

## **Arboricultural Impact Assessment & Method Statement**

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### **Land off Y Garnedd, Llanfairpwll**

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Prepared for:

**DU CONSTRUCTION**

Our Ref: 24/AIA/Anglesey/30 (Rev C)

January 2024

**Tree Solutions Ltd**

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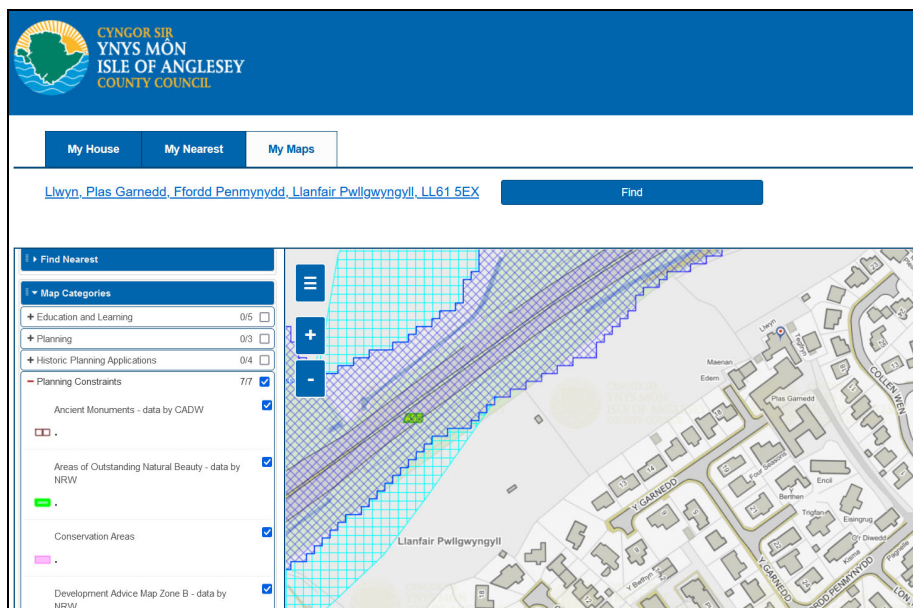
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## 1.0 INSTRUCTION

- 1.1 We have been instructed by DU Construction to carry out an Arboricultural Impact Assessment (AIA) to assess the development proposal in relation to trees in accordance with the principles of British Standard 5837 'Trees in Relation to Design, Demolition & Construction - Recommendations' 2012.
- 1.2 We are instructed to prepare a report to provide information to assist all parties involved in the planning process to make balanced judgements regarding arboricultural features in relation to the proposed development on land off Y Garnedd, Llanfairpwll, Anglesey. As such, all significant trees within influencing distance to the development proposal both on and adjoining the site have been surveyed and are listed within a Tree Survey Schedule (**Appendix 1**) and plotted on all accompanying plans.
- 1.3 The phase 1 tree survey was carried out by Alistair Henderson, Principal Consultant to Tree Solutions Ltd. Our appraisal of the mechanical integrity of trees on the site is enough to inform the current project. The assessment of trees is carried out from ground level without invasive investigation and the disclosure of hidden defects cannot therefore be expected. Whilst the survey is not specifically commissioned to report on matters of tree safety, we report obvious defects that are significant in relation to the existing and proposed land use. We do not carry out detailed safety inspections unless specifically instructed to do so in writing and have not carried out such inspections of trees on the proposal site.
- 1.4 Four individual trees (T1–T4), one group (G1) and two hedgerows (H1-H2) were surveyed and mapped on a Preliminary Tree Constraints Plan and Impact Assessment Plan Ref: 24/AIA/Anglesey/30 (Rev C) Drawing Nos. 1&2 at **Appendix 2/3**. All arboricultural information recorded during the survey is presented within a schedule at **Appendix 1**.
- 1.5 The Arboricultural Impact Assessment is based on the proposed site layout plan Ref: P1258, Drawing No: YGLL-SAL-01-ZZ-DR-A-0003 provided by Saer Architects.

## 2.0 STATUTORY CONTROLS

- 2.1 Anglesey Council do not display Tree Preservation Orders on an interactive map and unfortunately, we have been unable to obtain this information from the Council information to date. The land does not fall within a designated Conservation Area. You are advised to seek confirmation on TPO's prior to undertaking any tree works not granted consent under this planning proposal.



P1 – Extract from Anglesey Council interactive map showing no Conservation Area

## 2.2 Protected Species

- 2.2.1 Mature trees often contain cavities, crevices and hollows that offer potential habitat for species such as bats and barn owls. Both are afforded protection under the Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). Bats are also protected under The Conservation of Habitats and Species Regulations 2010 (as amended). Refer to Ecology report for further details.

