

Charles McCorkell Arboricultural Consultancy

12 Churchfield Grove, Ashbourne, Co. Meath

December 2022

Our Ref: 220513

Re: Arboricultural Documents to discharge Condition 6 of planning approval, registration reference SD22A/0303.

Dear Sir/Madam,

On behalf of Takeda Ireland Limited (the 'Applicant'), the following documents have been prepared to discharge Condition 6 of planning approval, registration reference SD22A/0303, for the proposed development at Takeda Ireland Ltd., Grange Castle Business Park, Dublin 22 (the 'Application Site').

Document	Reference	Appendices
Tree Schedule	220513-PD-10	Appendix A
Tree Removals & Protection Plan	220513-P-11	Appendix B
Tree & Hedgerow Management Plan	220513-P-13	Appendix B
Arboricultural Method Statement	220513-PD-13	Appendix C

Condition 6(a) requires a tree/hedgerow management plan showing the proposed removals and replacement planting, ensuring that the new planting is at least equal to what is being removed.

The Tree & Hedgerow Management Plan in Appendix B provides this information. It highlights the proposed tree/hedge removals and the proposed tree/hedge replacement planting as per the Landscape Layout which was prepared by DPS.

In total, 380 m² of trees and shrubs are proposed to be removed, while 385 m² of hedging and 16 trees are proposed to be planted. This concludes that the replacement planting is marginally greater than the proposed removals.

Condition 6(b) requests an Arboricultural Method Statement and Tree Protection Plan to ensure retained trees are safeguarded during the proposed construction works. The Tree

Removals & Protection Plan in Appendix B illustrates the location of the Tree Protection Zones which will be safeguarded by protective fencing. The specification of the fencing type required is shown on the plan and is in accordance with BS5837:2012. The Arboricultural Method Statement in Appendix C provides detailed information on the management and protection of the trees for the main contractor during the course of construction.

In conclusion, the documents provided within the appendices have addressed the requirements of Condition 6 of the grant of planning permission.

If you have any queries regarding the above please do not hesitate to contact me.

Yours faithfully,

Charles McCorkell B.Sc. (Hons), MICFor, MArborA

Chartered Arboriculturist

Appendix A - Schedule

Tree Schedule	220513-PD-10	

220513-PD-10-Tree schedule



220513 - Takeda Ireland Ltd

Tree ID	No. Species	Height (m)	Stem diameter (cm)	No. of Stems	CROWN SPREAD (m) N NE E SE S SW W NW	Crown clearance (m)	L.B. (m)	Life stage	Condition Notes Recommendations	Survey date	RPA (m ²)	RPR (m)	Life expectancy (yrs)	BS Category
Group G1	1 Acer platanoides (Norway Maple)	10.0	25 AVE	1		0.0		Mature	Structural condition Fair. Physiological condition Fair. Early-mature tree group growing on a raised mound. A large	09/06/2022	28.3	3.0	20-40	C2
	Betula pendula (Silver Birch)								number of the trees have been historically topped which has reduced their quality and produced weakly attached vertical regrowth. The tree group is an important landscape feature that provides screening. Height of trees vary with the maximum being between 10-12m. Stem diameter recorded					
	1 Carpinus betulus (Hornbeam)								was average for the group. Quantities of trees not recorded, only species mix. Lift low canopy - Specified extent Crown lift or reduce overhanging laterals to provide sufficient clearance for					
	1 Cerasus avium (Wild Cherry)								construction.					
	1 Fraxinus excelsior (Ash)													
	Laurocerasus officinalis (Cherry Laurel)													
	1 Tilia sp. (Lime sp.)													

Stem green Estimated value

Stem AVE Average stem diameter for tree groups

Stem COM Combined stem diameter in accordance with BS5837

L.B. Height of lowest branch attachment (m) - where relevant

The survey information in this schedule has been gathered following a BS5837 survey for planning purposes. Where hazardous trees have been noted recommendations for works may have been made but this survey cannot be relied upon as a full health and safety assessment of the trees.

