Arboricultural Assessment & Impact Report The Arboury

Project No.	Project name	Date	Revision
TABB001	The Arboury	20/04/22	В

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1. Client brief & Methodology

CMK Hort + Arb Ltd. were commissioned by Landmarque Belgard Development Company Limited to undertake an assessment of trees within the lands of the ABB industrial complex at Belgard Road, Dublin 24 (image 1). The purpose of the assessment and supporting drawings is to provide details on the type and condition of trees within the site. The trees within the site were assessed on the 2nd of October 2020 & those within the public realm on Belgard Road, Belgard Square North & East on the 6th of April 2021.

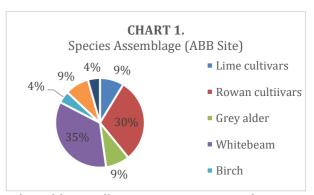
The survey methodology, supporting drawings and documentation follow the recommendations contained within BS 5837 (2012). The analysis of the trees was undertaken using the VTA methodology as developed by Mattheck and Breloer (1994). Species names referenced where necessary from Mitchell A. (1988) and Dirr M.A. & Warren K.S. (2019).



2. General description of trees

The site is located at the former ABB Site, on the junction of Belgard Road and Belgard Square North. It is an industrial warehouse site with offices of c.0.898 ha The site is bordered Belgard Road (R113) to the east, Belgard Square North to the North and Belgard Square East to the west and Clarity House to the south.

A total of 24 trees were assessed within the site with additional trees assessed within the public realm on Belgard Road and Belgard Square North & East. The trees within the industrial complex are located on the north, east and western boundaries and are all contemporary with the building. The age of the trees reflects this with all the trees within the



young to early-mature age classes. The range of species also reflects the industrial nature of the site with smaller, more ornamental species / cultivars as opposed to potentially larger species predominating (chart 1). These include rowan and whitebeam (*Sorbus sp*) with more occasional alder (*Alnus incana*) and lime (Tilia) cultivars (images 2-3)

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There has been minimal management of trees to date. The quality of the trees are good overall (table 1) with the vast majority of the trees within category B which gives them a moderate quality categorisation (BS5837 2012) with those within category C of low value overall.

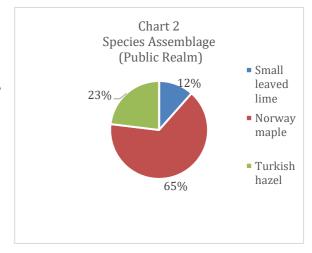
There are also a range of shrubs including lilac, hebe and potentilla present. In the main they have been tightly clipped (image 2) and are of low to moderate landscape value as a result.

A total of 26 trees within the public realm on Belgard road and Belgard Square North & East were assessed (for locations refer to drawing TABB001 101). They are composed of small leaved lime (*Tilia cordata* cv), Turkish hazel (*Corylus avellana*) and Norway maple (*Acer platanoides*) (Chart 2). The trees are early-mature though range considerably in terms of size. They are generally well developed (refer to Appendix II for a detailed description of individual trees) and all have been categorised as B.

A number are growing close to or just overhanging the ABB site (image 4). They are very unlikely to have roots which extend into the site as a boundary wall and fence delineates the boundary and would restrict root movement into the site.

Category	No	% of total
Α	0	0
В	21	88
С	3	12
U	0	0

Table 1. Tree Categorisations (ABB Site)





% of Total

Within category

100

100



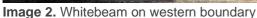




Image 3. Alder on southern boundary



Image 4. Trees on Belgard Square North

Number

21

3

Tree Categories

Α

В

C

3. Impact of proposed development

The proposed development will necessitate the demolition of all existing structures on site (and the construction of a mixed-use residential development set out in 3 No. blocks including a podium over a basement, ranging in height from 2 to 13 storeys. The proposed development will necessitate the removal of all existing trees within the site (table 1) plus a total of twenty three early-mature category B trees within the public realm on Belgard Square North & East. The impact of the proposed development on trees is shown on drawing TABB001 102 Rev B and

is considered significant in terms of tree loss in this area. Proposed new tree and other associated

U 0 Table 2. Arboricultural Impact ABB Site

plantings are outlined within the Landscape Strategy provided by Cameo & Partners. They have shown a total of 86 trees planted over the site.



