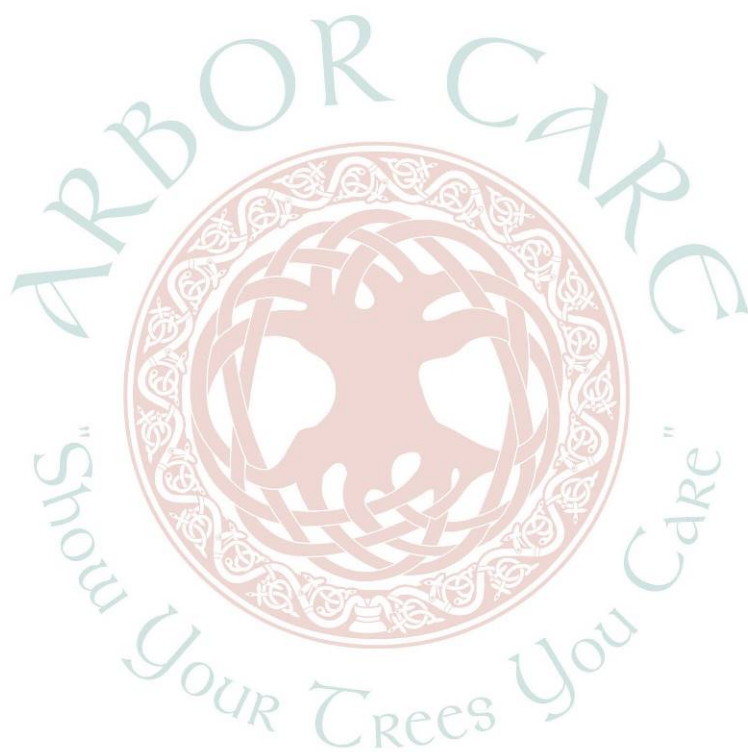




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Arboricultural Impact Assessment

Prepared for:

Rycroft Homes Ltd

Proposed site:

Lands at the townlands of Commons West, Boycetown and Kilcock, (lands adjoining the existing Brayton Park Estate), Kilcock, Co. Kildare

Prepared by:

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Executive Summary

Arbor-Care Ltd (Professional Consulting Tree Service) was retained by Rycroft Homes Ltd to undertake, a Tree Survey, an Arboricultural Impact Assessment and a tree protection plan the proposed development at the above location. The surveyed trees and hedgerows contained within this report are located within the parameters of the proposed site. The proposed site consists of several large green fields c. 11.56 ha in size, that are sub-divided by natural hedgerows, there are no internal trees within the site any larger trees are contained within the hedgerows. The hedgerows were surveyed as groups and for the purposes of this report they were labelled hedgerow 1-12.

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 4th of April 2019.

This Tree Survey report will be accompanied by an inventory of trees/hedgerows 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.

This Arboricultural Impact Assessment will be accompanied by a tree protection plan and tree constraints plan showing all trees and hedgerows to be retained and/or removed

Proposed development

Rycroft Homes Limited intends to apply to An Bord Pleanála for a **10 year planning permission** for a Strategic Housing Development on lands at the townlands of Commons West, Boycetown and Kilcock, (all adjoining the existing Brayton Park Estate), Kilcock, Co. Kildare on a site of approximately 11.56 ha.

The site is generally bound by undeveloped agricultural land to the north west, to the north east by the Dublin-Sligo railway line, open space at Bawnogues/Commons West to the south west, the Brayton Park residential development to the east and the M4 to the west.

The development will consist of:

345 no. residential units (69 no. Duplex Type Units, 182 no. Houses and 94 no. Apartments) ranging from 2 to 5 storeys, a standalone creche facility (approximately 466.76 sqm) with an overall height of 2 storeys, an associated external play area (approximately 277.67 sqm), associated ancillary surface car parking spaces and bicycle parking spaces, a link street, internal roads, pedestrian paths, cycle paths, public and private open spaces.

