Arboricultural Report

Tree Survey,

Arboricultural Impact Assessment &

Arboricultural Method Statement

In relation to the development proposal at:

Fonthill Road

Liffey Valley

Clondalkin

Dublin 22

December 2022

221123-PD-11

Additional Information request Point 2

Planning Reg Ref: SD22A/0363

CHARLES MCCORKELL
ARBORICULTURAL CONSULTANCY

Contents

Section 1: Arboricultural Impact Assessment

1 Summary

1.1 This arboricultural report has been instructed by Certas Energy Ireland Limited (the 'Applicant').

1.2 The development proposal is for the construction of an unmanned service station at an unused site on Fonthill Road, Liffey Valley, Clondalkin, Dublin 22 (the 'Application Site').

1.3 This report includes:

- an assessment of the trees, their quality and value in accordance with BS 5837:2012 - Trees in relation to design, demolition and construction;
- the site context and observations on the trees;
- local planning policies relevant to the consideration of trees on the site;
- the impact of the proposed development on the tree population in and around the site; and
- methods of reducing impacts on trees.

1.4 My conclusions are that the proposed development is acceptable in both arboricultural terms and in relation to local planning policy as it relates to trees.

1.4 No trees are required to be removed or pruned to facilitate the development and all working operations are located outside tree Root Protection Areas.

1.5 Neighbouring trees can be successfully protected during the development by following the information provided within this report and adhering to industry best practice.

2 Introduction

Instructions

2.1 This arboricultural report has been instructed by Certas Energy Ireland Limited to provide information to assist all parties involved in the planning process to make balanced judgements with regard to arboricultural features in relation to the proposed development at Fonthill Road, Liffey Valley, Clondalkin, Dublin 22.

Development proposal

2.2 The proposal is for the construction of an unmanned service station with associated site infrastructure and engineering works necessary to facilitate the development.

Qualification and experience

2.3 The author of this report, Charles McCorkell, is a Chartered Arboricultural Consultant who deals 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

2.4 The survey is not a health and safety inspection of trees; however, trees identified as imminently dangerous will have been highlighted and recommendations made, where appropriate.

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

Methodology and guidance

2.6 The author has referred to *British Standard 5837: Trees in relation to design, demolition and construction (2012)* which provides a methodology for the assessment of trees and other significant vegetation on development sites.

2.7 BS 5837:2012 is intended to assist decision-making with regard to existing and proposed trees and sets out the principles and procedures to be applied in order to achieve a harmonious relationship between existing and new trees and structures that can be sustained for the long term.

2.8 The BS 5837:2012 recommends the National Joint Utilities Group (NJUG) document *Guidelines for the planning, installation and maintenance of utility apparatus in proximity to trees.* Volume 4, issue 2. London: NJUG, 2007, as a normative reference for guidance on the installation of utilities within proximity to trees.

Supporting information

2.9 This report should be read in conjunction with the following supporting documents attached to this report.

Document	Reference	Location
Arboricultural Method Statement	N/A	Section 2
Tree Schedule	221123-PD-10	Appendix A
Tree Survey & Constraints Plan	221123-P-10	Appendix B
Tree Protection Plan	221123-P-11	Appendix B

Definitions

2.10 **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.

2.11 **Tree Protection Zone (TPZ)** – an area based on the RPA in m^2 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.

3 Observations & Context

Site visit

3.1 The site was visited by Charles McCorkell on 2 December 2022. The purpose of the visit was to survey off-site trees and vegetation which may be of significance to the proposed development. The survey was carried out in accordance with BS 5837:2012 and from ground level only.

Site location and description

3.2 The Application Site is located just off Fonthill Road between Tesco Extra and B&Q (Map 1). It is an unused and overgrown site bounded by wire mesh security fencing and gates. To the east of the site is the M50 motorway and Liffey Valley is located to the northwest of the site beyond Tesco Extra.