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, rail management, 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).



6. Terminology

	Tree categories
Α	Trees of high quality and value due to their size, age, condition, historical/visual merit and/or conservation potential (a minimum of 40 years).
A 1	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.
А3	Mainly cultural values, including conservation. Trees, groups or woodlands of significant conservation, historical, comparative or other value (e.g. veteran trees or wood-pasture).
В	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.
В3	Mainly cultural values including conservation. Trees with clearly identifiable conservation or other cultural benefits.
С	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.



Terminology (cont.)

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. References

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

Dirr M. A. Warren K.S. (2019). The Tree Book

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

Mitchell A (1988). Trees of Britain & Northern Europe

TABB001

Appendix I Tree condition analysis & preliminary recommendations (ABB Site)

Tag No.	Species	Age Category	General Condition	Comments	Preliminary Recommendations	Landscape and Arboricultural Category	Useful Life Expectancy	Height m	DBH mm	Crown Spread m
628	Grey alder Alnus incana	Early-mature	Good	Trunk multi-stemmed from 1m with a tight union between stems however unlikely to be significant at present. Upper canopy relatively well developed with no visible defects.	No action necessary	B2	20-30	5	240	2,2,2,2
629	Grey alder Alnus incana	Early-mature	Good	A well developed specimen on southern boundary. Trunk co dominant from 1.25m with a tight union between stems but unlikely to be significant at present. Upper canopy relatively well developed.	No action necessary	B2	20-30	5	220	2,2,2,1
630	Norway maple Acer pseudoplatanus	Early-mature	Good	A well established specimen however close proximity to building will necessitate crown reduction in time. No visible defects	No action necessary	B2	20-30	4.4	150	2,2,2,1
631	Rowan cultivar Sorbus aucuparia cv	Young	Good	A well developed specimen with no visible defects	No action necessary	B2	20	3	80	1,1,1,1
632	Rowan cultivar Sorbus aucuparia cv	Young	Good	A well developed specimen with no visible defects	No action necessary	B2	20	3	80	1,1,1.5,2
633	Rowan cultivar Sorbus aucuparia cv	Young	Fair	Crown poorly developed in terms of form and unlikely to become a decent tree	No action necessary	C2	10	2.5	80	1,1,1,1.5
634	Rowan cultivar Sorbus aucuparia cv	Young	Good	A well developed specimen with no visible defects	No action necessary	B2	20	3	80	1,1,1,1

Tag No.	Species	Age Category	General Condition	Comments	Preliminary Recommendations	Landscape and Arboricultural Category	Useful Life Expectancy	Height m	DBH mm	Crown Spread m
635	Rowan cultivar Sorbus aucuparia cv	Young	Good	A well developed specimen with no visible defects	No action necessary	B2	20	3	80	1,1,1,1
636	Whitebeam Sorbus aria	Early-mature	Good	A well developed specimen with no visible defects	No action necessary	B2	20	3	80	1,1,1,1
637	Whitebeam Sorbus aria	Early-mature	Good	A well developed specimen with no visible defects	No action necessary	B2	20	3	80	1,1,1.5,2
638	Whitebeam Sorbus aria	Early-mature	Good	A well developed specimen with no visible defects though crown restricted toward north due to competition from neighbouring tree.	No action necessary	B2	20	2.5	80	1,1,1,1.5
639	Rowan Sorbus 'Joseph Rock'	Early-mature	Good	A well developed specimen with no visible defects though crown restricted toward north due to competition from neighbouring tree.	No action necessary	B2	20	3	80	1,1,1,1
640	Rowan Sorbus 'Joseph Rock'	Early-mature	Good	A well developed specimen with no visible defects though crown restricted toward north due to competition from neighbouring tree.	No action necessary	B2	20	3	80	1,1,1,1
641	Whitebeam Sorbus aria	Early-mature	Fair	A relatively well developed specimen though crown restricted toward north due to competition from neighbouring tree.	No action necessary	C2	20	5	190	3,3,3,3
642	Whitebeam Sorbus aria	Early-mature	Fair	Relatively well developed though crown restricted toward north due to competition from neighbouring tree. Trunk co dominant from 2m with a tight union and included bark between stems.	No action necessary	C2	20	5	180	1,3,2,2