The proposed housing mix is comprised of 13 no. 1 bed units, 136 no. 2 bed units, 158 no. 3 bed units and 38 no. 4 bed units.

Out of the 345 no. residential units, 35 no. units are put forward to meet the applicant's obligations under Part V of the Planning & Development Act 2000 (as amended).

Each residential unit has associated private open space, in the form of either gardens, terraces or balconies in addition to access to the proposed public open space (including 3 no. playground areas) with hard and soft landscaping treatment.

A total of 650 no. surface car parking spaces are provided for the residential development including visitor parking. 280 no. bicycle spaces are proposed for the proposed apartments and duplexes and bicycle spaces for the proposed houses are provided on curtilage. In addition, the crèche will be provided with 34 no. surface car parking spaces and 30 no. bicycle parking spaces.

The proposed development provides for 1 no. vehicular access and associated pedestrian and cycle paths via a new link street connecting from the Brayton Park Road and 1 no. vehicular access and associated pedestrian path providing a link into the existing Brayton Park Estate.

The proposed development makes provision for future linkages to adjoining lands; including undeveloped lands to the north-west, the adjoining undeveloped educational zoned lands to the north, as part of this application land is reserved for access to a potential future pedestrian/cycle bridge over the railway line to the north-east of the site (to be delivered by others) . In addition, the proposed development provides for pedestrian and cycle paths connection to the north east of the site, as well as 4 no. pedestrian access points and 1 no. gated vehicular (for Kildare County Council maintenance use only) and pedestrian access point to the open space at Bawnogues/Commons West along the southern boundary of the site.

Bin storage is provided either on curtilage and or in communal storage. The associated site and infrastructural works include foul and surface water drainage, attenuation tanks, SuDs arrangements, hard and soft landscaping, permeable paving, boundary walls, fences and noise buffers, 3 no. substations (approximately 20 sqm each), public lighting, a link street, internal roads, cycle paths, pedestrian paths and all associated ancillary site development works.

1.0 Assignment

1. To undertake a visual tree/hedgerow 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.

Fig. 2 Survey area, highlighted in red



2.0 Methodology Employed

An initial tree survey and visual condition assessment was on the 4th of April 2019. The survey commenced at the southern boundary. Although the study area is wider than the site area, this is in accordance with BS 5837 which states trees in OR adjacent to the proposed development site are to be included within the survey.

For 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.**

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 4th of April 2019. A total of 49 trees were surveyed. 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	0
B-trees of good quality	48
C (Low quality or trees less than 75mm diameter)	1
U (remove due to poor condition)	0
Total Trees surveyed	49

3.2 Hedgerows surveyed

The survey commenced on the 4th of April 2019. A total of 12 hedgerows were surveyed. The impact of the development on the hedgerows surveyed will be assessed in the Arboricultural Impact Assessment.

3.2.1 A breakdown of the Hedgerows surveyed Categories on site as per BS 5837 2012 is set out in the table below:

Category	Quantity
A-Tree of high quality	0
B-trees of good quality	10
C (Low quality or trees less than 75mm diameter)	2
U (remove due to poor condition)	0
Total Trees surveyed	12

4.0 Arboricultural Impact of the Proposed Development.

4.1 Trees/hedgerows to be removed on site

The arboricultural impact of the proposed development on the site will be low. The design has been cognisant of the trees and hedgerows and will allow for the retention of the majority of the trees and hedgerows on the site, coupled with the proposed landscape plan this will ensure that the arboreal footprint of the site will be enhanced.

It is proposed to remove 3 individual trees and sections of various hedgerows, please refer to table 1 and the tree protection plan for further information for more information. Two areas have been denoted as conflict area 1 and 2. There may be minimal impact to the hedgerows within these areas to accommodate paving/parking areas. However any impact will be low and may only involve disturbance to approximately 20% root disturbance which will have no long term negative impact on the trees.

