

Arboricultural Impact Assessment & Method Statement

Trewythen Hall, Vicarage Lane, Gresford

Prepared for:

TREWYTHEN HALL CARE HOME

Our Ref: 23/AIA/WXM/311

February 2023

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1.0 INSTRUCTION

- 1.1 We have been instructed by Trevallyan Care Home to carry out an Arboricultural Impact Assessment (AIA) in order 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 in order to provide information to assist all parties involved in the planning process to make balanced judgements regarding arboricultural features in relation to the proposed extension/alterations at Trewythen Hall, Vicarage Road, Gresford. 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 stage 1 tree survey was carried out on 13 January 2023 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 Thirteen individual trees (T1-T13) and one group (G1) were surveyed and mapped on a Preliminary Tree Constraints & Impact Assessment Plan Ref: 23/AIA/WXM/311, Drawing No. 1 & 2 at **Appendix 2**. 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 latest site layout plan Ref: 1253, Drawing No: SP13 (Rev B) provided by Off the Wall Architecture

2.0 STATUTORY CONTROLS & PLANNING POLICY

- 2.1 All trees other than G1 are subject to Wrexham Maelor Borough Council Tree Preservation Order No. 3 (1974). As such statutory planning consent is required prior to undertaking any works.

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), as well as The Conservation (Natural Habitats, &c) (Amendment) Regulations 2007.

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 Former residential car home set within extensive grounds that contain many mature trees. Vehicular access is off Vicarage Lane to the NW.

4.0 DEVELOPMENT PROPOSAL

- 4.1 Extension/alterations to existing building and new fitness studio.

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 m², 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 diameter²) 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. Where pre-existing site conditions or other factors indicate that rooting has occurred asymmetrically, a polygon of equivalent area should be produced. Modifications to the shape of the RPA should reflect a soundly based arboricultural assessment of likely root distribution.

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 Proposal is for a single storey extension that replaces an existing conservatory and is aligned on the same footprint. The extension has open glazing to the SW and rooflights allowing significant natural daylight with no perceived shading from adjacent tree cover.

5.5 CEZ 4: NEW PLANTING ZONE

5.5.1 N/A.

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 tree number 12 has been modified around the swimming pool; all other PA's have been plotted unmodified as there were no underground barriers to prevent good radial root spread.

7.2 Underground Services

7.2.1 We have considered the broad implications of the provision of underground services but the locations of existing and proposed were not identified on the plans supplied by the Project Architect and in this regard, our advice is of a general nature.

7.2.2 Drainage and service runs may need to be constructed within the rooting areas of retained trees. If this is a requirement of the development it will be necessary to retain significant roots and methods of excavation, such as thrust boring or hand digging, may need to be adopted to ensure that these impacts are acceptable.

- 7.2.3 As with foundation design, low impact construction methods for services installation are now well established. For more information regarding underground services, reference should be made to the National Joint Utilities Group (NJUG) Publication No. 10. Volume 4 'Guidelines for the Planning, Installation and Maintenance of Utility Services in Proximity to Trees' 2007.

8.0 DEVELOPMENT IMPACT TO TREES

- 8.1 Tree Solutions carried out a stage one preliminary tree survey and provided the project 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. We are satisfied that the layout has taken the long-term future of the most important trees and into account and is in accordance with Wrexham County Borough Council Planning Policy EC4, SPG 17 and recommendations contained with BS5837: 2012.
- 8.2 In order to accommodate the proposed new access road alignment and ensure a good easement to the extension to the northern gable it will be necessary to remove tree numbers 1, 2 and 6. The impact of this will be negligible as tree numbers 1 & 2 are small specimens that can be easily replaced by new planting that will quickly establish in the space available. Tree number 6 is a larger, mature specimen but not one that is considered outstanding or pivotal to the landscape character and setting of the site. It has an asymmetrical crown form, and a large pruning wound at the base at the point of removal of the secondary leader to the west. Removing this tree will open a clear vista to the larger and better-quality trees located immediately north (T3-T5). The Pines (T3 & T5) will become the real feature trees in this area of the grounds with adequate space being provided for some good quality specimen planting provision within the new grassed island as mitigation. As such, we are satisfied that the loss of these trees will be largely unnoticed and new planting will ensure good quality, appropriate succession planting for the enjoyment of future occupants.

