recommendations	Category	Long-term potential (years)	Dbh mm	Height m	Spread m N, E, S, W
001	Lime cultivar Tilia cordata cv	Early-mature	Good	Trunk with a lean toward north-east due to competition from neighbouring tree. Lean not significant with crown vertical in orientation. Upper canopy relatively well developed with no visible defects.	No action necessary	B2	30-40	370	10	5;4.25;3;4
002	Lime cultivar Tilia cordata cv	Early-mature	Good	Trunk co-dominant from 3m with a wide union between stems. Canopy relatively well developed with no visible defects.	No action necessary	B2	30-40	290	11	6;4;3;4
003	Lime cultivar Tilia cordata cv	Early-mature	Good	Upper canopy topped to east over neighbouring building reducing the trees visual quality. Remaining crown relatively well developed. Trunk co-dominant from 2m with a tight union and included bark between stems. which may reduce long term potential.	No action necessary	B2	30-40	420	11	5;3;2;4

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004	Lime cultivar Tilia cordata cv	Early-mature	Good	Trunk multi-stemmed from 3m with tight unions between stems, which is unlikely to be significant at present. Root girdling west has potential to reduce long term potential, though not significant at present. Canopy toward west has been reduced in the	No action necessary	B2	30-40	410	11	5;4;3;4