Trees to be removed to accommodate development (Please refer to table 1 for further information)

Tree #	Age class	Species	Tree category
201	M	Ash	B2
210	M	Elder	U
213-214 x 2	M	Ash	B2

Hedgerows to be removed to accommodate development (Please refer to table 1 for further information)

Tree #	Age class	Species	Tree category
H1	M	Hawthorn	C2
H2	M	Hawthorn (section to be removed)	B2
H3	M	Hawthorn	B2
H8	M	Hawthorn (section to be removed)	B2
H9	M	Hawthorn (section to be removed)	B2
H11	M	Hawthorn (section to be removed)	B2
H12	EM	Hawthorn/overgrown embankment(section to be removed)	C2

5.0 Tree and Hedgerow Removal

All trees that are destined for removal shall be removed prior to any construction or demolition works on this site. Any tree remedial works that are required shall also be undertaken prior to any construction or demolition activity on the site. All the above shall be carried out by qualified and insured tree surgeons and in accordance with *BS 3998: 2010 Tree Work Recommendations*

6.0 Tree and hedgerow Protection

Prior to any construction or demolition works on this site all trees destined for retention need to be protected by the use of protective barriers and or ground protection, fit for the purpose of ensuring the successful long-term preservation of the trees. In order for the retained trees to be adequately protected on the site a construction exclusion zone needs to be identified. This zone is calculated based on the root protection area (RPA), which is the minimum area in m² which should be left undisturbed around each retained tree. The RPA should be calculated as an area equivalent to a circle with a radius 12 times the stem diameter for a single stem tree and 10 times basal diameter measured immediately above the root flare for trees with more than one stem arising below 1.5m above ground level.

Number of Stems	Calculation
Single Stem Tree	$\text{RPA (m}^2\text{)} = \frac{\{\text{stem diameter (mm) @ 1.5m x 12}\}^2 \times 3.142}{1000}$
Tree with more than one Stem arising below 1.5m above Ground level	$\text{RPA (m}^2\text{)} = \frac{\{\text{Basal Dia. (mm) x 10}\}^2 \times 3.142}{1000}$

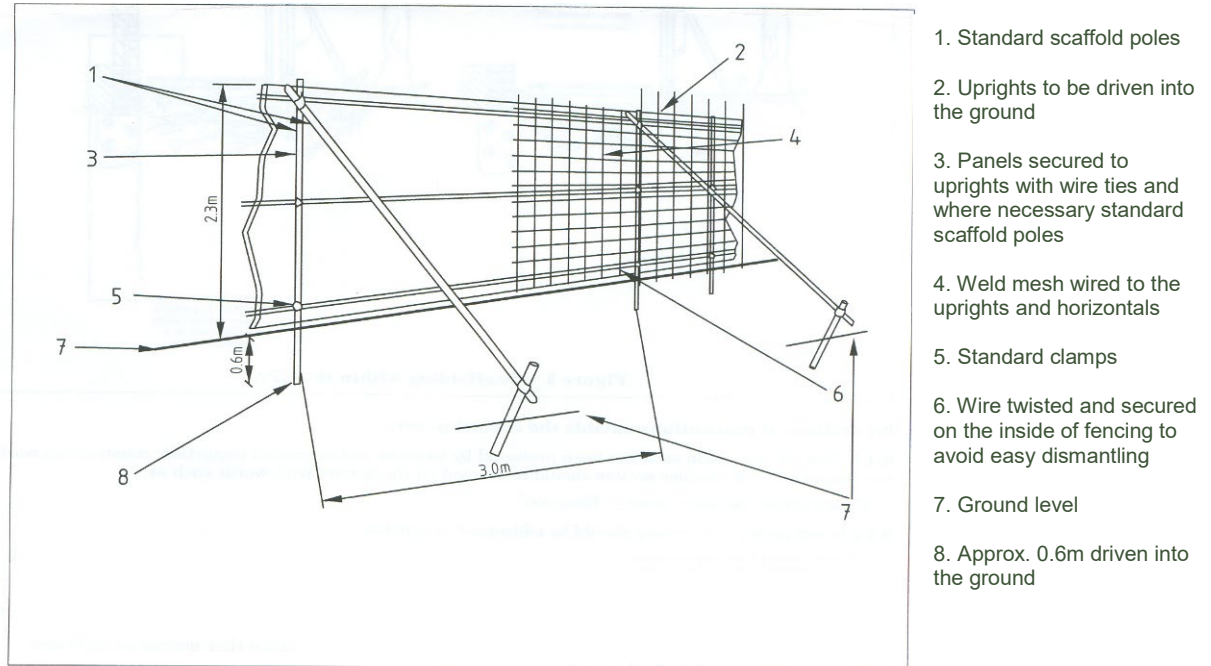
Note: The Calculated RPA should be capped to 707m² e.g. which is the equivalent to a circle with a radius of 15m or a square with approximately 26 m sides.