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Tag No.	Species	Age Category	General Condition	Comments	Preliminary Recommendations	Landscape and Arboricultural Category	Useful Life Expectancy	Height m	DBH mm	Crown Spread m
643	Whitebeam Sorbus aria	Early-mature	Good	A well developed specimen with no visible defects. Stake and tie in place beyond ideal period.	Remove stake	B2	30-40	6	180	1,3,2,2
644	Whitebeam Sorbus aria	Early-mature	Good	A well developed specimen with no visible defects.	No visible defects	B2	30-40	5	120	1,2,2,2
645	Cherry cultivar Prunus avium cv	Early-mature	Good	Relatively well developed though crown restricted toward west due to competition from neighbouring tree and very large pruning cuts to trunk at 1.5m will ultimately lead to decay development.	No visible defects	B2	15-20	5	180	1,3,2,2.1
646	Birch Betula pendula	Early-mature	Good	A well developed specimen with no visible defects.	No visible defects	B2	40	7.5	220	3,2,3,3
647	Cherry cultivar Prunus avium cv	Early-mature	Good	A well developed specimen with no visible defects	No visible defects	B2	40	5.5	200	3,3,3,3
648	Whitebeam Sorbus aria	Early-mature	Good	A well developed specimen with no visible defects. Stake and tie in place beyond ideal period.	Remove stake	B2	30-40	6	230	3,3,3,3
649	Small leaved lime cultivar Tilia cv	Young	Good	A well developed specimen with no visible defects.	No visible defects	B2	40	6	240	4.4,3,4
650	Fastigiate hornbeam Carpinus betulus 'Fastigiata'	Young	Good	A well developed specimen with no visible defects though crown restricted toward west due to competition from neighbouring tree.	No visible defects	B2	40	6	200	2,2,2,1.5
651	Small leaved lime cultivar Tilia cordata cv	Young	Good	A well developed specimen with no visible defects.	No visible defects	B2	40	6	230	4,4,4,3

TABB001

Appendix II Tree condition analysis & preliminary recommendations (Public Realm)

Tag No.	Species	Age Category	General Condition	Comments	Preliminary Recommendations	Landscape and Arboricultural Category	Useful Life Expectancy	Height m	DBH mm	Crown Spread m
2248	Small leaved lime cultivar Tilia cordata cv	Early Mature	Good	A well developed specimen with no visible defects	No action necessary	B2	40	8	230	3,3,3,3
2247	Small leaved lime cultivar Tilia cordata cv	Early Mature	Good	A well developed specimen with no visible defects	No action necessary	B2	40	8	230	3,3,3,3
2246	Small leaved lime cultivar Tilia cordata cv	Early Mature	Good	A well developed specimen with no visible defects	No action necessary	B2	40	8	230	3,3,3,3
2245	Norway maple Acer platanoides	Early Mature	Good	A well developed specimen with no visible defects	No action necessary	B2	40	9	340	3,3,3,3
2244	Norway maple Acer platanoides	Early Mature	Good	A well developed specimen with no visible defects	No action necessary	B2	40	8	200	3,3,3,3
2243	Norway maple Acer platanoides	Early Mature	Good	A well developed specimen with no visible defects	No action necessary	B2	40	8	180	2,3,2,2
2242	Norway maple Acer platanoides	Early Mature	Good	Decay in trunk at 0.75m to east. Unlikely to be significant at present. Crown well developed with no visible defects.	No action necessary	B2	20-30	8	230	3,4,3,3