3.3 The site does not contain any trees or hedgerows. To the east of the site, there is a semi-mature mixed group of trees that provide a good visual and acoustic screen between the site and the M50 motorway. These trees are located at a lower level and beyond an existing palisade fence.

Map 1 (Google 2022): *Dashed yellow line highlighting the location of the site within the local area.*

Views of the site and trees

Photo 1: *View of the site from the existing entrance just south of Fonthill Road.*

Photo 2: *View of the tree groups adjacent to the site.*

4 Local Planning Policy

Development Plan 2022-2028

4.1 The County Development Plan 2022-2028 contains the following policies that relate to trees and are to be considered:

GI1 Objective 1

To establish a coherent, integrated and evolving GI Network across South Dublin County with parks, open spaces, hedgerows, trees including public street trees and native mini woodlands (Miyawaki-Style), grasslands, protected areas and rivers and streams and other green and blue assets forming strategic links and to integrate and incorporate the objectives of the GI Strategy throughout all relevant land use plans and development in the County.

GI5 Objective 3

To ensure compliance with the South Dublin Climate Change Action Plan and the provisions of the Council's Tree Management Strategy.

- Increase the County's tree canopy cover by promoting annual planting, maintenance preservation and enhancement of trees, woodlands and hedgerows within the County using locally native species and supporting their integration into new development.

GI5 Objective 6

To provide more tree cover across the county, in particular to areas that are lacking trees.

NCBH11 Objective 3

To protect and retain existing trees, hedgerows, and woodlands which are of amenity and/or biodiversity and/or carbon sequestration value and/or contribute to landscape character and ensure that proper provision is made for their protection and management taking into account Living with Trees: South Dublin County Council's Tree Management Policy (2015-2020) or any superseding document and to ensure that where retention is not possible that a high-value biodiversity provision is secured as part of the phasing of any development to protect the amenity of the area.

Tree Management Policy 2015-2020

4.2 The South Dublin County Council Tree Management Policy 'Living with Trees' 2015-2020 contains information within Chapter 7 Trees and Development that relates to the retention, protection and planting of trees on development sites. Relevant points within this section include:

- The Council will use its powers to ensure that where it is conductive with the objectives of the County Development Plan, and other planning objectives there is maximum retention of trees on new development sites.
- In the processing of planning applications, the Council will seek the retention of trees of high amenity / environmental value taking consideration of both their individual merit and their interaction as part of a group or broader landscape feature.
- On construction sites all work must be in accordance with British Standard 5837 (2012): Trees in Relation to Design, Demolition and Construction – Recommendations.
- The Council will promote the replacement of trees removed to facilitate approved planning and development of urban spaces, buildings, streets, roads, infrastructural projects and private development sites.

5 Technical Information

Tree data

5.1 The Tree Survey & Constraints Plan at Appendix B illustrates the location of trees, the extent of the spread of their crowns, and their root protection areas. Dimensions, comments and information for each tree and group are given in the Tree Schedule at Appendix A.