6.1 Protective Barriers

Trees/hedgerows that are destined to be retained must be protected by protective fencing, signage and/or ground protection prior to any materials or machinery being brought on site and prior to any development, demolition or soil stripping takes place. Areas that are designated for new plantings should be similarly protected. Barriers should be fit for the purpose of excluding construction activity. In most cases barriers should consist of a scaffold framework (Refer to fig. 3 below) comprising a vertical and horizontal framework, well braced to resist impacts. To ensure the protective barriers are respected, clear concise signage must be affixed to the barrier in an unrestricted easily viewed location.

The protective barriers shall remain in an undisturbed condition and only removed on completion of all construction activity finished grading and sodding. Any breach of the protective fence shall be reported to the consulting arborist.

Figure 3. Protective Barrier



The above displays an example of a suitable protective barrier as recommended by *BS. 5837 2012 Trees in Relation to Construction. Recommendations.*

Figure 4. Signage to be placed on all protective fencing



The signage must state the following;

- No construction activity is to take place within the R.P.A. (unless pre-agreed with the arborist)
- No materials of any kind are to be stored within the R.P.A.
- No “Spilling out” of materials shall take place within the R.P.A.
- No fires are to be lit within the R.P.A.

6.2 Ground Protection

Although works within the RPA are not recommended should essentials works be required within the RPA. The installation of ground protection in the form of a single thickness of scaffold boards on top of a compressible layer laid onto a geotextile may be acceptable

6.3 Tree and Hedgerow Protection Plan

A site specific Tree/hedgerow Protection Plan has been included. See Appendix 2 and 3.

7.0 Arboricultural Method Statement/Tree Protection Strategy

The objective of this arboricultural method statement and tree protection plan is to provide information for the building contractor/site manager on how the trees on the site need to be protected pre, during and post development works so that they can prepare their own site specific detailed method statement for their works

It is necessary for the protective fencing to be erected and all other mitigation measures required to be put in place prior to any development works commencing on site to ensure all retained trees and their critical rooting zone are protected for the duration of the works. Refer to tree protection plan (Appendix 2) for the position of protective fencing and additional mitigation measures

The protection for trees and hedgerows shown for retention will occur in three stages known as pre, during and post development.

Table 1. Arboricultural Method Statement/Tree Protection Strategy – Management Stages

Arboricultural Method Statement/Tree Protection Strategy – Management Stages		
Stage 1 – Pre development works	Stage 2 - The construction works stage	Stage 3-Post Development Works
1. Consultation with Arborist and developer	1. Protective Fencing – management and maintenance	1. Site inspection by arborist to ensure plan adhered to and trees and hedgerow protected
2. Site meeting - consultation with Arborist, developer, main contractor and sub-contractor	2. Excavations – works only commence when protective fencing in place	
3. Tree works – Appointment of professional tree surgeon	3. Working within the RPA – All works within the RPA to be discussed and agreed with the arborist	
4. Erection of protective fencing/Mitigation measures	4. Finished ground levels/Landscaping – All works to ensure the integrity of tree/s protected.	