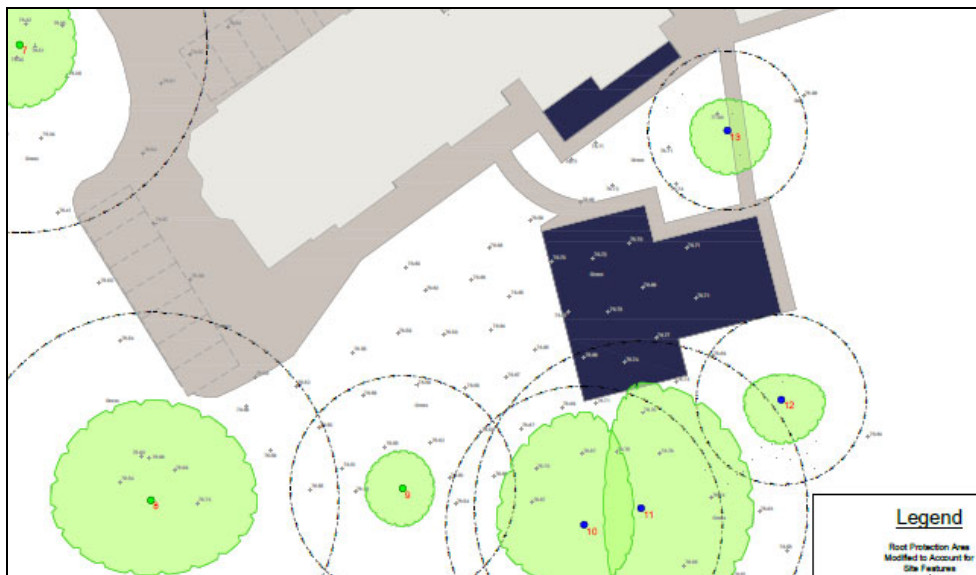


P1 – Tree numbers 1, 2 & 6 to be removed

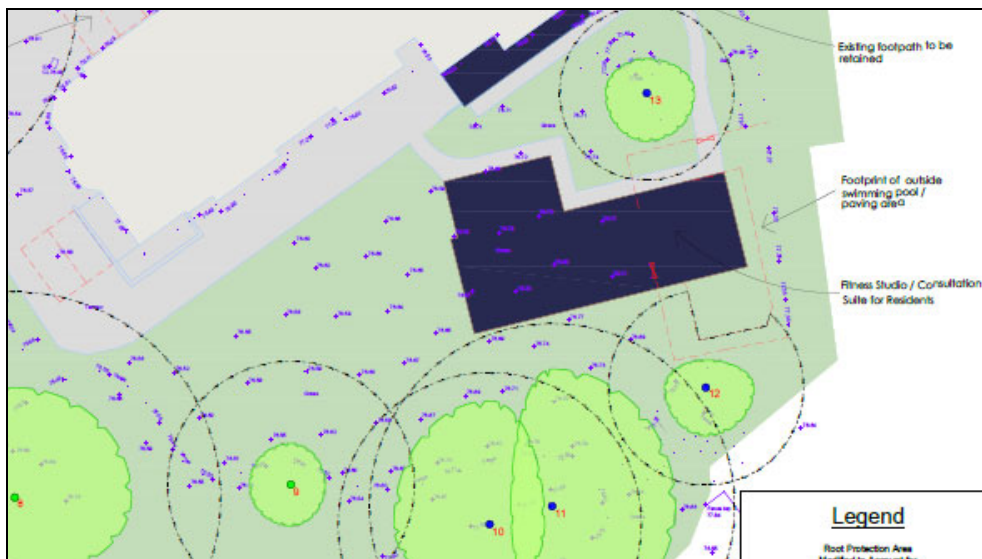
- 8.3 The proposed new fitness suite to the south of the hall has been redesigned following receipt of the tree survey and constraints plan. It now falls outside the designated RPA of all trees and at a sufficient distance to ensure no adverse construction impacts or issues of resentment towards the trees in the future. The amenity and landscape value they afford the grounds will therefore be maintained.
- 8.4 There are no other development impacts to trees as the external works have largely been kept within the existing alignment.