Page 1 of 3



Generated By

220513 - Takeda Ireland Ltd

Tree ID	No. Species	Height (m)	Stem diameter (cm)	No. of Stems	CROW	AD (m)	Crown clearance (m)	L.B. (m)	Life stage	Condition Notes Recommendations	Survey date	RPA (m ²)	RPR (m)	Life expectancy (yrs)	BS Category
Group G2	1 Tilia sp. (Lime sp.)1 Swida sanguinea (Common Dogwood)	5.0		1			0.0			Structural condition Fair. Physiological condition Fair. Semi- mature tree group with an understorey of dogwood and gorse. Small number of dead trees which have been out competed. Quantities of trees not recorded, only species mix. Height and stem diameter are average for group. Fell - Ground level Fell section of group as shown on the Tree Removals Plan to facilitate the development.	09/06/2022	6.5	1.4	20-40	C2
	1 Prunus sp. (Cherry sp.)														
	1 Castanea sativa (Sweet Chestnut)														
	Betula pendula (Silver Birch)														
	1 Acer campestre (Field Maple)														

Stem green Estimated value

Stem AVE Average stem diameter for tree groups

Stem COM Combined stem diameter in accordance with BS5837

L.B. Height of lowest branch attachment (m) - where relevant

The survey information in this schedule has been gathered following a BS5837 survey for planning purposes. Where hazardous trees have been noted recommendations for works may have been made but this survey cannot be relied upon as a full health and safety assessment of the trees.

Page 2 of 3



Generated By

Category and definition	Criteria (including subcategories	where appropriate)	Identificati	on on plan
Trees unsuitable for retention (see not	e)			
Category U Those in such a condition that they cannot realistically be retained as living trees in the context of the current land us for longer than 10 years	including those that will become unviloss of companion shelter cannot be * Trees that are dead or are showing s Trees infected with pathogens of sign suppressing adjacent trees of better	igns of significant, immediate, and irreversible on ificance to health and/or safety of other trees no	g. where, for whatever reason, the overall decline earby, or very low quality trees	
	1 Mainly arboricultural qualities	2 Mainly landscape qualities	3 Mainly cultural values, including conservation	
Trees to be considered for retention				
Category A	Tree that are particularly good examples of	Trees, groups or woodlands of particular	Trees, groups or	GREEN
Trees of high quality	their species, especially if rare or unusual; or those that are essential components of	visual importance as arboricutural and/or landscape features.	woodlands of significant conservation, historical,	OKLEN
with an estimated remaining life expectancy of at least 40 years	groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue).		commemorative or other value (e.g. veteran trees or wood-pasture).	
Category B	Trees that might be included in category A,	Trees present in numbers, usually growing	Trees with material	BLUE
Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation.	as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality.	conservation or other cultural value.	
Category C	Unremarkable trees of very limited merit or	Trees present in groups or woodlands, but	Trees with no material	GREY
Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young crees with a stem diameter below 150 mm	such impaired condition that they do not qualify in higher categories.	without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits.	conservation or other cultural value.	

Appendix B - Plans

Tree Removals & Protection Plan	220513-P-11
Tree & Hedgerow Management Plan	220513-P-13

Appendix C – Arboricultural Method Statement

Arboricultural Method Statement	220513-PD-13

Arboricultural Report

Arboricultural Method Statement

In relation to the development proposal at:

Takeda Ireland Ltd.

Grange Castle Business Park

Dublin 22

December 2022

220513-PD-13



Contents

1	Introduction	3
2	Sequence of Operations and Site Monitoring	4
3	Tree Surgery Works	6
4	Tree Protection	7
5	Construction Operations	9
6	Landscape Operations	10

1 Introduction

Instructions

1.1 This arboricultural method statement has been prepared on behalf of Takeda Ireland Ltd. (the 'Applicant'), to provide information to address Condition 6 (b) of the grant of Planning Permission, Registration Reference SD22A/0303, in relation to the proposed development at Takeda Ireland Ltd., Grange Castle Business Park, Dublin 22 (the 'Application Site').

Qualification and experience

1.2 This report has been prepared by Charles McCorkell. Charles is a Chartered Arboricultural Consultant dealing with trees in relation to all forms of human activity, including the built environment. He is a Professional Member of the Institute of Chartered Foresters, a Professional Member of the Arboricultural Association, a qualified professional tree inspector (LANTRA), and has a BSc Honours Degree in Arboriculture from the University of Central Lancashire.

Scope and limitations

1.3 The contents of this report are copyright of Charles McCorkell Arboricultural Consultancy and may not be copied without the author's permission.

Methodology and guidance

1.4 This report has been prepared in accordance with *British Standard 5837: Trees in relation to design, demolition and construction – Recommendations (2012)* which provides a methodology for the assessment and protection of trees and other significant vegetation on development sites.

Definitions

- 1.5 **Root Protection Area (RPA)** a layout design tool indicating the area surrounding a tree that contains sufficient rooting volume to ensure the survival of the tree.
- 1.6 **Tree Protection Zone (TPZ)** an area based on the RPA in m² identified by an arboriculturist, to be protected during development, including demolition and construction work, by the use of barriers and/or ground protection fit for purpose to ensure the successful long-term retention of a tree.

