



Arboricultural Impact Assessment

Prepared for:

MHL & Associates Ltd

Proposed site:

Mill Road, Corbally, Limerick.

Prepared by:

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Executive Summary

Arbor-Care Ltd (Professional Consulting Tree Service) was retained by MHL & Associates on behalf of Limerick City and County Council to undertake firstly, a Tree Survey, tree constraints plan outlining existing trees on or adjacent to the proposed development, this survey is undertaken without prejudice to the proposed development. The surveyed trees contained within this report are located within the parameters of the proposed site.

The objective of the tree survey was to identify the areas that contained trees or hedgerows of quality, and to ensure where possible that these areas would be retained.

The Tree Survey and inventory report is based on the British standard *BS 5837:2012 Trees in relation to design, demolition and construction. Recommendations*, this standard gives recommendations and guidance on the principles to be applied to achieve a satisfactory juxtaposition of trees, including shrubs, hedges and hedgerows, with structures. It sets out to assist those concerned with trees in relation to construction to form balanced judgements. The survey commenced on the 11th June 2020.

This Tree Survey report will be accompanied by an inventory of trees on site and tree constraints plan. A separate Arboricultural Impact Assessment and a tree protection plan will also be prepared for the site identifying trees and hedgerow impacted on by the proposed development once the proposed design is finalised.

Proposed development

The following report has been undertaken without prejudice to the proposed development. It sets out to inform the decision makers with regard to the quantity and quality of the tree stock along the proposed route.

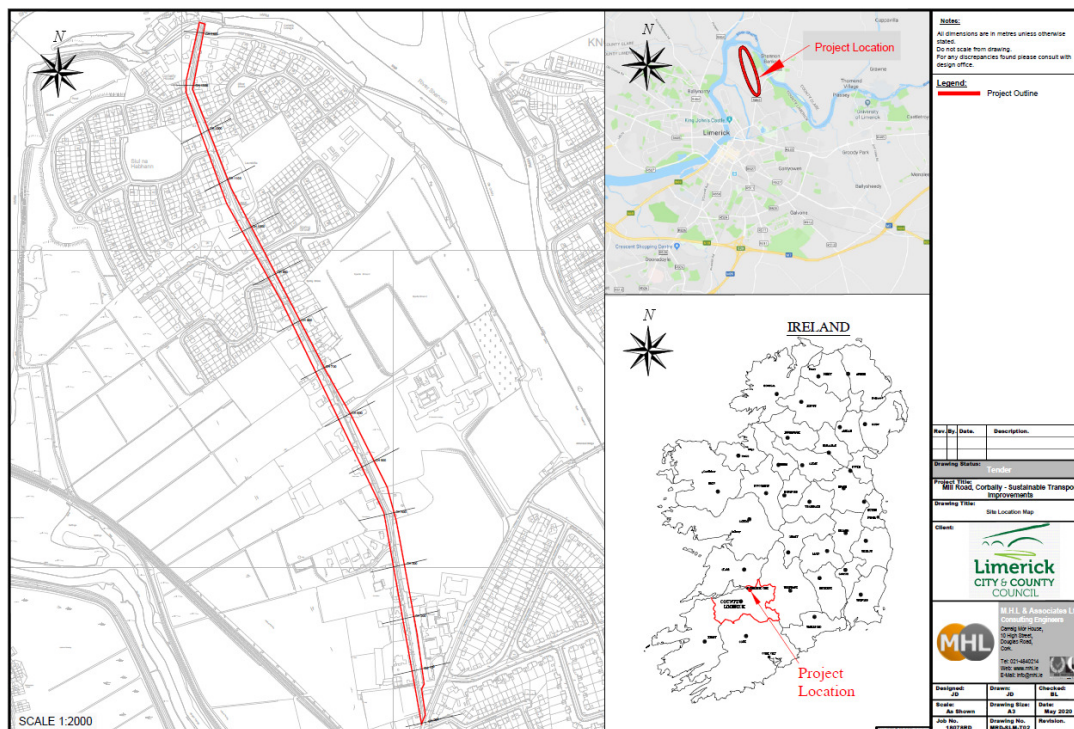


Figure 1. Displays the location of the proposed cycle and pedestrian route along a stretch of circa 1450m along the Mill road

1.0 Assignment

1. To undertake a visual tree survey to assess the tree's condition(s) and provide an inventory of trees.
2. Provide a table outlining the schedule of trees on site and provide recommendations for their preservation and/or removal.
3. Present a written report on the inspection of the trees.