7.1 Stage 1 - Pre development works

Prior to works commencing on site the following needs to be agreed and implemented:

1. The developer may need to appoint an arborist for the duration of the project. The arborist is to make regular site visits to ensure that the protection measures are in place and are being adhered too.
2. The main contractor and sub-contractors are to be briefed on the tree protection plan and ensure all measures are kept in place for the duration of the project
3. All personnel are to adhere to the recommendations of the appointed arborist
4. Any issues in relation to trees shown for retention must be discussed with the appointed arborist and the necessary mitigation measures put in place without delay and prior to the works taking place.

7.2 Site meeting

Prior to any works on site, if required a meeting be arranged between the project manager, site foreman, the project landscape architect, the project arborist and the local authority to identify and finalise the trees for removal and the line of protective fencing and any other mitigation measures.

7.3 Tree works

The developer or the main contractor is to appoint a professional tree surgery company to undertake any tree removal or surgery works identified. The works are to be undertaken in accordance with *BS 3998 2010*.

7.4 Erection of protective fencing/Mitigation measures

The erection of protective fencing is to be erected to the fence line shown in the protection plan. The fencing must adhere with BS 5837: 2012 (Figure 2 and Figure 3 above). Signage must be placed on the fence to highlight its importance. Once the fencing is erected works can commence on-site.

8.0 Stage 2 - The construction works stage

8.1 Protective Fencing

During the course of the construction works the integrity of the fencing must be respected and remain in place at all times. No building materials or soil heaps are to be stored within this area. Should essential works need to take place within the root protection area the project arborist must be informed in advance and any mitigation measures are to be put in place. The protective fencing must remain in situ for the duration of the project and must only be removed upon completion of all works.

8.2 Excavations

Excavation works are only to commence once the protective fence line is in place. The excavations need to be viewed on site once marked out with the project manager, site foreman and the project arborist in advance of excavation to determine the extent of the impact and the works space required to allow the construction works proceed and to assess any additional mitigation measures that may be required to protect the retained trees. In certain areas it may be necessary to use alternative methods of excavation to prevent encroachment into the RPA of the trees to be retained and this may include such methods as retaining walls, no dig technique etc.

8.3 Working within the RPA

If it becomes necessary to undertake works within the RPA of tree/trees, these must be discussed and agreed with the project arborist. All works must be carried out manually root pruning is to be undertaken by an arborist using hand held equipment such as a handsaw. For pedestrian movements within the R.P.A. the installation of ground protection in the form of a single thickness of scaffold boards on top of a compressible layer laid onto a geotextile may be acceptable.

8.4 Finished ground levels/Landscaping

The existing ground levels within the RPA of the retained trees must be retained and incorporated into the finished landscaped development. Where changes in level occurs these are to be either graded into the finished levels starting outside the RPA or alternatively, retaining wall structures are to be used differentiating between the different levels.

All soft and hard landscaping within the RPAs must be carried out manually and the soil levels must not be lowered or raised resulting in root damage to the trees. All finished surfaces are to be porous to allow the free movement of water and gaseous exchange to the roots.

9.0 Stage 3-Post Development Works

The project is not to be considered complete until the arborist has inspected the site and is satisfied that all retained trees and hedgerows have been protected in accordance with the site specific Tree Protection Plan and there has been no negative impact on the retained trees on site as a result of the development.

10.0 Conclusion

The arboricultural impact of the proposed development on the site will be low. The design has been cognisant of the trees and hedgerows and will allow for the retention of the majority of the trees and hedgerows on the site, coupled with the proposed landscape plan this will ensure that the arboreal footprint of the site will be enhanced.