Life stage analysis

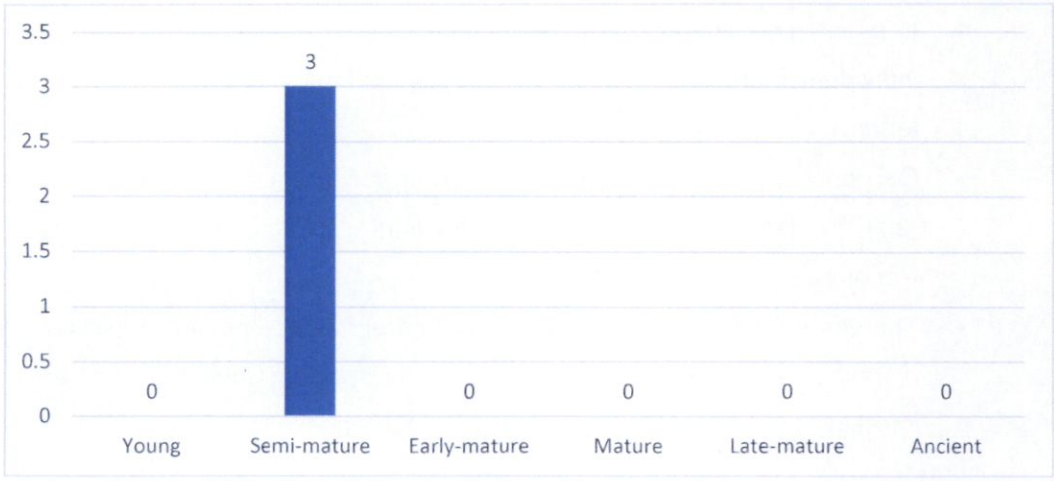

Figure 1: *Life stage analysis of the three tree groups recorded.*

BS5837 (2012) category breakdown

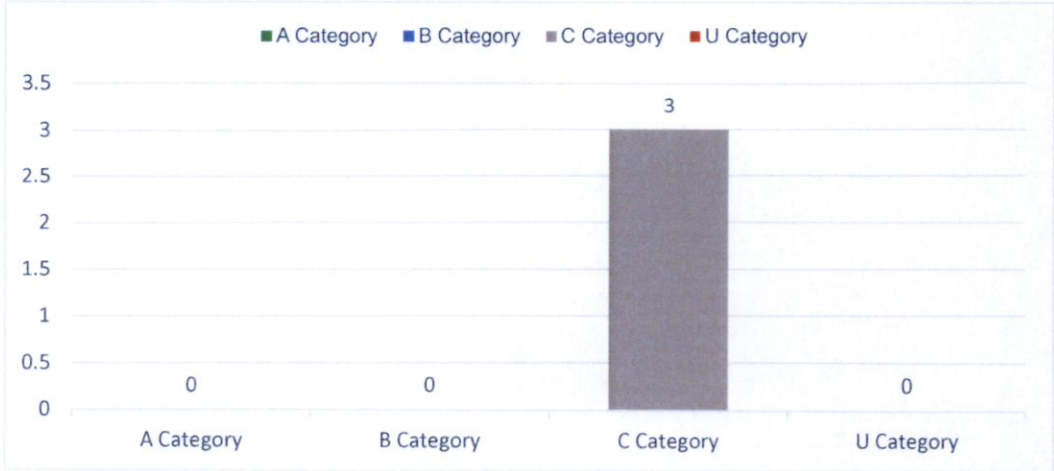

Figure 2: *Breakdown of BS5837:2012 categories of the three tree groups recorded.*

6 Analysis of the Proposal in Respect of Trees

Arboricultural Impacts

6.1 ***Tree loss*** – It will not be necessary to remove any trees to facilitate the construction of the proposed development.

6.2 The proposed development design in respect of the existing trees is shown on the Tree Protection Plan at Appendix B.

6.3 ***Pruning works to facilitate the development*** – It will not be necessary to prune any trees to facilitate the construction of the proposed development.

6.4 ***Construction Operations*** – No trees will be impacted by the construction of the development; therefore, no special working methods are considered necessary.

6.5 ***Tree protection measures*** – Neighbouring trees along the eastern boundary can be successfully protected during the proposed development works by retaining the existing mesh fencing along the boundary.

6.6 If this is not possible, the installation of robust fencing which complies with the recommendations outlined within BS 5837:2012 will be required.

6.7 For details of the tree protection measures required during construction, please refer to the Method Statement within Section 2 and the Tree Protection Plan at Appendix B.

7 Discussion & Conclusion

General Change

7.1 The removal or pruning of trees is not required to facilitate the development, therefore the impact on the landscape character of the local area will be neutral.

Arboricultural Impacts

7.2 The proposal will not have any impact on the existing trees located adjacent to the development site.

How do the changes relate to local planning policy?