1.1 Limits of the Assignment

Unless otherwise stated tree inspections have been undertaken from ground level and using non-invasive techniques only. Comments on the condition and safety of any tree relate to the condition of that tree at the time of the survey. It should be recognised that tree condition is subject to change due to, for example the effects of disease, wind or nearby development works. Changes in land use are also significant in respect of risk assessment. Trees should therefore be inspected at intervals relative to identified site risks. A full topographical survey displaying the locations of all the trees along the route was not provided therefore the location of certain trees is approximate.

2.0 Methodology Employed

An initial tree survey and visual condition assessment was on the 11th June 2020. The purpose of this report and in accordance with *BS 5837: 2012 Trees in relation to design, demolition and construction. Recommendations* only trees with diameters of 75mm or greater were surveyed, Also in accordance with section 4.4.2.3 of the British standard document where trees formed obvious groups these were assessed and recorded as groups. The survey commenced along the northern boundary and continued in an easterly direction

Section 4.4.2.3 of BS 5837: 2012 states:

Trees growing as groups or woodland should be identified and assessed as such where the arboriculturist determines that this is appropriate. However, an assessment of individuals within any group should still be undertaken if there is a need to differentiate between them, e.g. in order to highlight significant variation in attributes (including physiological or structural condition).

NOTE: The term “group” is intended to identify trees that form cohesive arboricultural features either aerodynamically (e.g. trees that provide companion shelter), visually (e.g. avenues or screens) or culturally, including for biodiversity (e.g. parkland or wood pasture), in respect of each of the three subcategories.

The survey concentrated primarily on the significant trees/hedgerows located within and adjacent to the proposed development area. The objective of this survey was to gather information regarding the trees location on the proposed development site and the impact the proposed development may have on the trees. **Please refer to appendix 1 for the tree inventory and appendix 2 for the tree constraints palm.**

Significant trees can be equated as those trees whose visual importance to the surrounding area are sufficient to justify special efforts to protect/preserve and whose loss would have an irremediable adverse impact on the local environment. Significance can also be placed depending on the trees age, another variable to imply significance can be the aesthetic merit of the tree based on its unusual size, intrinsic physical features or outstanding appearance or occurring in a unique location or context, and thus provides a special contribution as a landmark or landscape feature.

All above parts of the trees were visually examined. Tree diameters (DBH) were estimated at 1.5 meter above grade as per standard arboricultural practice. Tree height was measured with the use of a clinometer (Where practical). A generalised system was employed to describe the overall health of the trees. The system uses a five tier rating scale with the following descriptors:

Specimen condition 5-tier rating system

1. Very poor-1-20%
2. Poor- 21-40%
3. Fair- 41-60%
4. Good- 61-80%
5. Very good 81-100%

3.0 Trees surveyed

The survey commenced on the 11th June 2020. A total of 64 trees were surveyed The survey concentrated on those trees located 5m from the existing wall. The impact of the development on the trees surveyed will be assessed in the Arboricultural Impact Assessment.

3.1 A breakdown of the Tree Categories on site as per BS 5837 2012 is set out in the table below:

Category	Quantity
A-Tree of high quality	8
B-trees of good quality	41
C (Low quality or trees less than 75mm diameter)	14
U (remove due to poor condition)	1
Total Trees surveyed	64

In accordance with *BS 5837: 2012 Trees in relation to design, demolition and construction. Recommendations.*, Category A represents trees of a high quality and value, “in such a condition as to be able to make a substantial contribution. (A minimum of 40 years is suggested).” Category B signifies those trees of a “moderate value and in such a condition as to be able to make a substantial contribution (A minimum life expectancy of 20 yrs is suggested).” Category C signifies those trees of “a low quality and value that are currently in an adequate condition to remain until new planting could be established (A minimum life expectancy of 10yrs is suggested).. Category U signifies those trees “that are in such a 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”.