It is proposed to remove 3 individual trees and 2 hedgerows and sections of 5 further hedgerows, please refer to table 1 and the tree protection plan for further information for more information. Two areas have been denoted as conflict area 1 and 2. There may be minimal impact to the hedgerows within these areas to accommodate paving/parking areas. However any impact will be low and may only involve disturbance to approximately 20% root disturbance which will have no long term negative impact on the trees.

I consider subject to implementing the above Arboricultural Method Statement/Tree Protection Strategy that there is unlikely to be significant detrimental impact as a consequence of the development proposal

Tree and Hedgerow Categorisation.

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 and Hedgerow 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

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.*

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.

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



Appendix 1 – Tree and Hedgerow Inventory

Brayton Park, Kilcock

Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of the development	PMR	Category	R.P.A. Meters
H1	<i>Crataegus monogyna</i> Hawthorn	M	220	8	N=2 S=2 E=2 W=2	1	Good	A mature hedgerow displaying a good overall condition. Typical native hedgerow	Remove to facilitate the development	Remove	C2	
H2	Hawthorn	M	220	8	N=2 S=2 E=2 W=2	1	Good	A mature hedgerow displaying a good overall condition. Typical native hedgerow. Contained within this hedgerow are matures ash trees. A section of this hedgerow will have to be removed.(Refer to TPP)	Remove section to facilitate the development	Remove a section	B2	To dripline of hedgerow
201	<i>Fraxinus excelsior</i> Ash	M	380	16	N=4 S=4 E=4 W=4	2	Good	A mature ash contained with hedgerow 2 displaying a good overall condition.	Remove to facilitate the development	Remove	B2	
202	Ash	M	420	16	N=4 S=4 E=4 W=4	2	Good	A mature ash contained with hedgerow 2 displaying a good overall condition.	No impact	Retain	B2	5.2m
203	Ash	M	320	12	N=3 S=3 E=2 W=2	2	Good	A mature ash contained with hedgerow 2 displaying a good overall condition.	No impact	Retain	B2	4.2m
204	Ash	M	420	16	N=4 S=4 E=4 W=4	2	Good	A mature ash contained with hedgerow 2 displaying a good overall condition.	No impact	Retain	B2	5.2m

Appendix 1 –Tree and Hedgerow Inventory

Brayton Park, Kilcock

Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of the development	PMR	Category	R.P.A. Meters
205	Ash	EM	200	8	N=2 S=2 E=2 W=2	2	Good	An early mature ash contained with hedgerow 2 displaying a good overall condition.	No impact	Retain	B2	3m
206	<i>Quercus robur</i> Common oak	M	400	10	N=6 S=6 E=5 W=5	2	Good	A mature Oak contained with hedgerow 2 displaying a good overall condition.	No impact	Retain	B2	5m
H3	Hawthorn	M	220	8	N=2 S=2 E=2 W=2	1	Good	A mature hedgerow displaying a good overall condition. Typical native hedgerow. Contained within this hedgerow are matures ash trees	Remove to facilitate the development	Remove	B2	
H4	Hawthorn	M	220	10	N=2 S=2 E=2 W=2	1	Good	A mature hedgerow displaying a good overall condition. Typical native hedgerow. Contained within this hedgerow are matures ash trees	No impact	Retain	B2	To dripline of hedgerow
207	Ash	M	550	20	N=4 S=4 E=4 W=4	2	Good	An mature ash contained with hedgerow 5 displaying a good overall condition.	No impact	Retain	B2	6.5m
H5	Hawthorn	M	220	10	N=2 S=2 E=2 W=2	1	Good	A mature hedgerow displaying a good overall condition. Typical native hedgerow. Contained within this hedgerow are matures ash trees	Minimal impact to one section	Retain	B2	To dripline of hedgerow