P2 – Location of proposed fitness suite



P3 – Original location of fitness suite within RPA of T11 & footpath through T13



P4 – Amended location of fitness suite moved outside RPA of trees and footpath reverted back to existing alignment

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 in order 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 in order to obtain the best development proposal whilst considering the current and future tree requirements
- New tree planting can help mitigate the loss of trees
- Taking the above into consideration we can see no valid Arboricultural grounds for refusal

- 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)

Tree Solutions

Arboricultural Consultants

SITE:	TREWYTHEN HALL, VICARAGE ROAD, GRESFORD
CLIENT:	TREWYTHEN HALL CARE HOME
BRIEF:	ARBORICULTURAL IMPACT ASSESSMENT

SURVEYOR:	A HENDERSON
ASSESSMENT DATE:	13/01/2023
VIEWING CONDITIONS:	GOOD
JOB REFERENCE:	23/AIA/WXM/311

PAGE 1 OF 3

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 (m²)
				N	S	E	W						
T1	Malus	M	6 1.5N	2	2	2	1	260	G	<ul style="list-style-type: none"> Small tree with suppressed form due to location beneath T2 E.R.C. 10 	<ul style="list-style-type: none"> Remove for development 	C1	3 31m²
T2	Western Red Cedar	M	19 2S	3.5	6.5	4	4	900	G	<ul style="list-style-type: none"> Top failed at 13m, multi-stem secondary crown above Codominant stems from base in past, stem to west removed E.R.C. 20 	<ul style="list-style-type: none"> Remove for development 	B2	10.8 366m²
T3	Pine	M	18 7S	3	4	2.5	3.5	750	G	<ul style="list-style-type: none"> Top failed in past Tall, prominent tree to site Concrete edge restraint and hard standing installed within primary rooting area E.R.C. 40 	<ul style="list-style-type: none"> No works 	A2	9 255m²
T4	Beech	M	17 2E	5	6	8.5	4.5	820	G	<ul style="list-style-type: none"> Ivy clad tree with irregular crown form E.R.C. 20 	<ul style="list-style-type: none"> No works 	B2	9.8 304m²
T5	Pine	M	20	3	2.5	4.5	3	600	G	<ul style="list-style-type: none"> Tall, drawn form Recent failure of adjacent tree E.R.C. 40 	<ul style="list-style-type: none"> No works 	A2	7.2 163m²
T6	Japanese Maple	EM	3	2	2	2	2	100	G	<ul style="list-style-type: none"> Small ornamental E.R.C. 10 	<ul style="list-style-type: none"> Remove for parking bay 	C3	1.2 5m²

HEADINGS & ABBREVIATIONS

TREE NO.

SPECIES:

AGE RANGE/LIFE STAGE:

HEIGHT:

CROWN SPREAD:

CROWN CLEARANCE & DIRECTION OF GROWTH:

STEM DIA/MULTI-STEM DIA:

VITALITY:

E.R.C. = ESTIMATED REMAINING CONTRIBUTION:

BS 5837 CATEGORY & SUB-CATEGORY GRADING:

BS 5837 RADIUS & BS 5837 RPA:

REFERENCE NUMBER. REFER TO PLAN OR NUMBERED TAGS WHERE APPLICABLE (T = TREE, G = GROUP, H = HEDGE)