4.0 Conclusion

A complete tree inventory has been provided in appendix 1 outlining the schedule of trees and on site in accordance with *BS 5837: 2012 Trees in relation to design, demolition and construction. Recommendations.* The impact of the proposed development will be undertaken in the arboricultural impact assessment report once the proposed development is confirmed

Tree Categorization.

Tree Categorization.

Category U

This category signifies those trees that are in such a 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.

Category A.

Those trees of a high quality and value, in such a condition as to be able to make a substantial contribution. (A minimum of 40 years is suggested)

Category B

This category signifies those trees of a moderate value and in such a condition as to be able to make a substantial contribution (A minimum life expectancy of 20 yrs is suggested)

Category C

This category signifies those trees of a low quality and value that are currently in an adequate condition to remain until new planting could be established (A minimum life expectancy of 10yrs is suggested), or young trees with a stem diameter below 150mm. Whilst C category trees will usually not be retained where they would impose a significant constraint on development, young trees with a stem diameter of less than 150mm should be considered for relocation.

The above categories have sub-categories attached to the tree categorisation.

Sub-category 1- Mainly Arboricultural Values eg-A1

Sub-category 2- Mainly Landscape Values- B2

Sub-category 3- Mainly cultural values, including conservation C2

Appendix 1 – Tree Inventory

Tree Inventory Legend

Tree Dimensions - All dimensions are in meters.

Ht - Tree Height

Crown clearance - Lowest canopy height (distance from ground level to the first live branch)

Crown spread - Tree Canopy Spread measured by radii at north, east, south and west

Dia. - Stem diameter at approx. 1.50m from ground level.

RPA - Root Protection Area, as a radius measured from the tree's stem centre.

Physiological Condition

Good - A specimen of generally good form and health

Fair - A specimen with defects or ill health that can be either rectified or managed typically allowing for retention

Poor - A specimen whom through defect, disease attack or reduced vigour has a limited longevity or may be un-safe

Dead - A dead tree

Age Class - Young: A tree, which has been planted in the last 10 years.

Semi -mature A tree that is less than 1/3 the expected height of the species in question.

Early mature: A tree, which is approximately 2/3's the expected height of the species in question.

Mature: A tree that has reached the expected height of the species in question, but still increasing in size.

Over mature: A tree at the end of its life cycle and the crown is starting to break up and decrease in size.

Structural Condition - Information on structural form, defects, damage, injury or disease supported by the tree

PMR (Preliminary Management Recommendations) – refers to Arboricultural actions or works considered necessary at the time of the inspection and relating to the existing site context and tree condition. *Note is also made of works considered as urgent.*

Species Common name is given; botanical name is also given upon its first entry, in Italics.

Appendix 1. Tree inventory

Mill Road Corbally

Tree #	Species Botanical Name	Age Class	DBH (mm)	HT (m)	Crown Sp.(M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of development	PMR	Category	R.P.A. (M Radius)
5056	<i>Ulmus procera</i> Elm	M	280	8	N=1 S=1 E=1 W=1	3	Poor	A mature elm in advanced decline	Unknown	Remove based on its condition	U	
5057	<i>Fraxinus excelsior</i> Ash	M	600	20	N=4 S=4 E=4 W=4	3	Good	A large mature ash tree displaying a good overall condition	Unknown	Retain	B2	7m
5058	<i>Acer pseudoplatanus</i> Sycamore	M	300	18	N=1 S=2 E=2 W=1	2	Good	A mature sycamore in good condition	Unknown	Retain	B2	4m
5059	Sycamore	M	400	20	N=3 S=3 E=3 W=3	2	Good	A large mature ash tree displaying a good overall condition	Unknown	Retain	B2	5m
5060	Ash	M	300	16	N=4 S=4 E=4 W=4	1	Good	A large mature multi-stemmed ash displaying good overall condition	Unknown	Retain	B2	4m
5061	Sycamore	EM	240	10	N=2 S=2 E=2 W=2	2	Good	A sycamore displaying a good overall condition	Unknown	Retain	B2	3.4m
5062	Sycamore	M	350	16	N=3 S=4 E=4 W=3	2	Good	A large mature sycamore displaying a good overall condition. There is a mature elder adjacent to the tree	Unknown	Retain	B2	4.5