2 Sequence of Operations and Site Monitoring

Sequence of operations

- 2.1 The sequence of operations followed as part of the development process are:
 - · tree removals and tree surgery work;
 - installation of tree protection measures;
 - site set up and installation of the compound area and welfare facilities;
 - · construction; and
 - landscaping.
- 2.2 Alternative sequences can be discussed and agreed upon with the local planning authority and project manager.

System of monitoring

- 2.3 Where trees on or adjacent to a site have been identified within the tree protection plan for protective measures, an auditable system of arboricultural site monitoring is required. This includes arboricultural supervision whenever development activity is to take place within or adjacent to any RPA.
- 2.4 Prior to the commencement of works, contact details of all parties will be circulated to ensure all team members are able to communicate correctly.
- 2.5 The following key / critical activities will be inspected and monitored by the approved arboricultural consultant during the course of the development.

Supervision	Date	Initial
Sign off tree removals and tree surgery works.		
Sign off the tree protection measures.		
Sign off tree condition assessment		

2.6 The Site Manager will be responsible for the protection of all retained trees for the duration of the development project. Whenever necessary, the Site Manager will engage the arboricultural consultant to ensure trees are adequately protected.

- 2.7 The Site Manager will explain the importance of the tree protection measures to all site operatives and external sub-contractors working on site during a Site Induction. Each site operative will be made aware of the location of the designated tree protection zones and that no alterations or working operations are permitted within these protected areas without the approval of the arboricultural consultant.
- 2.8 It will be the responsibility of the Site Manager to ensure that the arboricultural consultant is given *five working days prior notification* of any works on site that have been identified as a risk to trees within this statement, so that appropriate supervision can be carried out when required.
- 2.9 Following each site visit, a site inspection report that details the works supervised and the tree protection measures on the site will be submitted to the Project Manager and Site Manager.

Variations to works

2.10 Variation from the details within this method statement can only be decided and instructed by the Site Manager in prior consultation and agreement of the client arboricultural consultant. Any such proposal will be followed up formally for agreement with the Local Authority Parks Department prior to the works being carried out unless deemed as an emergency.

Incidents on site

- 2.11 In the event of an emergency, human health and safety will be the main priority. Works that may affect trees including damage to branches, roots, and rooting areas will require the Site Manager to report to the arboricultural consultant immediately before any action is taken. If there is no time to report, the Site Manager <u>must</u> inform the Local Authority Parks Department and client arboricultural consultant immediately following reasonable action.
- 2.12 It will be the responsibility of the Site Manager to ensure that these protocols are complied with, and in all other situations strict adherence to this method statement is complied with.

3 Tree Surgery Works

- 3.1 Details of the proposed tree works to be undertaken are specified within the Tree Schedule in Appendix A. The location of trees to be removed is highlighted in the Tree Removals & Protection Plan at Appendix B.
- 3.2 It is the responsibility of the Site Manager to ensure that all tree works have been approved by the Local Planning Authority (LPA).
- 3.3 Only tree works specified within this document may be carried out. Any uncertainty regarding trees to be pruned will be immediately confirmed with the arboricultural consultant and LPA if required.
- 3.4 All tree works will be carried out by a reputable arboricultural contractor in accordance with the recommendations given in BS 3998:2010 Tree Work Recommendations.
- 3.5 All tree works should be carried out in accordance with Section 40 of the Wildlife Act 1976 and Section 46 of the Wildlife (Amendment) Act 2000.
- 3.6 It is the responsibility of the arboricultural contractor to ensure that no protected species are harmed whilst carrying out site clearance or tree surgery works.

4 Tree Protection

Site-specific protection measures

4.1 The proposed development will require the installation of Tree Protection Barriers safeguard retained trees throughout the construction phase of development. The location of all tree protection measures is highlighted in the Tree Removals & Protection Plan at Appendix B. Alternatives to those shown must be agreed upon in advance by the client-approved arboricultural consultant.

Specification for barriers

- 4.2 Protective fencing will be constructed of robust barriers fit for the purpose of excluding construction activity and appropriate to the degree and proximity of work taking place around the retained trees. Barriers should be maintained to ensure that they remain rigid and complete.
- 4.3 Barriers within the main construction site will consist of 2m tall, welded mesh panels on rubber or concrete feet. Fencing panels should be joined together using a minimum of two anti-tamper couplers, which are installed so that they can only be removed from inside the fence. The distance between the fence couplers should be at least 1m and should be uniform throughout the fence. The panels should be supported on the inner side by stabilizer struts, which are attached to a base plate and are secured with ground pins, refer to the specification on the Tree Removals & Protection Plan at Appendix B. Where the use of ground pins is not possible, the stabilizer struts should be mounted on a block tray.
- 4.4 Signs will be fixed to every third panel stating, <u>'Tree Protection Area Keep Out Any incursion into the protected area must be with the agreement of the local authority or arboricultural consultant'</u>.