## 2.3 Wildlife Habitats

- 2.3.1 Trees and hedgerows of most species provide valuable nesting sites for a wide range of birds, and it is likely that nesting birds will be present on the site during the period March to September.

## 3.0 THE SITE

- 3.1 The site is agricultural land located to the north of Y Garnedd. It contains unmanaged hedgerows to the east and western boundary and woodland to the north which forms part a linear strip along the southern edge of the A55.



P2 – Aerial of site location

## 4.0 DEVELOPMENT PROPOSAL

- 4.1 Erection of 27 affordable dwellings, construction of internal access road, diversion of Public Right of Way, creation of a landscaping bund, erection of acoustic fence and associated works.

## 5.0 GENERAL CONSTRAINTS DATA - CONSTRUCTION EXCLUSION ZONES (CEZ's)

### 5.1 GENERAL

- 5.1.1 The three phases of an AIA were outlined in Section 1. In addition, during the development process for retention trees, there may be three and even four constraints to consider: Construction Exclusion Zone (CEZ's):

- CEZ 1: Root Protection Area (see 5.2)
- CEZ 2: Tree Crown Protection (see 5.3)
- CEZ 3: Tree Dominance (see 5.4)
- CEZ 4: New Tree Planting Zone (see 5.5)

CEZ's are explained below:

### 5.2 CEZ 1: ROOT PROTECTION AREA (RPA)

- 5.2.1 The RPA, calculated in m<sup>2</sup>, should be protected before and during any demolition/construction works. This ensures the effective retention of trees by safeguarding a reliable quantum of functioning tree roots. The RPA is based on a radial measure from the centre of the tree stem, which is calculated by multiplying the stem diameter by a factor of twelve or by the (mean stem diameter<sup>2</sup>) x number of stems for multi-stemmed trees. With the AIA 1, the RPA is only shown indicatively on the preliminary TCP, as its shape may be subject to amendment as the design progresses.

- 5.2.2 During the AIA 2, the derived radial measure is converted by the arboriculturalist into the actual area to be protected, having due regard to prevailing site conditions and how these may have affected the tree(s), particularly in relation to factors affecting their likely rooting disposition. The RPA for each tree should initially be plotted as a circle centred on the base of the stem.

- 5.2.3 The means of protecting the RPA will include the installation of tree protective fencing prior to the start of any demolition or construction work on site. The prohibition of various activities within the RPA must be adhered to (e.g. mechanical excavation, soil stripping, fire lighting, material storage, lowering levels and creating excessive sealed surfacing) and may include the use of temporary ground protection and/or special engineering solutions where construction is proposed near to retention trees or within the RPA.

### 5.3 CEZ 2: TREE CROWN PROTECTION ZONE

- 5.3.1 This is the area above ground occupied by the crown (branches) of the tree, along with allowances for working space (safe working area) and if appropriate, for future growth. The extent of CEZ 2 is determined by considering the existing and future crown spread of the tree(s), bearing in mind the possibility of this being modified by an acceptable quantum of pruning.

### 5.4 CEZ 3: TREE DOMINANCE ZONE

- 5.4.1 There are no issues with over dominance of trees in relation to the proposed development as the woodland strip is located beyond the northern boundary and well clear of all dwellings.

### 5.5 CEZ 4: NEW PLANTING ZONE

- 5.5.1 Refer to landscape plan.

## 6.0 SURVEY METHODOLOGY

- 6.1 The method used in the preparation of this report is based on the principles of BS 5837: 2012.

1. Tree heights were surveyed to the nearest 1m.
2. Trunk diameters were measured by use of forestry girth tape
3. The category assessment (Table 1) on which the trees is based include current and long-term arboricultural, landscape, cultural and conservation values (BS5837: 2012). This table can be found at **Appendix 1**
4. For clarity, the grading system is summarised from **Table 2** of the BS as follows:

**U grade** – trees for removal, effective for less than 10 years

**A grade** – trees of high quality and value, effective for more than 40 years

**B grade** – trees of moderate quality and value, effective for more than 20 years

**C grade** – trees of low quality and value, effective for 10 years

*Note: We have indicated colour coding on the drawing and therefore a monochrome copy should not be relied on.*

## 6.2 SOIL ASSESSMENT

- 6.2.1 A soil assessment should be undertaken by a competent person to inform decisions relating to:

- the root protection area (RPA)
- tree protection
- new planting design; and
- foundation design to take account of retained, removed and new trees (potential soil subsidence/heave)

Tree Solutions do not undertake soil assessments and the client is advised to seek specialist advice in this respect.

