

**ARBORICULTURAL ASSESSMENT  
&  
IMPACT REPORT**

**KILDARE MARKET SQUARE  
CO. KILDARE**

<b>Project No.</b>	<b>Project name</b>	<b>Date</b>	<b>Revision</b>
TKIL004	Kildare Market Square	19/12/23	A

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## Summary

CMK Hort + Arb Ltd. on behalf of Kildare County Council undertook an assessment of eighteen trees within Market Square, Kildare Town on the 14<sup>th</sup> of May 2021. The purpose of the assessment was to provide the design team with details on the composition and nature of the tree population within the square with this information informing the design process.

The tree population is mainly composed of common and small-leaved lime with the quality of the trees generally good.

The impact of the proposals to upgrade the square will necessitate the removal of three early-mature small leaved lime and 1 mature rowan tree. This impact is considered to be insignificant given the number and scale of the individual trees effected. It is considered that new tree planting as outlined within the landscape masterplan for the project will more than compensate for the removal of the four trees.

## 1. Client brief & Methodology

CMK Hort + Arb Ltd. were commissioned by Kildare County Council to undertake an assessment of trees within Market Square, Kildare Town. The fieldwork was undertaken on the 14<sup>th</sup> of May 2021.

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 trees with the site are located within Market Square (images 2 & 3) contains a number of mature common lime (*Tilia xeuropaea*), young & early-mature small leaved lime cultivars (*Tilia cordata* cv) with one one rowan cultivar (*Sorbus aucuparia* cv).



Image 2. Mature common lime (Market Sq. west)



Image 3. Early-mature small leaved lime Market Sq. east)

The lime trees are the most significant specimens and provide both a strong historic and sylvan presence to the centre of the town. Their condition is generally good, and all have the potential for long-term retention with appropriate management. It is recognised that the trees have been

incorporated into the public domain with the provision of seating at the base of a number of trees on the eastern section of the square (image 2) and as sites for lighting during festivals such as Christmas. Unfortunately, the seating has included a build-up of soil against tree trunks. This will negatively impact on the bark of the trees and could lead to bark death and decay establishment. Lighting although innocuous in itself can lead to cables becoming embedded in canopies if retained too long.

The impermeable nature of the paving which is very close to the bases of trees reduced the potential for moisture and gaseous movement to and from the trees' root zones. However, despite this most of the trees appear to be of good vigour (table 1).

More recently planted trees adjacent to the shops on the southern side of the square are generally outgrowing their base grills. It is now time to remove these grills and re-evaluate the type of basal treatment for these trees.

Management of the trees in the square has been largely confined to reducing crown spreads in the vicinity of the shops (image 4). This is an appropriate approach for lime and will continue to be necessary as the trees develop and it is recommended that this approach is adopted for the whole tree canopy to provide a uniformly managed crown shape.

Individual tree descriptions are provided within appendix I with table 1 outlining the overall categorisations of the trees. The locations of trees are shown on drawing TKIL006 101 Tree Survey & Constraints.



**Image 4.** Small leaved lime on eastern section of Market Square

Tree Categories	Number	% of Total
A	6	33
B	9	50
C	3	17
U	0	0

**Table 1.** Tree Categories

### 3. Impact of the proposed development

The proposed upgrade of Kildare Market Square will necessitate the removal of four trees (#961, #962, #963 & #964) as shown on drawing TKIL006 102 Arboricultural Impact. This represents a loss of three low value category C trees and one moderate value category B tree. The impact on the tree population of the proposed upgrade of Market Square is considered to be insignificant given the size of the trees and their overall condition. Replacement tree planting as shown within the landscape masterplan for the project will more than compensate for the removal of the 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. Relevant legislation

There are no Tree Protection Orders (TPOs) on any of the trees on this site.

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.

## Terminology cont.

- 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.

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.

## **7. Tree Protection**

Tree protection measures are shown on drawing TKIL006 103 Tree Protection and should be installed immediately works commence on the site. Two tree protection types are shown on the drawing. Type A being Herras fencing to be used for general overall protection with type B providing trunk protection when works are required in close proximity to trees and Type A fencing cannot be used. The removal of existing paving may expose tree roots and/or soil around tree roots. These areas should not be allowed to dry out or root death may occur. The soil shall be kept moist with the use of hessian sacking or other material to be placed over roots where required.

An arboriculturist should be retained to provide advice as necessary for the duration of the project.