Additional precautions

- 4.5 All trees that are being retained should be protected before any materials or machinery are brought onto the site, and before any development or stripping of soil commences.
- 4.6 Where required, pre-development tree work may be undertaken before the installation of tree protection measures, with the agreement of the project arboriculturist or local planning authority, if appropriate.
- 4.7 No alteration, removal, or repositioning of the tree protection will take place without the prior consent of the arboricultural consultant, and it will be the site manager's

- responsibility to ensure that all site operatives are made aware of this requirement prior to starting work on site.
- 4.8 Prior to the commencement of works, the proposed Tree Protection Barriers must be inspected and signed off by the arboricultural consultant.
- 4.9 No materials, vehicles, plant, or personnel will be permitted into the Tree Protection Zones at any time without the prior consent of the arboricultural consultant.
- 4.10 No fires will be permitted within 20m of the crown of any tree.
- 4.11 Any liquid materials spilt on site will be immediately cleared up and removed from the site. If liquid fuel or cement products are spilt within 2m of the Tree Protection Zone, the contractor will report the incident to the arboricultural consultant immediately.
- 4.12 The contractor will report any damage to trees, whether caused by construction activities or from any other cause, to the arboricultural consultant immediately.
- 4.13 Where soil compaction has occurred in the vicinity of existing trees, arboricultural advice should be sought and the appropriate remedial works recommended.

5 Construction Operations

Compound Area

- 5.1 The proposed site compound area has not yet been designed; however, the considerations below must be followed:
 - The site compound must be located outside the designated TPZs as highlighted on the Tree Removals & Protection Plan at Appendix B.
 - No excavation works within tree RPAs are permitted to install temporary services for site cabins and facilities. Any temporary services within tree RPAs must be above ground and protected accordingly.
 - No operating generators or toxic liquids will be stored within the RPAs of retained trees during construction.
 - Overhanging tree canopies must be taken into consideration when transporting, installing, and removing site cabins near tree crowns. A banksman must be present during this process to ensure that all operations are carried out in a controlled manner and no part of the cabin meets overhanging tree crowns.

6 Landscape Operations

Landscape operations within tree RPAs

6.1 Landscape operations within tree protection zones have the potential to damage trees if not carried out with care; in addition, the removal of protective fencing to carry out landscape operations may allow access for landscape contractors into previously protected areas.

Removal of protective fencing

- 6.2 Prior to the commencement of landscaping operations, the protective fencing shall be removed by hand.
- 6.3 No vehicles will be permitted within this protected area for the purposes of carrying out the landscape operations or for any other purpose.
- 6.4 All landscape operations within the protected area will be carried out using hand tools only.
- No dumping of spoil or rubbish, parking of vehicles or plant, storage of materials or temporary accommodation will be undertaken within the protected area.
- 6.6 All tree roots within the protected area greater than 25mm diameter or large clumps of fibrous roots will be retained, protected and worked around.

Soil levels

6.7 Soil levels will not be increased or reduced within the RPAs of retained trees by more than 50mm above or below existing soil levels unless agreed upon beforehand with the arboricultural consultant.

Use of machinery and tools

- 6.8 No vehicles will be used within the designated TPZ during landscaping operations.
- 6.9 Hand tools will be used to ensure that no tree roots are damaged during the landscaping works.
- 6.10 All landscape operations will be in accordance with BS5837 Trees in relation to design, demolition and construction Recommendations (2012) and BS 4428 Code of practice for general landscape operations (1989).

Planting in root protection areas

- 6.11 Where tree, hedge or shrub planting is proposed within root protection areas the following methods will apply:
 - Planting pits will be excavated manually, any roots of existing trees encountered will be retained and if necessary the tree pit will be moved to allow for their retention.
 - All roots greater than 25mm in diameter and large clumps of fibrous roots will be retained.
 - Immediately after the new tree, hedge or shrub is planted, the pit will be backfilled accordingly.



Address: 12 Churchfield Grove, Ashbourne, Co. Meath

Email: charles@cmarbor.com

Tel: +353 85 843 7015

Web: www.cmarbor.com