## 7.0 JUXTAPOSITION OF TREES AND STRUCTURES

### 7.1 Below ground constraints

- 7.1.1 The below ground constraints are generally summarised as the root protection area (RPA). The shape of the RPA and its exact location will depend upon arboricultural considerations including likely tolerance of the tree to root disturbance; morphology and disposition of the roots when known influenced by past or existing site conditions; soil type and structure; and topography and drainage.



7.1.2 The purpose of the RPA is to prevent physical damage to tree roots and to prevent damage to the soil structure. Tree roots are damaged by soil compaction, changes in soil levels or soil contamination which could reduce tree health and/or stability.

7.1.3 Root patterns are affected by topography and characteristics of the soil or substrate. Where trees are located within proximity to existing hard standing or underground physical barriers, they are unlikely to have an even distribution of lateral roots due to restrictions in root growth created by compacted sub-grades beneath. The RPA of all trees have been plotted unmodified as there were no significant underground barriers to prevent good radial root spread.

## 7.2 Underground Services

7.2.1 There are no proposed service runs within the RPA of retained trees.

## 8.0 DEVELOPMENT IMPACT TO TREES

8.1 Tree Solutions carried out a stage one preliminary tree survey and provided the project architect & landscape architect with a report in which all existing trees and their respective Root Protection Areas (RPA) were identified and plotted on a tree constraints and impact assessment plan. The architect has incorporated the design and layout advice contained within the stage 1 survey and input from Tree Solutions to ensure the best quality trees can be retained with no adverse construction impacts. We are satisfied that the proposal has taken the long-term future of the most important trees and into account and the layout is therefore in accordance with Anglesey Council Planning Policies and recommendations contained with BS5837: 2012.

8.2 In order to accommodate the proposed development there are three impacts to trees as listed below:

1. The vehicular access and driveway to plot 13 encroaches significantly within the RPA of tree number 4. This is a small naturally colonised tree located on top of dilapidated wall. It has no significant amenity of landscape value and is not viable for long-term retention within the context of the residential development. We have therefore recommended that it be removed.
2. The proposed earth bund and acoustic fence along the northern boundary encroach within the RPA of tree number 1. This is an early mature Ash in advanced decline due to the spread of Chalara Ash Dieback. As such, it will require removal soon irrespective of this development proposal. We therefore have no concerns about installing the bund in the vicinity. The bund to the NW has been amended to stop at the edge of the RPA of T2 which is a good quality Oak within the wooded copse. This will prevent any anaerobic soil conditions and ensure long-term retention with no adverse impacts. The toe of the embankment encroaches marginally ( $\leq 1\text{m}$ ) within the RPA of G1, the wooded copse. The edge trees to this copse are typically small diameter unmanaged scrub. They are young and will tolerate some minor change in level with no long-term adverse impact. The larger early mature Pine are set back further into the woodland approximately 6m north of the boundary fence line and these trees will be unaffected by the bund. An acoustic fence sits on top of the earth bund and will require any overhanging canopy to be pruned back to allow for a suitable easement during installation.



P3 – Group 1, note small diameter scrub growth along fence line with more mature trees set back

## 9.0 PROPOSED REVISIONS TO THE SCHEME

9.1 We advise that all proposed revisions having implications for trees should be referred to us for review.

## 10.0 CONCLUSIONS

10.1 BS 5837: 2012 contains clear and current recommendations for a best practice approach to the assessment, retention, and protection of trees on development sites. The proposed development has followed this guidance by:

- Seeking arboricultural advice and undertaking a phase 1 preliminary tree survey to inform the layout and design of the proposed development
- Respecting the constraints posed to development of the site by high or moderate quality trees
- Acting upon arboricultural advice throughout the design process to obtain the best development proposal whilst considering the current and future tree requirements

10.2 The protection of retained trees will be in accordance with recommendation contained within the BS and as detailed on the Tree Protection Plan at **Appendix 4**.

## 11.0 LIMITING CONDITIONS

Unless stated otherwise:

Information contained in this report covers only those trees that were examined and reflects the condition of those trees at the time of the inspection.

The inspection is limited to visual examination of the subject trees from ground level only and without dissection, excavation, probing or coring. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the subject trees may not arise in the future.

This report has been prepared for the sole use and benefit of the client. Any liability of Tree Solutions shall not be extended to any third party.

No part of this report can be reproduced without the authorisation of *Tree Solutions Ltd*.