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Tag No.	Species	Age Category	General Condition	Comments	Preliminary Recommendations	Landscape and Arboricultural Category	Useful Life Expectancy	Height m	DBH mm	Crown Spread m
2241	Norway maple Acer platanoides	Early Mature	Good	A well developed specimen with no visible defects.	No action necessary	B2	40	7	180	2,2,2,2
2240	Norway maple Acer platanoides	Early Mature	Good	A well developed specimen with no visible defects.	No action necessary	B2	40	7	140	2,2,3,2
2239	Norway maple Acer platanoides	Young	Good	A well developed specimen with no visible defects.	No action necessary	B2	40	6.5	130	2,2,3,2
2238	Norway maple Acer platanoides	Early Mature	Good	Minor mower damage base. Not significant at present. Crown A well developed specimen with no visible defects.	No action necessary	B2	40	8.5	220	3,3,3,3
2237	Norway maple Acer platanoides	Early Mature	Good	A well developed specimen with no visible defects.	No action necessary	B2	40	7.5	210	2,4,3,3
2236	Norway maple Acer platanoides	Early Mature	Good	A well developed specimen with no visible defects.	No action necessary	B2	40	10	230	3,5,3,3
2235	Norway maple Acer platanoides	Early Mature	Good	Decay at point of limb loss in lower canopy to north. Upper canopy A well developed specimen with no visible defects	No action necessary	B2	40	10	230	3,4,3,3
2234	Norway maple Acer platanoides	Early Mature	Good	A well developed specimen with no visible defects.	No action necessary	B2	40	10.5	280	4,4,4,4

Tag No.	Species	Age Category	General Condition	Comments	Preliminary Recommendations	Landscape and Arboricultural Category	Useful Life Expectancy	Height m	DBH mm	Crown Spread m
2233	Norway maple Acer platanoides	Early Mature	Good	A well developed specimen with no visible defects.	No action necessary	B2	40	11	250	4,4,4,3
2232	Norway maple Acer platanoides	Early Mature	Good	A well developed specimen with no visible defects.	No action necessary	B2	40	10	260	4,5,4,4
2231	Norway maple Acer platanoides	Early Mature	Good	A well developed specimen with no visible defects.	No action necessary	B2	40	8	270	3,3,3,3
2230	Norway maple Acer platanoides	Early Mature	Good	A well developed specimen with no visible defects.	No action necessary	B2	40	8	210	4,4,3,3
2229	Norway maple Acer platanoides	Early Mature	Good	A well developed specimen with no visible defects.	No action necessary	B2	40	7	200	3,3,2,3
2228	Turkish hazel Corylus avellana	Early Mature	Good	A well developed specimen with no visible defects.	No action necessary	B2	40	10	200	2,2,2,2
2227	Turkish hazel Corylus avellana	Early Mature	Good	A well developed specimen with no visible defects.	No action necessary	B2	40	8	230	3,3,3,3
2226	Turkish hazel Corylus avellana	Early Mature	Good	Minor mower impact damage base. Crown A well developed specimen with no visible defects.	No action necessary	B2	30-40	8	200	2,3,2,2

Tag No.	Species	Age Category	General Condition	Comments	Preliminary Recommendations	Landscape and Arboricultural Category	Useful Life Expectancy	Height m	DBH mm	Crown Spread m
2225	Turkish hazel Corylus avellana	Early Mature	Good	A well developed specimen with no visible defects.	No action necessary	B2	40	9.5	310	4,4,4,4
2224	Turkish hazel Corylus avellana	Early Mature	Good	A well developed specimen with no visible defects.	No action necessary	B2	40	10	280	4,4,3,3
2223	Turkish hazel Corylus avellana	Early Mature	Good	A well developed specimen with no visible defects.	No action necessary	B2	40	8	220	2,2,2,2

Issue Sheet

Drawing No.	Drawing Title	Scale	Size
101	Arboricultural Assessment	1:250	A1
102	Arboricultural Impact	1:250	A1