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5063	Sycamore	M	480	18	N=4 S=4 E=4 W=4	3	Good	A large mature sycamore tree displaying a good overall condition	Unknown	Retain	B2	5.5m
5064	Sycamore	M	380	16	N=4 S=5 E=5 W=4	2	Good	A large mature sycamore tree displaying a good overall condition	Unknown	Retain	B2	4.8m
5065	Ash	M	350	14	N=4 S=4 E=4 W=4	2	Good	A mature sycamore in good condition	Unknown	Retain	B2	4m
5066	Sycamore	M	520	22	N=6 S=6 E=6 W=6	1	Good	A large mature multi-stemmed sycamore tree displaying a good overall condition	Unknown	Retain	B2	6.2m
5067	Sycamore	EM	280	8	N=2 S=2 E=2 W=2	1	Fair	An early mature sycamore that has been suppressed by the larger surrounding trees	Unknown	Retain	C2	3.8m
5068	Sycamore	EM	240	10	N=2 S=2 E=2 W=2	1	Good	A sycamore displaying a good overall condition	Unknown	Retain	B2	3.4m

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5069	Ash	M	380	20	N=2 S=2 E=2 W=2	3	Good	A large mature ash tree displaying a good overall condition	Unknown	Retain	B2	5.5m
5070	Ash	M	320	16	N=4 S=5 E=5 W=4	2	Good	A large mature sycamore tree displaying a good overall condition, 4m from the wall	Unknown	Retain	B2	4.2m
5071x 4	Sycamore group	M	350	18	N=4 S=4 E=4 W=4	2	Good	A mature sycamore group located 4m from the boundary wall	Unknown	Retain	B2	4.5m
5072	Sycamore	M	500	24	N=5 S=5 E=5 W=5	2	Good	A large mature sycamore located 3m from the boundary wall	Unknown	Retain	B2	6m
5073	<i>Tilia x europaea</i> Common lime	M	950	26	N=5 S=5 E=5 W=5	2	Good	A large mature lime in good condition, located 4m from the boundary wall	Unknown	Retain	A2	10.5m
5074	Sycamore	EM	240	12	N=2 S=2 E=2 W=2	1	Fair	A sycamore displaying a fair condition, it has been suppressed by the lime and is leaning over the wall	Unknown	Retain	C2	3.4m
5075	Ash	M	400	24	N=3 S=4 E=4 W=3	2	Good	A large mature ash in good condition	Unknown	Retain	A2	5m

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5076 x 3	Sycamore cluster	M	380	20	N=2 S=2 E=2 W=2	4	Good	A cluster of 3 mature sycamores located 1m from the boundary wall	Unknown	Retain	B2	4.8m
5077 x 3	Sycamore cluster	M	300	20	N=2 S=2 E=2 W=2	4	Good	A cluster of 3 mature sycamores located 1m from the boundary wall	Unknown	Retain	B2	4m
5078	Ash	M	350	24	N=4 S=4 E=4 W=4	2	Good	A large mature ash in good condition	Unknown	Retain	B2	4.5m
5079	Sycamore	M	320	18	N=3 S=3 E=3 W=3	2	Good	A large mature sycamore l	Unknown	Retain	B2	4.2
5080	Ash	M	500	24	N=4 S=4 E=4 W=4	4	Good	A large mature ash displaying a good overall condition	Unknown	Retain	B2	6m
5081	Ash	M	900	28	N=8 S=8 E=8 W=8	3	Good	A large mature ash displaying a good overall condition. 5m from the boundary wall	Unknown	Retain	A2	10m
5082 x 4	Sycamore	M	200	10	N=1 S=1 E=1 W=1	1	Fair	Represents 4 early-mature sycamore located against the boundary wall	Unknown	Retain	C2	5m