**Appendix One**  
**Tree Survey Schedule**



**TREE SURVEY SCHEDULE (BS5837: 2012)**

<b>SITE:</b>	LAND OFF Y GARNEDD, LLANFAIRPWLL
<b>CLIENT:</b>	DU CONSTRUCTION
<b>BRIEF:</b>	ARBORICULTURAL IMPACT ASSESSMENT & METHOD STATEMENT

<b>SURVEYOR:</b>	A. HENDERSON
<b>ASSESSMENT DATE:</b>	AUG 2022
<b>VIEWING CONDITIONS:</b>	GOOD
<b>JOB REFERENCE:</b>	20/AIA/ANGLESEY/30

TREE NO. <small>T - Tree G - Group H - Hedge</small>	SPECIES (COMMON NAME)	AGE	HEIGHT (m) + CROWN CLEARANCE/ DIRECTION OF GROWTH (N.S.E.W)	RADIAL CROWN SPREAD (m)				STEM/ MULTI-STEM* DIA. (mm)	VITALITY	COMMENTS	MANAGEMENT	CATEGORY & SUB- CATEGORY GRADING BS 5837	BS 5837 RADIUS (m)  RPA (m <sup>2</sup> )
				N	S	E	W						
T1	Ash	SM	11 2S						P	<ul style="list-style-type: none"> <li>In advanced decline due to Ash Dieback</li> <li>E.R.C &lt;10</li> </ul>	<ul style="list-style-type: none"> <li>3<sup>rd</sup> party tree so no works but will require removal in near future</li> </ul>	U	N/A
T2	Sessile Oak	EM	12 2S	6	5	3	3.5	710	G	<ul style="list-style-type: none"> <li>Largest tree sessile oak in NW corner</li> </ul>	<ul style="list-style-type: none"> <li>No works</li> </ul>	B2	8.5 228m <sup>2</sup>
T3	Sycamore	M	10	4	3.5	2	5	640	M	<ul style="list-style-type: none"> <li>Badly pruned to clear overhead power lines to south</li> <li>Growing on top of old stone wall</li> <li>E.R.C 10</li> </ul>	<ul style="list-style-type: none"> <li>No works</li> </ul>	C3	7.7 185m <sup>2</sup>
T4	Sycamore	EM	10	3	3	4	3	440	M	<ul style="list-style-type: none"> <li>Small self-set tree</li> <li>Growing on top of old stone wall</li> <li>E.R.C 20</li> </ul>	<ul style="list-style-type: none"> <li>Remove</li> </ul>	C2	5.3 88m <sup>2</sup>
G1	Mainly mixed broadleaved, including Corsica pine component, ash, beech, elder, alder, sycamore, oak, hazel	SM /M	≤16					≤250	G	<ul style="list-style-type: none"> <li>Part of linear wooded strip along southern embankment to A55</li> <li>Ash within all showing signs of Chalara Ash Dieback</li> <li>Provides good screening and backdrop to site</li> <li>Requires thinning out</li> <li>E.R.C 40</li> </ul>	<ul style="list-style-type: none"> <li>Monitor for further Chalara Ash Dieback (ADB) development.</li> <li>Prune back/crown lift southern canopy where necessary to install acoustic fence</li> </ul>	A2	3 28m <sup>2</sup>

# TREE SURVEY SCHEDULE (BS5837: 2012)

<b>SITE:</b>	LAND OFF Y GARNEDD, LLANFAIRPWLL
<b>CLIENT:</b>	DU CONSTRUCTION
<b>BRIEF:</b>	ARBORICULTURAL IMPACT ASSESSMENT & METHOD STATEMENT

<b>SURVEYOR:</b>	A. HENDERSON
<b>ASSESSMENT DATE:</b>	AUG 2022
<b>VIEWING CONDITIONS:</b>	GOOD
<b>JOB REFERENCE:</b>	20/AIA/ANGLESEY/30

PAGE 2 OF 2
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TREE NO. <small>T - Tree G - Group H - Hedge</small>	SPECIES (COMMON NAME)	AGE	HEIGHT (m) + CROWN CLEARANCE/ DIRECTION OF GROWTH (N.S.E.W)	RADIAL CROWN SPREAD (m)				STEM/ MULTI-STEM* DIA. (mm)	VITALITY	COMMENTS	MANAGEMENT	CATEGORY & SUB-CATEGORY GRADING BS 5837	BS 5837 RADIUS (m)  RPA (m <sup>2</sup> )
				N	S	E	W						
H1	Hawthorn elder, holly, gorse, blackthorn	SM /M	≤8						P	<ul style="list-style-type: none"> <li>Unmanaged hedgerow should be hedge laid and/or cut to standard, largest</li> </ul>	<ul style="list-style-type: none"> <li>Coppice/Lay in order to reinstate former field boundary hedge</li> </ul>	N/A	N/A
H2	Sycamore, ash, hawthorn, blackthorn	SM /M	≤8						M	<ul style="list-style-type: none"> <li>Hedge poorly managed – major deadwood throughout</li> <li>All trees poorly anchored on top of old stone wall</li> </ul>	<ul style="list-style-type: none"> <li>Coppice/Lay in order to reinstate former field boundary hedge</li> </ul>	N/A	N/A