7.3 The proposed development complies with local planning policies as they relate to trees. No trees are required to be removed and no development works are required within the rooting areas of neighbouring trees.

Conclusion

7.4 The proposal has been assessed in accordance with BS5837:2012 and no trees will be impacted by the construction of the development.

7.5 Neighbouring trees can be successfully protected during the development by following the information provided within this report and adhering to industry best practice.

Section 2: Arboricultural Method Statement

Arboricultural Method Statement	
Scope	**Methodology**
Tree Protection	Tree protection will only be required if the existing boundary fence is removed prior to construction. In this instance, protective fencing must be installed as shown on the Tree Protection Plan at Appendix B. Protective fencing must be constructed and installed using the BS5837:2012 fencing specification, please refer to the Tree Protection Plan at Appendix B. Alternatives to those shown must be agreed upon in advance by the client-approved, arboricultural consultant. No materials or equipment other than those required to erect protective fencing will be delivered to the site before the fencing is installed. Signs will be fixed to every third panel stating, *'Tree Protection Area Keep Out – Any incursion into the protected area must be with the agreement of the local authority or arboricultural consultant'*.
Compound Area	The site compound must be located outside the designated TPZs as highlighted on the Tree 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 will 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.
General Principals to Avoid Damage to Trees	All tree works will be carried out in accordance with the recommendations given in BS 3998 (2010). No fires will be permitted within 20m of the crown of any tree. No changes in soil levels will take place within the tree protection zones without prior written consent of the local authority.

	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. 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. The contractor will report any damage to trees or shrubs, whether caused by construction activities or from any other cause, to the arboricultural consultant immediately.

Appendix A - Schedule

Document	Reference	Revision
Tree Schedule	221123-PD-10	-

221123-PD-10-Tree schedule

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221123 - Fonthill Road

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	Survey date	RPA (m^2)	RPR (m)	Life expectancy (yrs)	BS Category
Group G1	1	Acer campestre (Field Maple)	9.0	15 AVE	1									0.0		Semi Mature	Structural condition Fair. Physiological condition Fair. Mixed group of neighbouring semi-mature trees located between a palisade fence and the M50. The trees act as a good visual and acoustic screen from the road. They are located at a lower level to the site. Quantities have not been recorded. Height and stem diameter are average for group.	02/12/2022	10.2	1.8	40+	C2
	1	Acer platanoides (Norway Maple)																				
	1	Aesculus hippocastanum (Horse Chestnut)																				
	1	Betula pendula (Silver Birch)																				
	1	Quercus robur (English Oak)																				

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.

Generated By MyTREES tree management software

Printed on 07/12/22 (BS5837 Tree Schedule (with recs) - tables)

221123 - Fonthill Road

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	Survey date	RPA (m^2)	RPR (m)	Life expectancy (yrs)	BS Category
Group G2	1	Fraxinus excelsior (Ash)	9.0	15 AVE	1									0.0		Semi Mature	Structural condition Fair. Physiological condition Fair. Mixed group of neighbouring semi-mature trees located between a palisade fence and the M50. The trees act as a good visual and acoustic screen from the road. They are located at a lower level to the site. Quantities have not been recorded. Height and stem diameter are average for group.	02/12/2022	10.2	1.8	40+	C2
	1	Acer platanoides (Norway Maple)																				
	1	Aesculus hippocastanum (Horse Chestnut)																				
	1	Alnus glutinosa (Common Alder)																				
	1	Betula pendula (Silver Birch)																				
	1	Quercus robur (English Oak)																				

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.

