

# **ARBORICULTURAL ASSESSMENT** IMPACT & TREE PROTECTION REPORT

# **OLDCASTLE** CO. MEATH

Project No. TOLD004

Project name Oldcastle Public Realm 22/05/23

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**Revision** 

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#### 1. Client Brief & Methodology

This tree survey report was commissioned by Digby Brady Landscape Architects on behalf of Meath County Council. The purpose of the report is to provide details on the nature and condition of existing trees within the town of Oldcastle, Co. Meath to inform the upgrade of the town's public realm provision (image 1), the potential impact on trees

of these works and guidance on the protection of trees during the construction period.

The fieldwork was undertaken on the 5<sup>th</sup> of February 2023.

This report is supported by the following drawings:

- TOLD004 101 Arboricultural Assessment & Constraints
- TOLD004 102 Arboricultural Impact & Tree Protection

The survey methodology, supporting drawings and documentation follow the recommendations contained within BS 5837 (2012). The analysis of the trees was



Image 1. Survey extents (red line) ©Google

undertaken using the VTA methodology as developed by Mattheck and Breloer (1994).

#### 2. General description of trees

There is a total of sixteen street trees within Oldcastle. These trees were all planted in relatively recent times by the Oldcastle Tidy Towns committee. Three cultivars were selected ie Fastigiate hornbeam (*Carpinus betulus 'Fastigiata'*), *Tilia* Greenspire (*Tilia cordata* 'Greenspire') and fastigiate oak (*Quercus robur* 'Koster') all of which developed well. In December 2022 the limes and hornbeams were heavily pruned (images 2 & 3) reducing canopies to on average 1m diameter. The fastigiate oaks were not pruned and so their canopies are still intact (image 4). There are no other street trees present within Oldcastle therefore the existing trees though arguably reduced in terms of their stature and landscape value by the pruning works have made a big impact on the streetscape of the town and could continue to do so if more sensitive management options are considered.

It should be noted that limes and hornbeams respond well to pruning so although the degree of pruning could be considered excessive their future management could allow them to develop into defined shapes to give them an architectural quality whilst reducing their potential impact on neighbouring buildings. The same options are not available for the management of the fastigiate oak which should only be pruned in response to structural issues or storm damage etc. The narrow nature of the oak crowns limits their potential impact on adjacent buildings.

A tree (#563) which is in close proximity to the central building in the square should be pruned to reduce the potential for impacting on the building.



Image 2. Lime. Note extensive canopy reduction



**Image 3.** Hornbeam in front of St Brides Church Note extensive canopy reduction

There has been a tendency for small areas to be created at the base of trees (images 2, 3 & 4) into which summer bedding is planted. This could lead to a degree of bark damage from soil contact where rings separating the soil from the tree trunks are not in place. From an arboricultural management viewpoint, it would be preferrable for these planters to be removed and replaced with tree grills or permeable surfaces to allow more water to reach root zones.



**Image 4.** Fastigiate oak. Note planting area at base of tree.

#### 3. Impact of the proposed development & Tree Protection

The proposed redesign of the public realm infrastructure in Oldcastle will necessitate the removal of seven trees (two limes, four hornbeams and one fastigiate oak). The reasons for their removal include a road realignment, a pedestrian crossing and the facilitation of views to important historic buildings (Caffrey's & St Brides Church). With the exception of the fastigiate oak the trees identified for removal have all been heavily pruned in recent times thereby reducing their aesthetic value. The impact on existing trees is shown on drawing TOLD004 102 Arboricultural Impact & Tree Protection

New trees shown on the landscape masterplan provided by Digby Brady Landscape Architects are designed to provide replacement planting and will more than compensate numerically for the trees to be removal.

Retained trees which are to be incorporated into new paving will require protection from construction related impacts during works. This should include both trunk and root protection. Tree trunks should be protected by timber cladding as shown on drawing TOLD004 102 Arboricultural Impact & Tree Protection and where roots and/or soil around roots are exposed moist hessian should be used to reduce possible desiccation. It is advised that an arboriculturist be retained to provide advice as required to the design / construction teams to help deliver the best outcomes for retained trees.

#### 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. 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).

### Terminology cont.

- 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.

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

### Terminology cont.

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.