Appendix 1 –Tree and Hedgerow Inventory

Brayton Park, Kilcock

Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of the development	PMR	Category	R.P.A. Meters
208-209	Ash	M	320	12	N=2 S=2 E=2 W=2	2	Good	A row of 12 mature ash contained with hedgerow 5 displaying a good overall condition.	No impact	Retain	B2	4.2m
210	<i>Sambucus nigra</i> Elder	M	280	8	N=2 S=2 E=2 W=2	1	Fair	A mature elder that has suffered significant stem damage	No impact	Remove based on its poor condition	C2	
H6	Hawthorn	M	220	8	N=2 S=2 E=2 W=2	1	Good	A mature hedgerow displaying a good overall condition. Typical native hedgerow. Contained within this hedgerow are matures ash trees	No impact	Retain	B2	To dripline of hedgerow
211-212	Ash x12	M	350	12	N=2 S=2 E=2 W=2	1	Good	A row of 12 mature ash contained with hedgerow 6 displaying a good overall condition.	No impact	Retain	B2	4.5m
H7	Hawthorn	M	220	8	N=2 S=2 E=2 W=2	1	Good	A mature hedgerow displaying a good overall condition. Typical native hedgerow. Contained within this hedgerow are matures ash trees	No impact	Retain	B2	To dripline of hedgerow
213-214	Ash x12	M	350	12	N=2 S=2 E=2 W=2	1	Good	A row of 12 mature ash contained with hedgerow 6 displaying a good overall condition.	Remove two to facilitate a future road	Retain 10 Remove 2	B2	4.5m