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221123 - Fonthill Road

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	Survey date	RPA (m^2)	RPR (m)	Life expectancy (yrs)	BS Category
Group G3	1	Alnus cordata (Italian Alder)	10.0	15 AVE	1									0.0		Semi Mature	Structural condition Fair. Physiological condition Fair. Mixed group of neighbouring semi-mature trees located immediately adjacent to the site. Quantities have not been recorded. Height and stem diameter are average for group.	02/12/2022	10.2	1.8	40+	C2
	1	Betula pendula (Silver Birch)																				
	1	Cerasus avium (Wild Cherry)																				
	1	Corylus avellana (Common Hazel)																				
	1	Pinus sylvestris (Scots Pine)																				
	1	Quercus robur (English Oak)																				

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.

Generated By MyTREES tree management software

Table 1 of BS5837 (2012) **Cascade chart for tree quality assessment**

Category and definition	Criteria (including subcategories where appropriate)			Identification on plan
Trees unsuitable for retention (see note)				
Category U Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years	* Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) * Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline * Trees infected with pathogens of significance to health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7			RED
	1 Mainly arboricultural qualities	**2 Mainly landscape qualities**	**3 Mainly cultural values, including conservation**	
Trees to be considered for retention				
Category A **Trees of high quality** with an estimated remaining life expectancy of at least 40 years	Tree that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue).	Trees, groups or woodlands of particular visual importance as arboricutural and/or landscape features.	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture).	GREEN
Category B **Trees of moderate quality** with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, 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.	Trees present in numbers, usually growing 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.	Trees with material conservation or other cultural value.	BLUE
Category C **Trees of low quality** with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories.	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits.	Trees with no material conservation or other cultural value.	GREY

Appendix B - Plans

Document	Reference	Revision
Tree Survey & Constraints Plan	221123-P-10	-
Tree Protection Plan	221123-P-11	-

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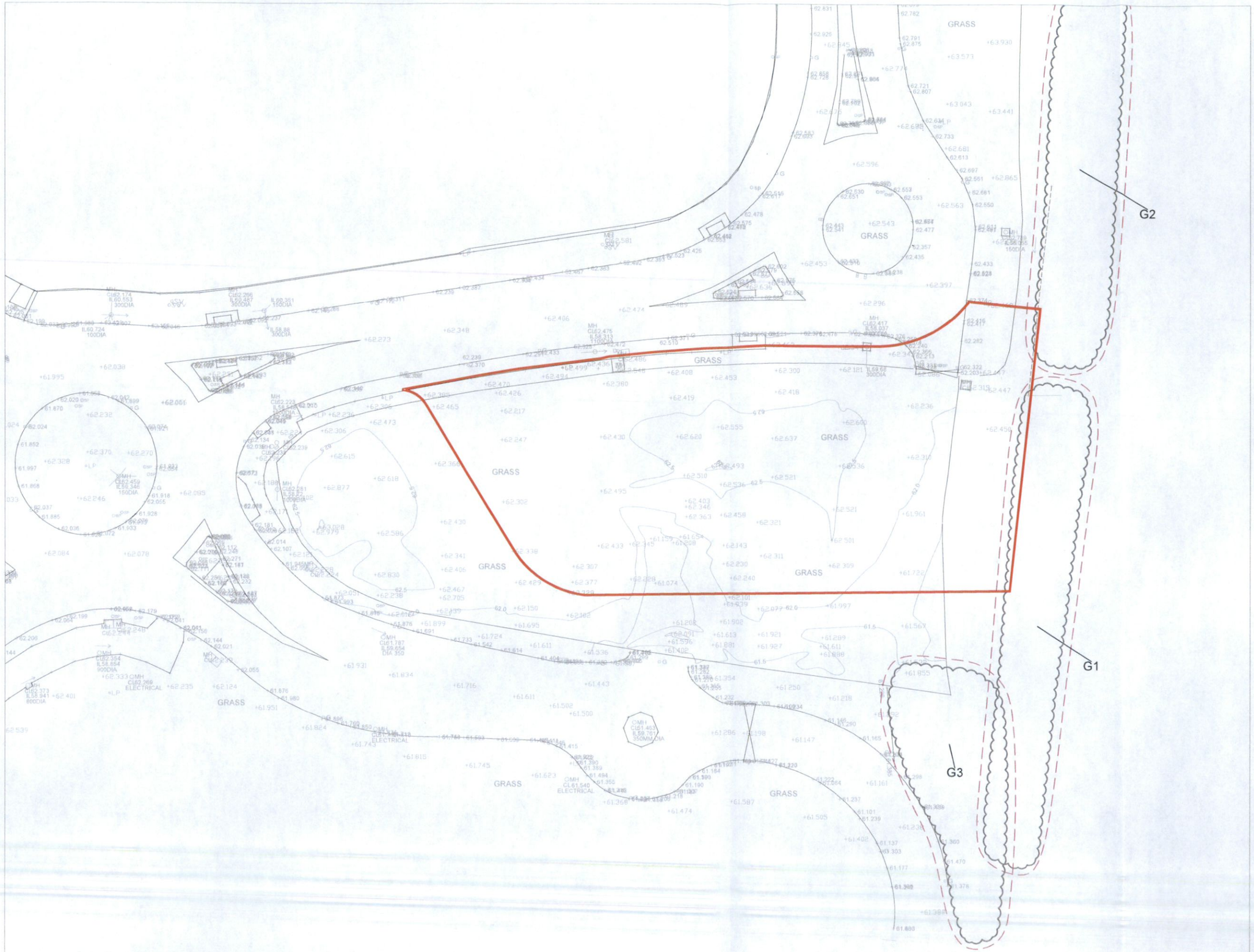