COMMON NAME (LATIN NAMES AVAILABLE ON REQUEST)

Y = YOUNG, SM = SEMI MATURE, EM = EARLY MATURE, M = MATURE, PM = POST MATURE

ESTIMATED AND RECORDED IN METRES. APPROXIMATELY 1 IN 10 TREES ARE MEASURED USING A CLINOMETER AND THE REMAINDER ESTIMATED AGAINST THE MEASURED TREES

MAXIMUM CROWN RADIUS MEASURED TO THE FOUR CARDINAL COMPASS POINTS FOR SINGLE SPECIMENS ONLY (MEASUREMENT FOR TREE GROUPS - MAXIMUM RADIUS OF THE GROUP)

HEIGHT IN METERS OF CROWN CLEARANCE ABOVE ADJACENT GROUND LEVEL (TO INFORM ON GROUND CLEARANCE, CROWN/STEM RATIO AND SHADING)

STEM DIAMETER - MEASURED AT APPROXIMATELY 1.5 METRES ABOVE GROUND LEVEL OR A COMBINATION OF STEMS FOR MULTI-STEMMED TREES

A MEASURE OF PHYSIOLOGICAL CONDITION. D = DEAD, MD = MORIBUND, P = POOR, M = MODERATE, G = GOOD

RELATIVE USEFUL LIFE EXPECTANCY (YEARS)

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)

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 M²) NOTE - ALL CALCULATIONS ROUNDED TO NEAREST DECIMAL

TREE SURVEY SCHEDULE (BS5837: 2012)

Tree Solutions

Arboricultural Consultants

SITE:	TREWYTHEN HALL, VICARAGE ROAD, GRESFORD
CLIENT:	TREWYTHEN HALL CARE HOME
BRIEF:	ARBORICULTURAL IMPACT ASSESSMENT

SURVEYOR:	A HENDERSON
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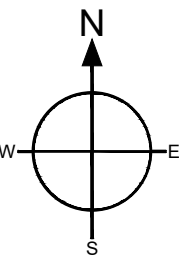
PAGE 2 OF 3

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 (m²)
				N	S	E	W						
T7	Wellingtonia	M	22	5.5	5	4.5	4	1390	G	<ul style="list-style-type: none"> Large prominent tree High amenity value to site E.R.C. 40 	• No works	A1	15 707m²
T8	Cedar	M	16 3N	8	6	8.5	8	1250	G	<ul style="list-style-type: none"> Prominent tree to site Cable braced No obvious defects E.R.C. 40 	• No works	A2	15 707m²
T9	Chilian Pine	M	16	3	3	2.5	3	750	G	<ul style="list-style-type: none"> No obvious defects E.R.C. 40+ 	• No works	A2	9 255m²
T10	Beech	M	18	9	5	4	7	600 700 (922)	G	<ul style="list-style-type: none"> Co-dominant stems from base with included compression union 20+ 	• No works	B2	11 385m²
T11	Cedar	M	19	10	9	9	3	1110	G	<ul style="list-style-type: none"> Multiple past crown failures E.R.C. 40 	• No works	A2	13 557m²
T12	Irish Yew	M	8	2	3.5	3.5	3	560	G	<ul style="list-style-type: none"> No obvious defects Historic value to site E.R.C. 40 	• No works	B2	6.7 142m²
T13	Irish Yew	M	8	2.5	3.5	3.5	3	530	G	<ul style="list-style-type: none"> As T12 	• No works	B2	6.4 127m²
G1	Himalayan Birch	Y	3	1	1	1	1	50	G	<ul style="list-style-type: none"> Newly planted trees E.R.C. 10+ 	• No works	C1	0.5

Table 1 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	<ul style="list-style-type: none">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 declineTrees 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 <p><i>NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.</i></p>			See Table 2
	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	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
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	See Table 2
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	See Table 2