#### 6. References

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

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

## Appendix i Tree Survey & 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
	Small leaved lime									
	cultivar 'Greenspire'	<b>F</b> . 1								
E 1 Q	lilla cordata	Early	Good	A have No visible defects	No action pocossany	רם	40	170	5 5	1 1 1 1
540		wature	<u> </u>		NO action necessary	DZ	40	170	5.5	1,1,1,1
	Small leaved lime									
	Tilia cordata	Early		Heavily pruned in 2022, Soil build-up						
549	'Greenspire'	Mature	Good	at base. No visible defects.	No action necessary	B2	40	170	4.5	1,1,1,1
	Small leaved lime									
	Tilia cordata	Early		Heavily pruned in 2022, Soil build-up						
550	'Greenspire'	Mature	Good	at base. No visible defects.	No action necessary	B2	40	170	5.5	1,1,1,1
				A well-developed specimen						
	Fastigiate oak	Early		unaffected by pruning works. Soil						
551	Quercus robur 'Koster'	Mature	Good	build-up at base. No visible defects.	No action necessary	B2	40	220	10	1,1,1,1
	Small leaved lime									
	cultivar 'Greenspire'									
	Tilia cordata	Early		Heavily pruned in 2022. Soil at base.						
552	'Greenspire'	Mature	Good	No visible defects	No action necessary	B2	40	180	5.5	1,1,1,1
	Small loaved lime									
	cultivar 'Greenspire'									
	Tilia cordata	Early		Heavily pruned in 2022. Soil build-up						
553	'Greenspire'	, Mature	Good	at base. No visible defects.	No action necessary	B2	40	170	5	1,1,1,1
	Small leaved lime									
	cultivar 'Greenspire'									
	Tilia cordata	Early		Heavily pruned in 2022. Soil build-up						
554	'Greenspire'	Mature	Good	at base. No visible defects.	No action necessary	B2	40	190	4	1,1,1,1

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Tag number	Species	Age Class	Vigour	Comments	Preliminary Recommendations	Category	Long-term potential (years)	Dbh mm	Height m	Spread m N, E, S, W
	E. Martin and	<b>5</b> 1		A well-developed specimen						
555	Quercus robur 'Koster'	Mature	Good	build-up at base. No visible defects.	No action necessary	B2	40	180	10.5	1,1,1,1
556	Fastigiate hornbeam Carpinus betulus 'Fastigiata'	Early Mature	Good	Heavily pruned in 2022. Soil build-up at base.	No action necessary	В2	40	160	4	0.5,0.5, 0.5,0.5
557	Fastigiate hornbeam Carpinus betulus 'Fastigiata'	Early Mature	Good	Heavily pruned in 2022. Soil build-up at base.	No action necessary	B2	40	170	4	0.5,0.5, 0.5,0.5
558	Fastigiate hornbeam Carpinus betulus 'Fastigiata'	Early Mature	Good	Heavily pruned in 2022. Soil build-up at base.	No action necessary	В2	40	170	4.5	1,1,1,1
559	Fastigiate hornbeam Carpinus betulus 'Fastigiata'	Early Mature	Good	Heavily pruned in 2022. Soil build-up at base. No visible defects.	No action necessary	В2	40	170	4.5	1,1,1,1
560	Fastigiate hornbeam Carpinus betulus 'Fastigiata'	Early Mature	Good	Heavily pruned in 2022. Soil build-up at base.	No action necessary	В2	40	130	4.5	1,1,1,1
561	Fastigiate hornbeam Carpinus betulus 'Fastigiata'	Early Mature	Good	Heavily pruned in 2022. Soil build-up at base. No visible defects.	No action necessary	В2	40	160	4	1,1,1,1

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Tag number	Species	Age Class	Vigour	Comments	Preliminary Recommendations	Category	Long-term potential (years)	Dbh mm	Height m	Spread m N, E, S, W
562	Fastigiate oak Quercus robur 'Koster'	Early Mature	Good	A well-developed specimen unaffected by pruning works. Soil build-up at base. No visible defects.	No action necessary	В2	40	221	12	1,1,1,1
563	Small leaved lime cultivar 'Greenspire' Tilia cordata 'Greenspire'	Early Mature	Good	Located within shrubbery with limbs to west in contact with building. No visible defects.	Reduce limbs toward building	В2	40	160	8	2,2,2,2