This drawing is to be read in conjunction with the respective arboricultural schedules and reports relevant to this project.

Where contradictions between this drawing and any other design information becomes apparent, the respective authors should be contacted immediately.

It is the responsibility of the main site contractor to check and verify all information and measurements onsite and confirm prior to the commencement of works, and to ensure that all site operatives work in accordance with respective arboricultural reports and BS5837:2012, Trees in relation to design, demolition and construction.

BS5837:2012 Tree Categorisation

Category A
Trees of high quality with an estimated remaining life expectancy of at least 40 years

Category B
Trees of moderate quality with an estimated life expectancy of at least 20 years

Category C
Trees of low quality with an estimated life expectancy of at least 10 years, or young trees with a stem diameter below 150mm

Category U
Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years

Key

Root Protection Areas
The minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the trees viability.

T10 — Tree/Group Reference Number

Tree, shrub, or hedge group.

Site boundary.

Revision	Date	Description

Title: Tree Survey & Constraints Plan

Project: Fonthill Road, Liffey Valley

Client: Certas Energy Ireland Limited

Date: Dec 2022	Scale: 1:500 @ A3	Status: Planning
Drawn by: CMcC	Dwg ref: 221123-P-10	Rev: -
Checked by: CMcC		

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Additional Information Point 2, Planning Reg Ref: SD22A/0363

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BS5837:2012 Tree Categorisation

Category A
Trees of high quality with an estimated remaining life expectancy of at least 40 years

Category B
Trees of moderate quality with an estimated life expectancy of at least 20 years

Category C
Trees of low quality with an estimated life expectancy of at least 10 years, or young trees with a stem diameter below 150mm