Appendix Two
Preliminary Tree Constraints Plan



Legend

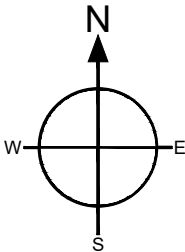
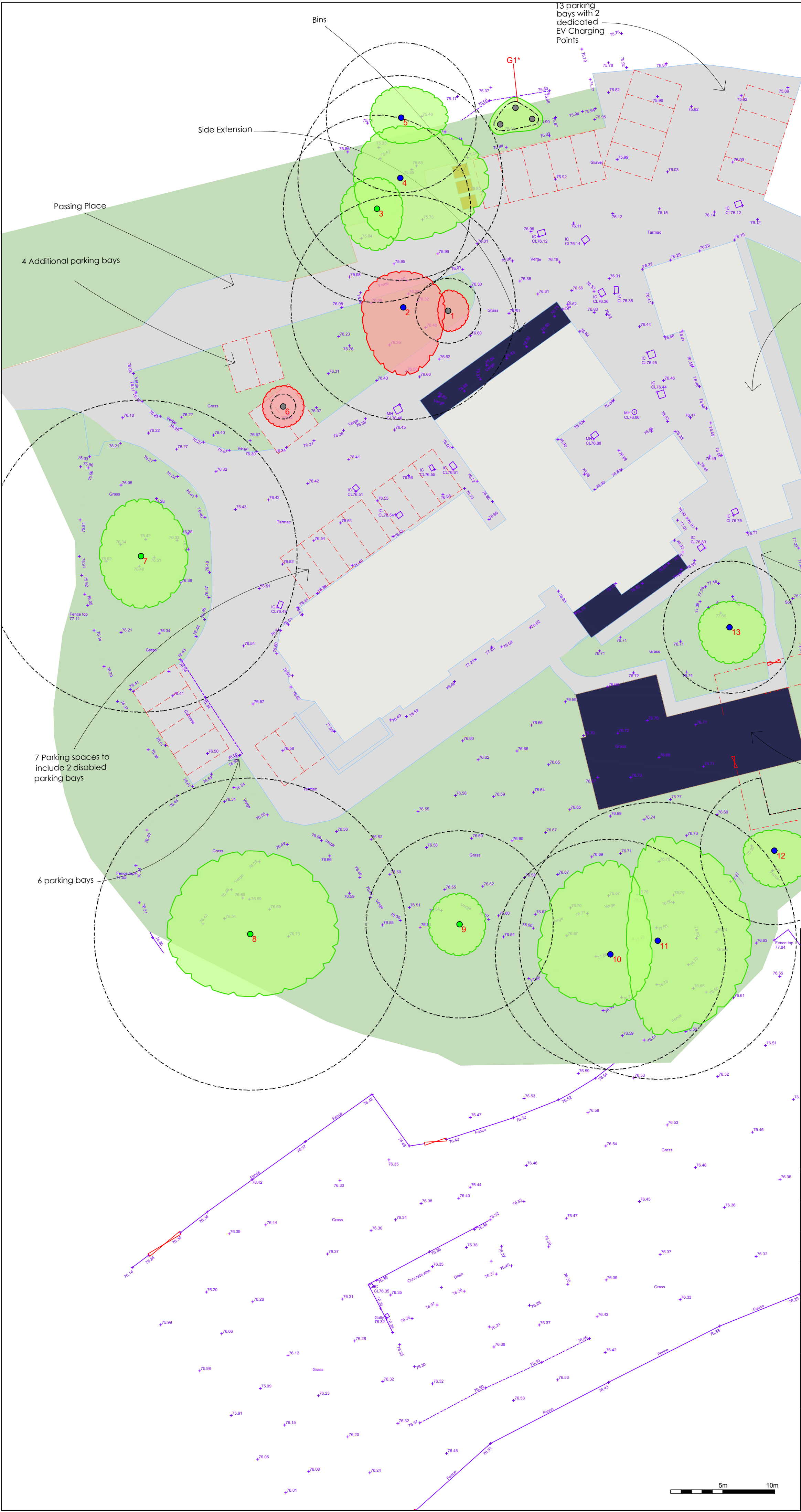
- Root Protection Area
Modified to Account for
Site Features
- Category
- Root Protection Area
- Crown Spread
- Tree Number
- Category A
(High Quality)
- Category B
(Moderate Quality)
- Category C
(Low Quality)
- Category U
(Dead/Dying/In Decline)