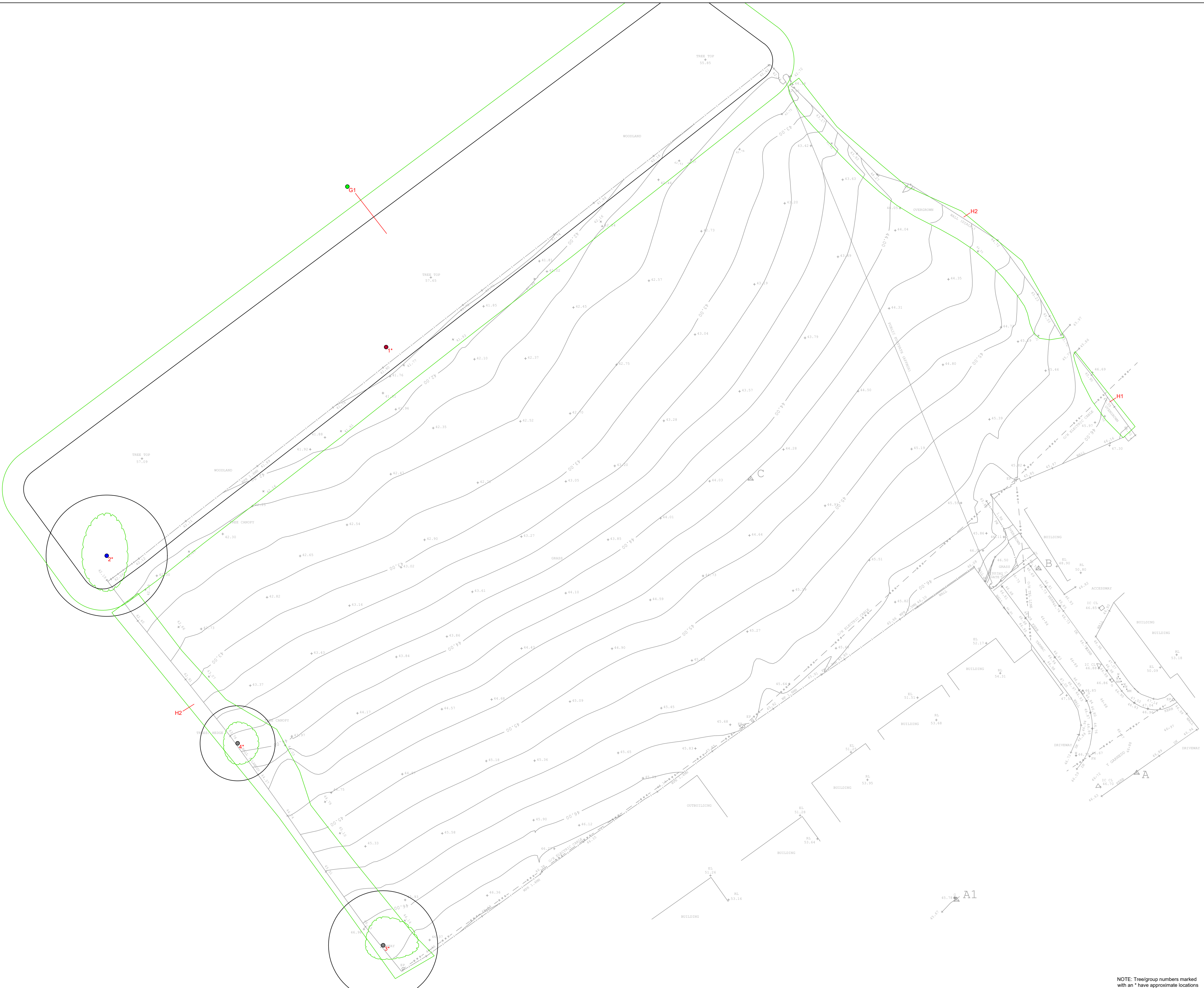
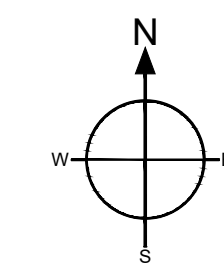
## HEADINGS & ABBREVIATIONS