Appendix 1 – Tree and Hedgerow Inventory

Brayton Park, Kilcock

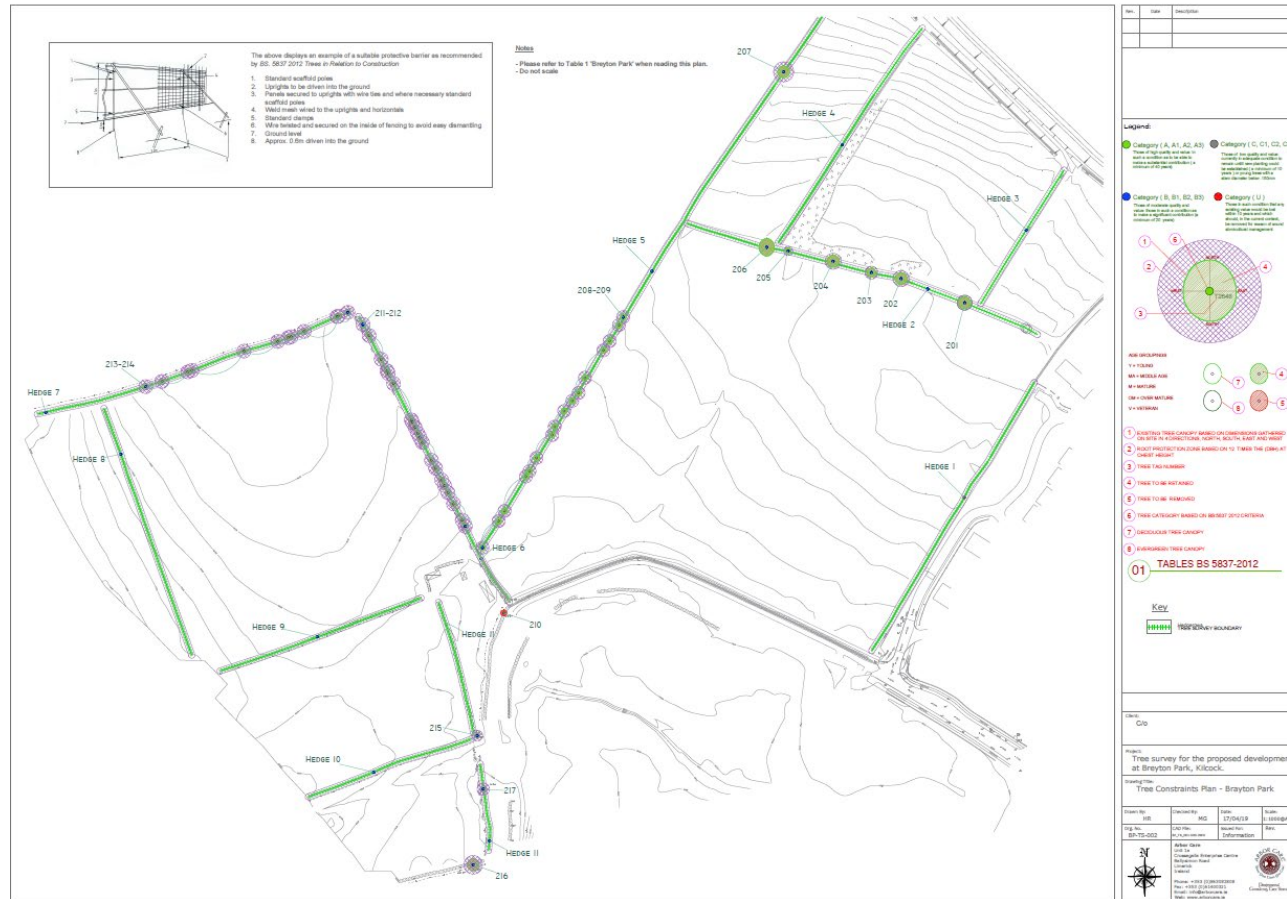
Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of the development	PMR	Category	R.P.A. Meters
H8	Hawthorn	M	220	8	N=2 S=2 E=2 W=2	1	Good	A mature hedgerow displaying a good overall condition. Typical native hedgerow. A small section to the north of this hedgerow will require removal. (Refer to TPP)	Remove small section	Remove the designated section	B2	To dripline of hedgerow
H9	Hawthorn	M	220	8	N=2 S=2 E=2 W=2	1	Good	A mature hedgerow displaying a good overall condition. Typical native hedgerow. A section to the of this hedgerow will require removal. (Refer to TPP)	Remove small section	Remove the designated section	B2	To dripline of hedgerow
H10	Hawthorn	M	220	8	N=2 S=2 E=2 W=2	1	Good	A mature hedgerow displaying a good overall condition. Typical native hedgerow.	No impact	Retain	B2	To dripline of hedgerow
H11	Hawthorn	M	220	8	N=2 S=2 E=2 W=2	1	Good	A mature hedgerow displaying a good overall condition. Typical native hedgerow.	Remove to facilitate the development	Remove	B2	
215	Ash	M	240	8	N=2 S=2 E=2 W=2	1	Good	An early mature ash contained with hedgerow 6 displaying a good overall condition.	No impact	Retain	B2	3.5m
216	<i>Fagus sylvatica</i> Beech	M	500	16	N=4 S=4 E=4 W=4	1	Good	A mature Beech contained with hedgerow 11 displaying a good overall condition.	No impact	Retain	B2	6m

Appendix 1 – Tree and Hedgerow Inventory

Brayton Park, Kilcock

Tree #	Species Botanical Name	Age class	Size (mm)	Height (M)	Crown Sp. (M)	Crown Cl.(M)	Condition	Structural/Physiological Observations	Impact of the development	PMR	Category	R.P.A. Meters
217	Sycamore	M	300	12	N=2 S=2 E=2 W=2	1	Good	A mature sycamore contained within H11 displaying a good overall condition.	No impact	Retain	B2	4m
H12	Hawthorn	EM	200	6	N=2 S=2 E=2 W=2	1	Fair	This hedgerow bounds Kildare County Council Park, is an overgrown grassed embankment with a few sporadic hawthorns contained within it. A section of this will be removed to allow for road works.	A section will require to be removed. Please refer to the TPP	Remove required section	C2	3m

Appendix 2. Tree Constraints Plan



Appendix 3. Tree Protection Plan



Figure 2. Typical hedgerow composition on the site



Figure 3. Typical Ash tree within the hedgerows



This report was prepared by:

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Yours in Conservation,

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