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

Client:		Trewythen Hall Care Home	
Project:		Trewythen Hall, Vicarage Lane, Gresford	
Title:		Preliminary Tree Constraints Plan	
Scale:	1:250 at A2	Date:	February 2023
Drawn By:	SD	Revision:	-
Job Ref:	23/AIA/WXM/311	Drawing No:	01
Do not scale from this drawing all dimensions to be checked on site.			
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Appendix Three

Impact Assessment Plan



Legend

Root Protection Area
Modified to Account for
Site Features

Category

Root Protection Area

Crown Spread

Tree Number

Category A (High Quality)

Category B (Moderate Quality)

Category C (Low Quality)

Category U (Dead/Dying/In Decline)

Tree Proposed for Removal

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

Client:		Trewythen Hall Care Home	
Project:		Trewythen Hall, Vicarage Lane, Gresford	
Title:		Arboricultural Impact Assessment	
Scale:	1:250 at A2	Date:	February 2023
Drawn By:	SD	Revision:	A
Job Ref:	23/AIA/WXM/311	Drawing No:	02
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Appendix Four

Arboricultural 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. Installation of ground protection boards
4. Demolition & construction phase
5. Removal of temporary fencing

1. Tree Surgery Works

1. Before the erection of the temporary protective fencing, all tree removal shall be implemented in accordance with the approved 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
6. Any additional access facilitation pruning required shall be undertaken by qualified tree contractors and conform to the recommendations of BS 3998 (2010) 'Recommendations for Tree Work'

2. Erect Temporary Tree Protective Fencing

1. Prior to commencement of any demolition and subsequent 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. Tree Solutions are 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. Install Ground Protection within RPA of Tree Numbers 11 & 12

1. Ground protection shall be installed prior to commencement of any construction work on site and shall be in accordance with the specification in plate 1 below.
2. The ground beneath any protection boarding will be left undisturbed and will be protected with a porous geotextile fabric and side butting scaffold boards on a 100mm compressible layer such of sharp sand
3. Boards will remain in-situ until the construction of the building has been completed

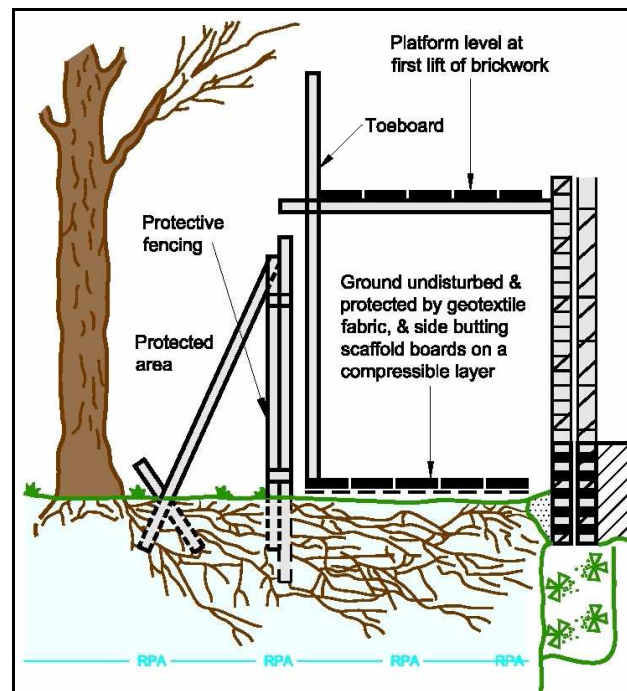


Plate 2- protective boards & scaffolding to be installed

4. Demolition & Construction Phase

4. Tree protective fencing to be erected prior to any demolition and construction plant or materials entering the site
5. 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
6. 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
7. 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 encountering 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.