<p><b>TREE NO.</b></p> <p><b>SPECIES:</b></p> <p><b>AGE RANGE/LIFE STAGE:</b></p> <p><b>HEIGHT:</b></p> <p><b>CROWN SPREAD:</b></p> <p><b>CROWN CLEARANCE &amp; DIRECTION OF GROWTH:</b></p> <p><b>STEM DIA/MULTI-STEM DIA:</b></p> <p><b>VITALITY:</b></p> <p><b>E.R.C. = ESTIMATED REMAINING CONTRIBUTION:</b></p> <p><b>BS 5837 CATEGORY &amp; SUB-CATEGORY GRADING:</b></p> <p><b>BS 5837 RADIUS &amp; BS 5837 RPA:</b></p>	<p>REFERENCE NUMBER. REFER TO PLAN OR NUMBERED TAGS WHERE APPLICABLE (T = TREE, G = GROUP, H = HEDGE)</p> <p>COMMON NAME (LATIN NAMES AVAILABLE ON REQUEST)</p> <p>Y = YOUNG, SM = SEMI MATURE, EM = EARLY MATURE, M = MATURE, PM = POST MATURE</p> <p>ESTIMATED AND RECORDED IN METRES. APPROXIMATELY 1 IN 10 TREES ARE MEASURED USING A CLINOMETER AND THE REMAINDER ESTIMATED AGAINST THE MEASURED TREES</p> <p>MAXIMUM CROWN RADIUS MEASURED TO THE FOUR CARDINAL COMPASS POINTS FOR SINGLE SPECIMENS ONLY (MEASUREMENT FOR TREE GROUPS - MAXIMUM RADIUS OF THE GROUP)</p> <p>HEIGHT IN METERS OF CROWN CLEARANCE ABOVE ADJACENT GROUND LEVEL (TO INFORM ON GROUND CLEARANCE, CROWN/STEM RATIO AND SHADING)</p> <p>STEM DIAMETER - MEASURED AT APPROXIMATELY 1.5 METRES ABOVE GROUND LEVEL OR A COMBINATION OF STEMS FOR MULTI-STEMMED TREES</p> <p>A MEASURE OF PHYSIOLOGICAL CONDITION. D = DEAD, MD = MORIBUND, P = POOR, M = MODERATE, G = GOOD</p> <p>RELATIVE USEFUL LIFE EXPECTANCY (YEARS)</p> <p>A = HIGH QUALITY AND VALUE, B = MODERATE QUALITY AND VALUE, C = LOW QUALITY AND VALUE, U = UNSUITABLE FOR RETENTION (SUB-CATEGORY REFERS TO ARBORICULTURAL, LANDSCAPE AND CULTURAL/CONSERVATION VALUES)</p> <p>PROTECTIVE DISTANCE - RADIUS FROM THE CENTRE OF THE STEM TO THE LINE OF TREE PROTECTION (CONSTRUCTION EXCLUSION ZONE - CEZ) AND PROTECTIVE BARRIER ROOT PROTECTION AREA - BS 5837 (2012) ANNEX D (THE RECOMMENDATIONS STATE THAT THE RPA SHOULD BE CAPPED AT 707 M<sup>2</sup>) NOTE – ALL CALCULATIONS ROUNDED TO NEAREST DECIMAL</p>
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Table 1 Cascade chart for tree quality assessment

Category and definition	Criteria (including subcategories where appropriate)			Identification on plan
<b>Trees unsuitable for retention</b> (see Note)				
<b>Category U</b> 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	<ul style="list-style-type: none"> <li>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)</li> <li>Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline</li> <li>Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality</li> </ul> <p><i>NOTE</i> Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.</p>			See Table 2
	<b>1 Mainly arboricultural qualities</b>	<b>2 Mainly landscape qualities</b>	<b>3 Mainly cultural values, including conservation</b>	
<b>Trees to be considered for retention</b>				
<b>Category A</b> <b>Trees of high quality</b> with an estimated remaining life expectancy of at least 40 years	Trees 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 arboricultural and/or landscape features	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)	See Table 2
<b>Category B</b> <b>Trees of moderate quality</b> 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	See Table 2
<b>Category C</b> <b>Trees of low quality</b> 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	See Table 2