Category U
Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years

Key

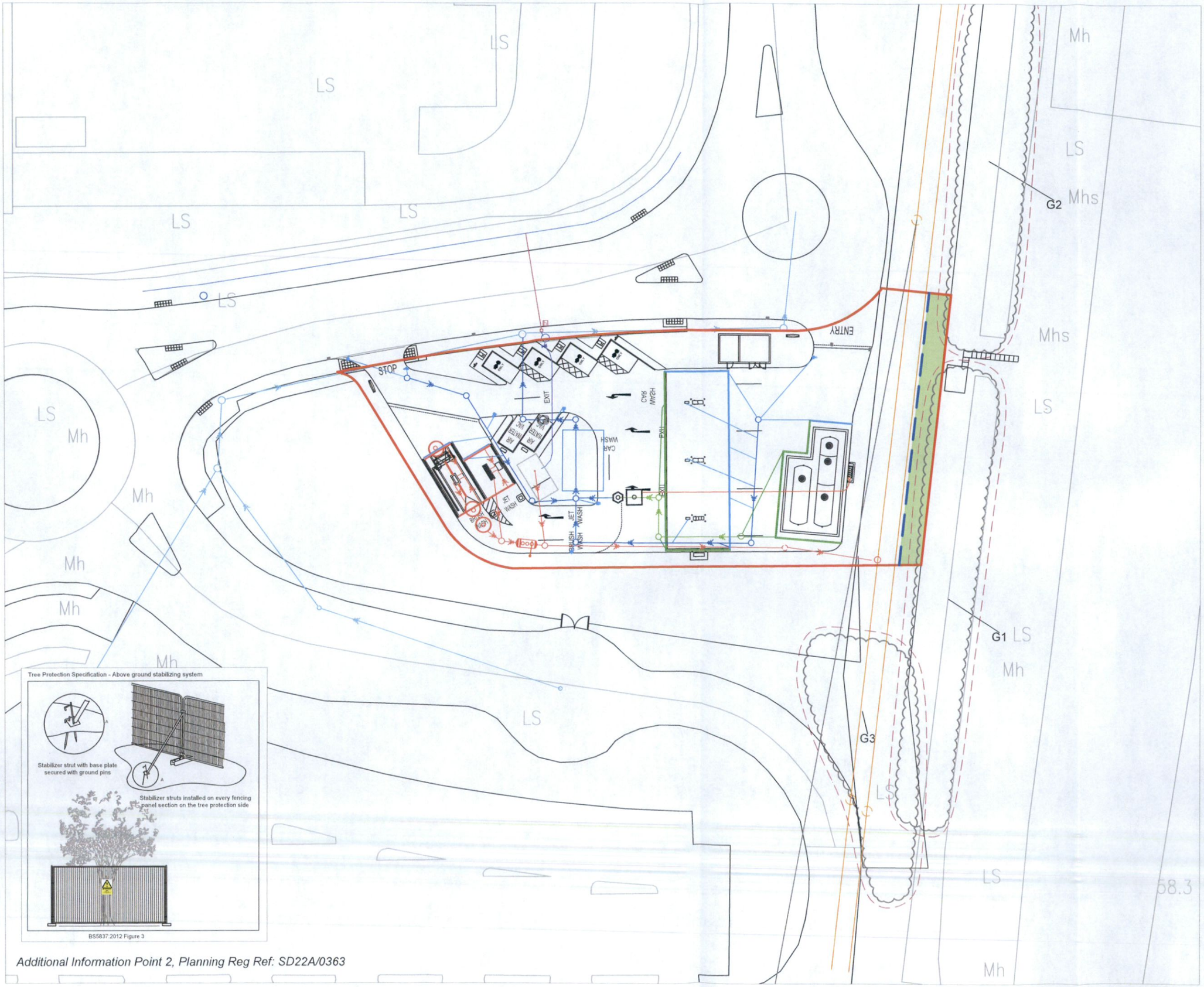
Root Protection Areas
The minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the trees viability.

T10 — Tree/Group Reference Number

Tree, shrub, or hedge group.

Tree Protection Zone - Protective fencing to be installed as per Specification. Designated Construction Exclusion Zone.

Site boundary.



Tree Protection Specification - Above ground stabilizing system

BS5837:2012 Figure 3

Additional Information Point 2, Planning Reg Ref: SD22A/0363

N

Revision	Date	Description

Title: Tree Protection Plan

Project: Fonthill Road, Liffey Valley

Client: Certas Energy Ireland Limited

Date: Dec 2022	Scale: 1:500 @ A3	Status: Planning
Drawn by: CMcC	Dwg ref: 221123-P-11	Rev: -
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