5. 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.

TREE PROTECTIVE FENCING

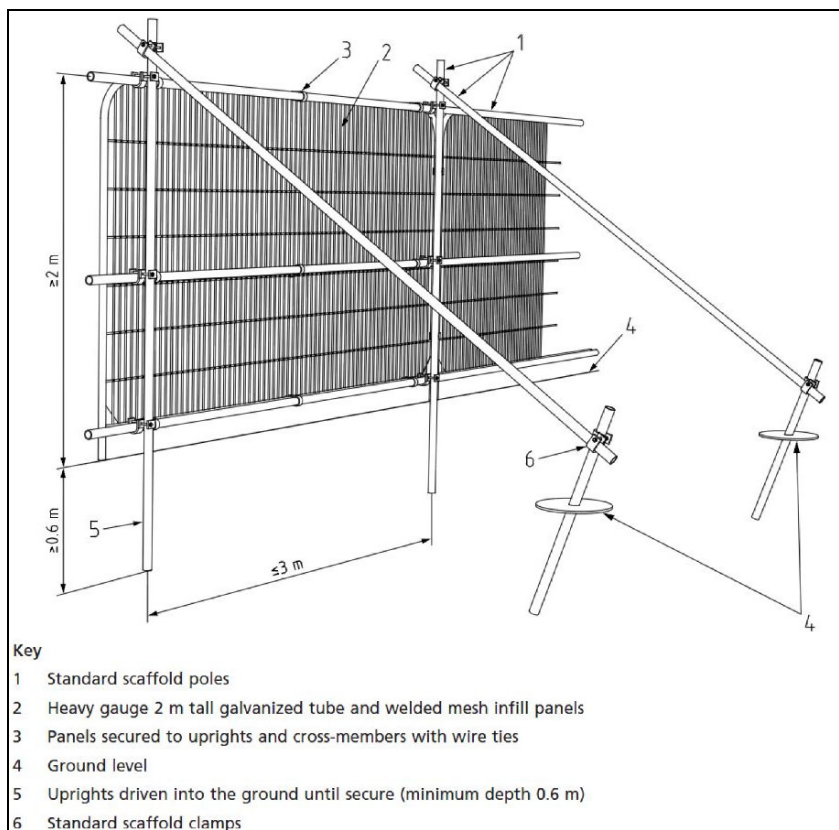
- 1 Before the commencement of any site excavations and subsequent construction works (other than those set out in the schedule of tree works contained in this document), protective fencing will be erected as detailed on the Tree Protection Plan and as specified below.
- 2 The fencing will consist of 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

Arboricultural Consultant

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Appendix Five

Tree Protection Plan

Legend

Root Protection Area
Modified to Account for
Site Features

Category

Crown Spread

Tree Number

Root Protection Area

● Category A
(High Quality)

● Category C
(Low Quality)

● Category B
(Moderate Quality)

● Category U
(Dead/Dying/In Decline)

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.

⊠ Ground Protection

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

Client:	Treeythen Hall Care Home
Project:	Treeythen Hall, Vicarage Lane, Gresford
Title:	Tree Protection Plan
Scale: <div style="text-align: center; padding: 5px;">1:250 at A2</div>	Date: <div style="text-align: center; padding: 5px;">February 2023</div>
Drawn By: <div style="text-align: center; padding: 5px;">SD</div>	Revision: <div style="text-align: center; padding: 5px;">A</div>
Job Ref: <div style="text-align: center; padding: 5px;">23/AIA/WXM/311</div>	Drawing No: <div style="text-align: center; padding: 5px;">03</div>
Do not scale from this drawing all dimensions to be checked on site.	
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