**Appendix Two**  
**Preliminary Tree Constraints Plan**



**Legend**

Root Protection Area  
Modified to Account for  
Site Features

Category A (High Quality) Category C (Low Quality)   
 Category B (Moderate Quality) Category U (Dead/Dying/In Decline)

Crown Spread  
Tree Number  
Root Protection Area

NOTE: tree locations are approximate

---

Client: DU Construction

Project: Land off y Gamedd, Llanfairpwll, LL61 5EX

Title: Preliminary Tree Constraints Plan

Scale: 1-250@A1 Date: January 2024

Drawn By: AM Revision: A

Job Ref: 24/AIA/Anglesey/30 Drawing No: 01

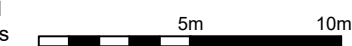
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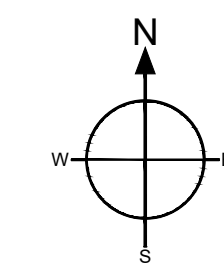
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Company Registration No: 3048851

NOTE: Tree/group numbers marked with an \* have approximate locations



**Appendix Three**  
**Impact Assessment Plan**





**Legend**

Root Protection Area Modified to Account for Site Features

Category A (High Quality) ●  
 Category B (Moderate Quality) ●  
 Category C (Low Quality) ●  
 Category D (Dead/Dying/In Decline) ●

Tree Proposed for Removal ●

Crown Spread Tree Number 1

NOTE: tree locations are approximate

Client: DU Construction	
Project: Land off y Gamedd, Llanfairpwll, LL61 5EX	
Title: Arboricultural Impact Assessment	
Scale: 1-250@A1	Date: January 2024
Drawn By: AM&NB	Revision: C
Job Ref: 24/AIA/Anglesey/30(Rev C)	Drawing No: 02

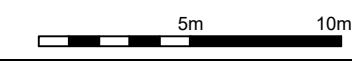
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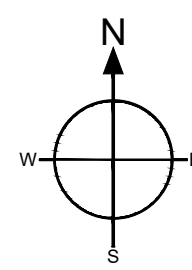
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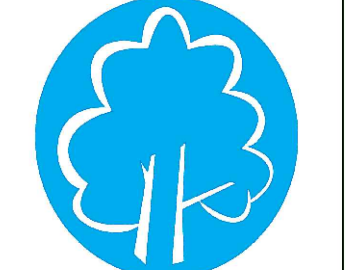


**Appendix Four**  
**Tree Protection Plan**





Tree Protective Fencing Specification



PROTECTIVE FENCING. THIS FENCING MUST BE MAINTAINED IN ACCORDANCE WITH THE APPROVED PLANS AND DRAWINGS FOR THIS DEVELOPMENT.



**TREE PROTECTION AREA**  
**KEEP OUT!**  
FROM A COUNTY PLANNING ACT 1982  
THESE ARE THE PROTECTED AREAS OF A TREE PROTECTION ORDER. THE CONTINUATION OF A TREE PROTECTION ORDER MAY LEAD TO CRIMINAL PROSECUTION.  
ANY ENCROACHMENT INTO THE PROTECTED AREA MUST BE WITH THE WRITTEN PERMISSION OF THE LOCAL PLANNING AUTHORITY.



**Legend**

Root Protection Area Modified to Account for Site Features

Category A (High Quality) Category B (Moderate Quality) Category C (Low Quality) Category D (Dead/Dying/In Decline)

Root Protection Area Crown Spread Tree Number

NOTE: tree locations are approximate

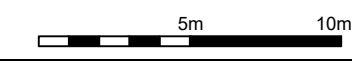
2.0M High Heras (with extra central support bar) mounted on scaffold poles (driven in to the ground) and secured with anti tamper bolts – as illustrated.

Client: DU Construction	
Project: Land off y Gamedd, Llanfairpwll, LL61 5EX	
Title: Tree Protection Plan	
Scale: 1-250@A1	Date: January 2024
Drawn By: AM&NB	Revision: C
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Do not scale from this drawing all dimensions to be checked on site.