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Tree #	Species Botanical Name	Age Class	DBH (mm)	HT (m)	Crown Sp.(M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of development	PMR	Category	R.P.A. (M Radius)
5083	Sycamore	M	320	20	N=4 S=4 E=4 W=4	3	Good	A mature sycamore displaying a good overall condition	Unknown	Retain	B2	4.2m
5084	Sycamore	M	320	20	N=4 S=4 E=4 W=4	3	Good	A mature sycamore displaying a good overall condition	Unknown	Retain	B2	4.2m
5085	Sycamore	M	320	20	N=3 S=3 E=3 W=3	3	Good	A multi-stemmed sycamore in good condition	Unknown	Retain	B2	4.2m
5086	Sycamore	M	300	20	N=2 S=2 E=2 W=2	5	Good	A large mature sycamore In good condition	Unknown	Retain	B2	4m
5087	Sycamore	M	300	20	N=2 S=2 E=2 W=2	5	Good	A large mature sycamore In good condition	Unknown	Retain	B2	4m
5088	Sycamore	M	320	20	N=2 S=2 E=2 W=2	3	Good	A large mature sycamore In good condition located 1m from the wall	Unknown	Retain	B2	4.2m
5089	Sycamore	M	320	20	N=2 S=2 E=2 W=2	3	Good	A large mature sycamore In good condition located 2m from the wall	Unknown	Retain	B2	5m

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Tree #	Species Botanical Name	Age Class	DBH (mm)	HT (m)	Crown Sp.(M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of development	PMR	Category	R.P.A. (M Radius)
5090-5091 x 8	Sycamore	EM	280	14	N=3 S=3 E=3 W=3	2	Good	A row of 8 EM sycamore located against the boundary wall	Unknown	Retain	C2	3.8m
5092 x 2	Ash	M	500	24	N=4 S=4 E=4 W=4	3	Good	Two mature ash located 4m from the boundary wall	Unknown	Retain	A2	6m
5093	<i>Cupressus x macrocarpa</i> Monterey Cypress	OM	1500	20	N=8 S=8 E=8 W=8	3	Good	A large Monterey cypress located at the rear gate to the St. Munchins school	Unknown	Retain	B2	12m
5094 x 3	Sycamore Ash	M	350	20	N=3 S=3 E=3 W=3	5	Good	Represent mature sycamore and ash group due to the overgrowth they could not be tagged	Unknown	Retain	B2	4.5m
5095	Sycamore	M	300	16	N=2 S=2 E=2 W=2	3	Good	A large mature sycamore in good condition	Unknown	Retain	B2	4m
5096	Sycamore	M	300	18	N=3 S=3 E=3 W=3	3	Good	A large mature sycamore in good condition	Unknown	Retain	B2	4m