## **8. References**

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

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

Tag number	Species	Age Class	Vigour	Comments	Preliminary Recommendations	Category	Long-term potential (years)	Dbh mm	Height m	Spread m N, E, S, W	Clear stem m
957	Common Lime <i>Tilia x europaea</i>	Mature	Good	Located on raised area with root potential restricted to south-east and west. Crown well developed with no visible defects.	No action necessary	A2	40	780	20	7,7,5,6	4.5w
958	Common Lime <i>Tilia x europaea</i>	Mature	Good	Crown slightly restricted toward east. Not significant. Well developed with no visible defects.	No action necessary	A2	>40	470	14	5,4,5,6	4n
959	Common Lime <i>Tilia x europaea</i>	Mature	Good	Well developed with no visible defects. Well developed with no visible defects.	Remove electrics	A2	40	620	14	6,6,5,6	6w
960	Fastigate hornbeam <i>Carpinus betulus</i> 'Fastigiata'	Mature	Good	Extensive bark damage to east with localised decay. Tight unions between stems. in canopy but unlikely to be significant at present.	No action necessary	B2	30-40	460	11.5	4,4,4,4	1.5s
961	Rowan <i>Sorbus aucuparia</i>	Mature	Fair	Pockets of bark damage and localised decay. Unlikely to be significant at present. Upper canopy sparse indicating decline.	Monitor	C2	10	210	11	2,1,2,1	2.5s
962	Small leaved lime cultivar <i>Tilia cordata</i> cv	Young	Poor	Extensive bark damage to lower trunk. Crown poorly developed overall.	No action necessary	C2	10	110	4	1,1.5,1,2	2.5w
963	Small leaved lime cultivar <i>Tilia cordata</i> cv	Young	Poor	Extensive vehicle impact damage and bark loss to trunk. Upper canopy sparse and poorly formed.	No action necessary	C2	10-15	120	5	1,1,1,2	2s



Tag number	Species	Age Class	Vigour	Comments	Preliminary Recommendations	Category	Long-term potential (years)	Dbh mm	Height m	Spread m N, E, S, W	Clear stem m
964	Common Lime Tilia x europaea	Young	Good	Pockets of vehicle bark impact damage. Crown relatively well developed.	No action necessary	B2	30-40	110	6	2,2,2,2	2.5w
965	Common Lime Tilia x europaea	Mature	Good	Build-up to base with paving and bound gravel. Extensive decay present in base of trunk to west but surrounding buttresses sound. Upper crown well developed. No visible defects.	Remove electric cabling from canopy	B2	30-40	730	18	6,6,6,6	4w
966	Small leaved lime cultivar Tilia cordata cv	Early Mature	Good	Well developed with no visible defects. No visible defects.	Undertake formative pruning Remove electric	B2	40	210	7.5	3,3,3,3	2.5w
967	Small leaved lime cultivar Tilia cordata cv	Early Mature	Good	Located within seating area with soil build-up at base of trunk. Bark damage at base to north west but unlikely to be significant at present. Canopy well developed. No visible defects.	Undertake formative pruning Remove seating from base	A2	40	440	8.5	5,5,5,5	2.5w
968	Common Lime Tilia x europaea	Mature	Good	Seating with soil build-up at base. Upper canopy well developed with no visible defects. .	Undertake formative pruning Remove electric cabling from canopy and seating from	A2	40	590	10	6,5,5,5	3w

Tag number	Species	Age Class	Vigour	Comments	Preliminary Recommendations	Category	Long-term potential (years)	Dbh mm	Height m	Spread m N, E, S, W	Clear stem m
969	Small leaved lime cultivar Tilia cordata cv	Mature	Good	Bound gravel build-up at base becoming damaged by tree. Vehicle impact damage at base to west. Crown well developed with no visible defects.	Undertake formative pruning Remove bound gravel build-up from base.	A2	40	350	9	5,5,5,5	2.5n
970	Small leaved lime cultivar Tilia cordata cv	Young	Good	Bound gravel build-up at base. Bark damage from stake with localised decay. Crown well developed. No visible defects.	Undertake formative pruning Remove bound gravel build-up at	B2	40	200	7.5	2,2,2,2	2.5n
971	Small leaved lime cultivar Tilia cordata cv	Early Mature	Good	Well developed. No visible defects. Trunk in contact with basal grill.	Remove basal grill	B2	40	210	7.5	2,1,2,2	4w
972	Small leaved lime cultivar Tilia cordata cv	Early Mature	Good	Well developed with no visible defects. No visible defects.	No action necessary	B2	40	230	7.5	2,1,2,2	2.5w
973	Small leaved lime cultivar Tilia cordata cv	Early Mature	Good	Well developed with no visible defects. No visible defects.	No action necessary	B2	40	260	8	2,1,2,2	3w
974	Small leaved lime cultivar Tilia cordata cv	Early Mature	Good	Grill in contact with trunk. Upper canopy well developed No visible defects.	Remove grill	B2	40	200	7.5	2,2,2,2	2w