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**Appendix Five**  
**Tree Protective Measures/Method Statement**

## SEQUENCE OF OPERATIONS

From commencement of the above development, the following methodology shall be implemented in the manner and sequence described:

1. Tree surgery works
2. Erect temporary protective fencing
3. Main construction phase
4. Removal of temporary fencing
5. Landscaping within RPA's

### 1. Tree Surgery Works

1. Before the erection of the temporary protective fencing, all tree removal shall be implemented in accordance with the Tree Survey Schedule at **Appendix 1**
2. All possible efforts must be made to prevent damage to retained trees including potential root incursion or compaction caused by vehicle access.
3. All arboricultural works shall conform to the recommendations of BS 3998 (2010) 'Recommendations for Tree Work'
4. All operatives shall be equipped with and use personal protective equipment (PPE) in accordance with current Health & Safety Executive current directives and industry codes of practice.
5. Performance of all arboricultural operations and use of equipment shall be in accordance with current Health & Safety Executive current directives and industry codes of practice

### 2. Erect Temporary Tree Protective Fencing

1. Prior to commencement of any construction, preparation, excavation or material deliveries the main contractor shall erect the temporary protective fencing as detailed in the 'Tree Protection Specification' and in the location indicated on the Tree Protection Plan.
2. Wirral Council Tree Officer is to be given 5 days written notice as soon as all protective fencing has been erected in order to inspect the specification and location. An inspection report will be completed and returned to the LPA Tree Officer for approval. Any damage occurring to protective fencing during the demolition or construction phase shall be made good by the main contractor

### 3. Main Construction Phase

1. There shall be no storage of construction material, site parking, site accommodation or equipment in any area designated as the Root Protection Area (RPA) and Construction Exclusion Zone (CEZ) and enclosed by Temporary Protective Fencing
2. No materials that are likely to have an adverse effect on tree health such as oil, bitumen or cement will be stored or discharged within 10 metres of the trunk of a tree that is to be retained. No fires will be lit
3. The site agent shall supervise deliveries by self-loading crane, with vehicles positioned in such a manner that retained trees are not at risk of damage

#### Cement Mixing

- The cement mixer will be laid on top of plywood boards in a position outside the RPA of any trees. The mixer will be kept in this position throughout all development work.

#### Avoiding Damage to Stems and Branches

- Care shall be taken when planning site operations in proximity to trees to ensure that wide or tall loads or plant with booms, jibs and counterweights can operate without coming into contact with retained trees. Such contact can result in serious injury resulting in safe retention impossible

#### On Site Storage of Spoil and Building Materials

- Prior to and during all site construction works no spoil will be stored and no cement mixing will take place within the Root Protection Area of any tree on or adjacent to the site even if proposed site work is to be within the crown spread. Any encroachment within this protected area will only be with the prior agreement of the LPA Arboricultural Officer

#### 4. Remove all Temporary Tree Protective Fencing

1. Tree Protective fencing will only be removed upon completion of all construction work and once all machinery associated with the works has left site.

#### 5. Landscaping within RPA of Trees

1. There shall be **no rotovating** of ground within any area designated as a Root Protection Area (RPA) and Construction Exclusion Zone (CEZ) and enclosed by Temporary Protective Fencing.
2. No hard-landscaping works or excavation for cables or any other service should be installed within the Root Protection Area (RPA) and Construction Exclusion Zone (CEZ) without the written consent of the LPA

#### **Useful Contacts**

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## TREE PROTECTIVE FENCING

- 1 Before the commencement of any site excavations and subsequent construction works (other than those set out in the schedule of tree works contained in this document), protective fencing will be erected as detailed on the Tree Protection Plan and as specified below. The LPA Tree Officer will be given 5 days notice upon completion of the fencing in order to inspect and approve prior to the commencement of any site works.
- 2 The fencing will consist of a scaffold framework in accordance with Figure 2 of BS 5837 – 2012 (illustration below) comprising a metal framework, both vertical and horizontal, well braced to resist impacts. Vertical tubes will be spaced at a maximum interval of 3m. Onto this, weldmesh panels shall be securely fixed with wire or scaffold clamps. Weldmesh panels on rubber or concrete feet are not considered resistant to impact and for this reason will not be used. The site manager or other suitably qualified appointed person will be responsible for inspecting the protective fencing on a daily basis; any damage to the fencing or breaches of the fenced area will be rectified immediately.
- 3 Clearly legible weatherproof signage, stating “Protected Trees – Exclusion Zone” shall be attached to the fencing 1.5m from the ground, facing out of the Tree Protection Zone located at regular intervals along the fence line.
- 4 The fencing will remain in place until completion of all site works and then only removed when all site traffic is removed from site
- 5 Other than works detailed within this method statement or approved in writing by the Local Planning Authority (LPA), no works including storage or dumping of materials shall take place within the exclusion zones defined by the protective fencing.

### Protective Fencing Detail

The fence types are shown on the Tree Protection Plan with the following colour key: -

1. **Magenta** (Trees)

2.0M high heavy-duty Heras panels (with extra central support bar) mounted on scaffold poles (driven into the ground) and secured with anti tamper bolts – as illustrated below.



**Tree Protective Fencing Specification**