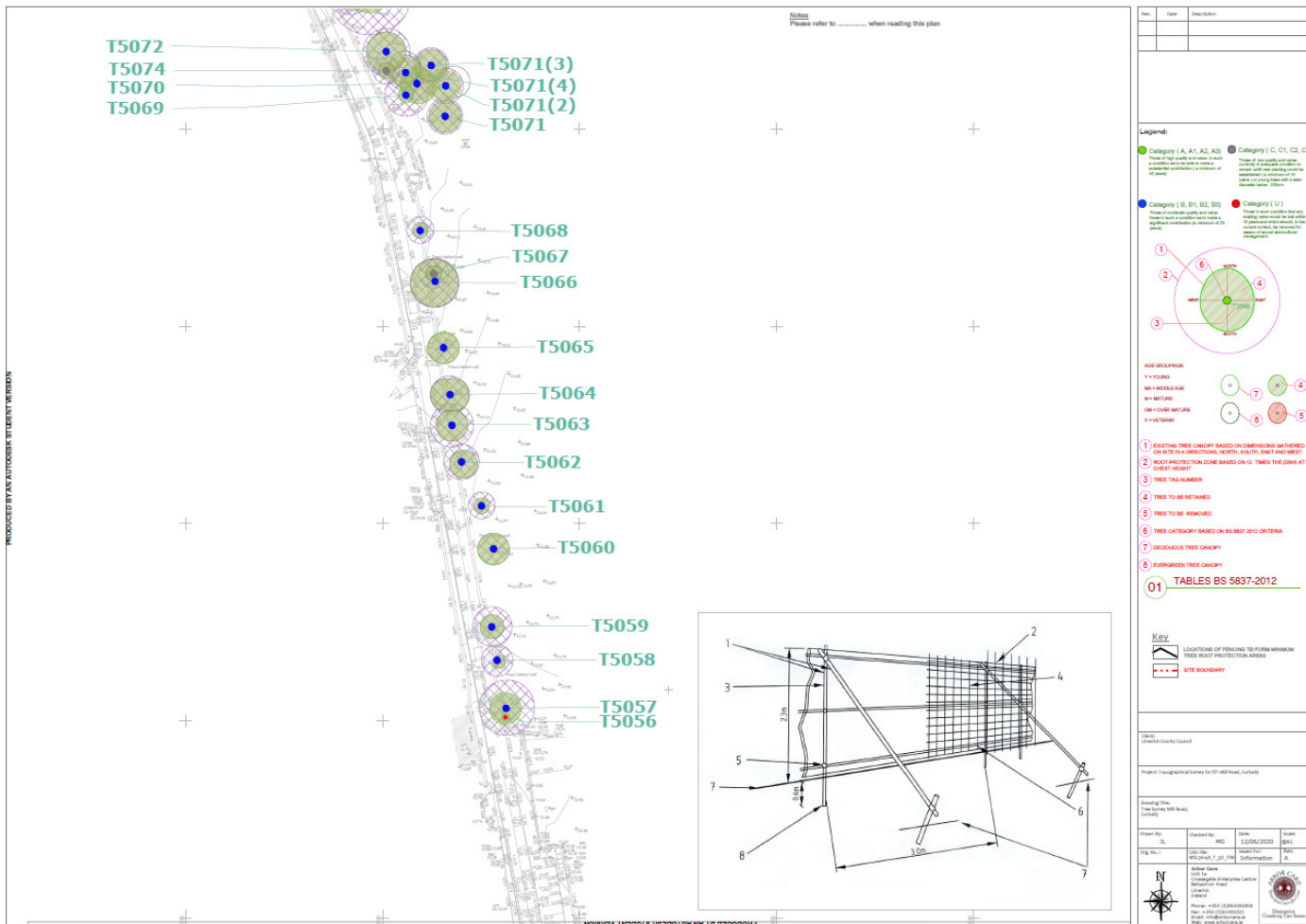
Appendix 1. Tree inventory

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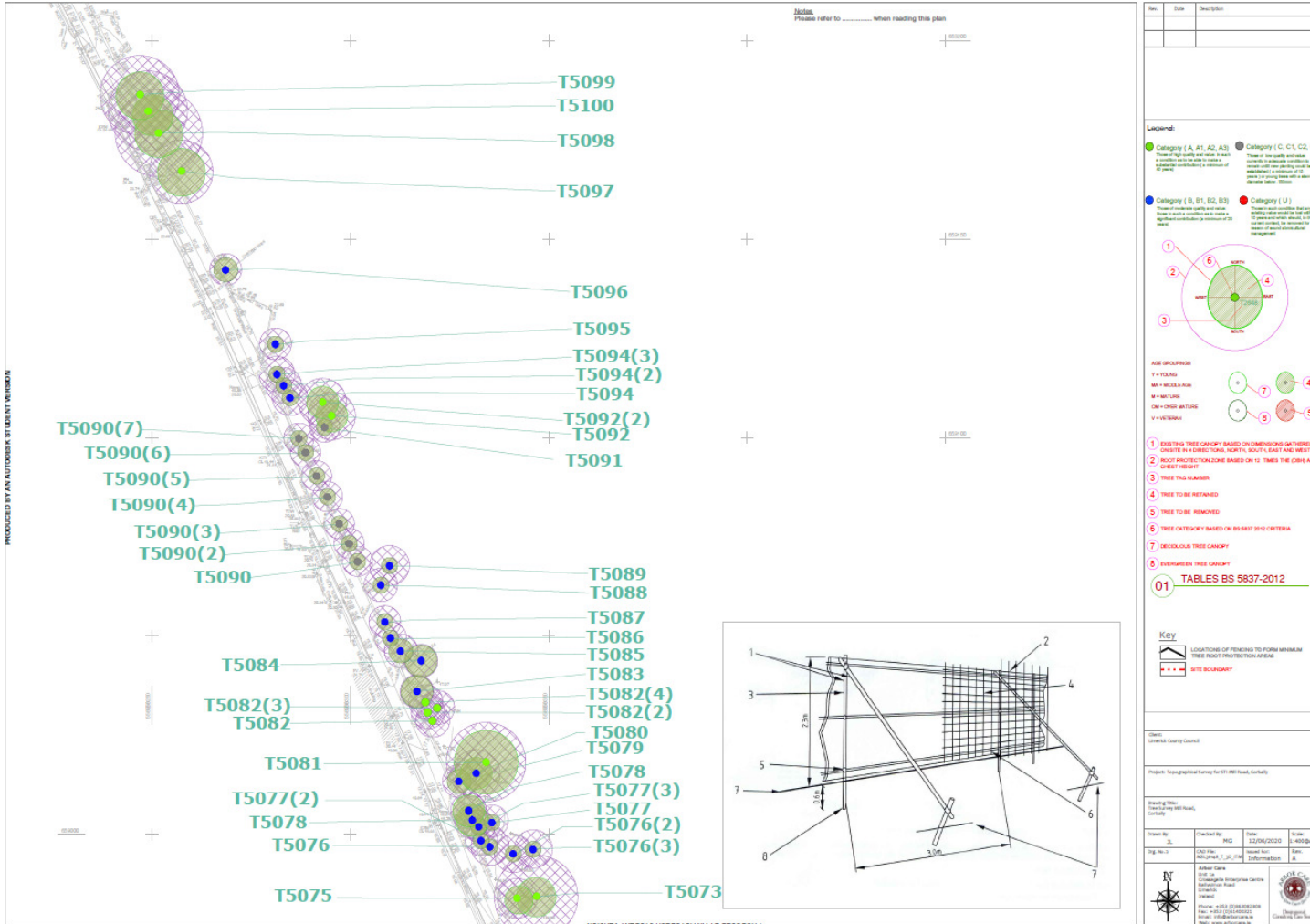
Tree #	Species Botanical Name	Age Class	DBH (mm)	HT (m)	Crown Sp.(M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of development	PMR	Category	R.P.A. (M Radius)
5097	<i>Aesculus hippocastanum</i> Horse Chestnut	M	700	22	N=6 S=6 E=6 W=6	3	Good	A large mature chestnut displaying a good overall condition	Unknown	Retain	A2	8m
5098	Horse Chestnut	M	1000	24	N=6 S=6 E=6 W=6	3	Good	A large mature chestnut displaying a good overall condition	Unknown	Retain	A2	11m
5099	Horse Chestnut	M	900	22	N=6 S=6 E=6 W=6	3	Good	A large mature chestnut displaying a good overall condition	Unknown	Retain	A2	10m
5100	Ash	M	600	28	N=4 S=6 E=6 W=4	3	Good	A large mature ash tree displaying a good overall condition	Unknown	Retain	A2	7m

Appendix 2. Tree Constraints Plan

PRODUCED BY AN AUTOCAD STUDENT VERSION



PRODUCED BY AN AUTODESK STUDENT VERSION





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Arbor-Care Ltd, Professional Consulting Tree Service

Yours in Conservation.

Michael Garry.

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