TREE SOLUTIONS



Arboricultural Impact Assessment

Land off Davy Way, Llay Industrial Estate, Llay

Prepared for:

R.A & C.E PLATT LTD

Our Ref: 23/AIA/WXM/314

April 2024

T 01244 389114 · E info@tree-solutions.co.uk

Tree Solutions Ltd • Registration in England & Wales • Company No. 04548951

Contents:

1.0 Instruction
2.0 Statutory Controls & Planning Policy
3.0 The Site
4.0 Development Proposal
5.0 General Constraints Data – Construction Exclusion Zones
6.0 Survey Methodology
7.0 Juxtaposition of Trees & Structures
8.0 Development Impact to Trees
9.0 Proposed Revisions
10.0 Conclusions
11.0 Limiting Conditions

Appendix 1 Tree Survey Schedule
Appendix 2 Preliminary Tree Constraints Plan
Appendix 3 Arboricultural Impact Plans (Option 4b & Option 5)

1.0 INSTRUCTION

1.1 We have been instructed by R.A & C.E Platt Ltd (the applicant) 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 residential development on land off Davy Way, Llay Industrial Estate, Llay, Wrexham. As such, all 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 updated in October 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 Eighteen individual trees (T1–T18), six groups (G1-G6) and two hedgerows (H1-H2) were surveyed and mapped on a Preliminary Tree Constraints & Impact Assessment Plan Ref: 23/AIA/WXM/314, 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 two illustrative masterplan layouts options 4b and 5, Ref: 13361-AEW-SI-XX-DR-A-0005 (Rev P11) & 13361-AEW-SI-XX-DR-A-0007 (Rev P2) provided by the project architect AEW.

2.0 STATUTORY CONTROLS & PLANNING POLICY

2.1 Wrexham County Borough Council (WCBC) do not display TPO information on an interactive mapping layer. You are therefore advised to seek confirmation on this prior to undertaking any works to trees.

2.1.1 A Felling Licence is required from Natural Resources Wales (NRW) to remove any more than 5m³ of trees any one calendar quarter.

2.1.2 The application will be assessed against Planning Policy Wales Framework (PPW 2024), WCBC Planning Policy EC4 and PPG 17 and recommendations contained with BS5837: 2012

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 The site is located on the corner of Rackery Lane/Davey Way within Llay Industrial Estate. It is currently utilised as agricultural land and contains a linear belt of mature Oak trees that run across the site and younger groups of trees to the east that screen the industrial units beyond. There is a silted-up pond surrounded by a mass of past coppiced Willow that have predominantly failed at the base. The land is within Llay Industrial Estate and has a strategic employment allocation.

© Tree Solutions Ltd (2024)

4.0 DEVELOPMENT PROPOSAL

4.1 Outline planning permission with all matters reserved for an industrial development together with associated infrastructure and works (including estate roads, yards, parking, footpaths, internal hard and soft landscaping and drainage works).

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

5.1 GENERAL

5.1.1 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.

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.

5.3.2 As shown on the parameters plan, the development zone for Class B1, B2 and/or B8 employment floorspace is set back from the canopies of retained trees such that access facilitation pruning is not required to accommodate construction works.

5.4 CEZ 3: TREE DOMINANCE ZONE

5.4.1 As shown on the parameters plan as well as the two indicative masterplans (provided for illustrative purposes only), the linear group trees (T1-T16) have been retained in such as way as to create an attractive frontage to the industrial area and we are confident that they will be seen as a significant landscape asset. Tree dominance is not an issue given the nature of the proposal being industrial as opposed to residential.

© Tree Solutions Ltd (2024)

5.5 CEZ 4: NEW PLANTING ZONE

5.5.1 Whilst landscaping details will be subject to future reserved matters approval, the parameters plan shows the broad areas of proposed landscaping, particularly adjacent to Davy Way to create an attractive landscaped frontage into the site. These areas can be fenced off where possible to ensure no significant ground compaction.

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 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 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 and, in this regard, our advice is of a general nature.

7.2.2 As the proposal is predominantly redevelopment works, the existing service runs will be utilised where possible.

7.2.3 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.

© Tree Solutions Ltd (2024)

7.2.4 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. Tree Solutions have been involved in the design team to advise on suitable layouts to ensure no significant adverse impact to retained trees. We are therefore satisfied that the parameters plan (showing the development zone for employment floorspace, the two access location options and proposed areas of landscaping) has taken the long-term future of the trees into account and the industrial units will coexist well with the tree cover such that they will be a considerable landscape asset with no pressure to fell or prune in the future. As such the proposal is in accordance with Planning Policy Wales Framework (PPW 2024), WCBC Planning Policy EC4 and PPG 17 and recommendations contained with BS5837: 2012.

8.2 In order to accommodate the works, it will be necessary to remove group 2, the northern edge of group 1 and a small section of group 5 as detailed in the survey scheduled and AIA plans. Group 2 is an area of very poor-quality Willow scrub that has been coppiced to ground level in the past. A significant number of trees within this group have failed at the old coppice stool and many are in advanced decline. The area contains a heavily silted pond and as a result is significantly waterlogged which is not conducive to root stabilisation. These trees have been categorised as 'C' grade purely on collective value, they could/should however be considered as 'U' grade given they cannot be realistically retained as living trees in the context of the current land use for longer than 10 years. Clearly, they require re-coppicing or removal as appropriate site managing irrespective of this planning proposal and as such should not form a material consideration of planning. Group 1 in a linear group of semi-mature specimens that appear to have been planted as a screen along the boundary. Many amongst this group are Ash that show signs of extensive dieback from Chalara Ash Dieback and require removal which should allow surrounding trees to establish better given the extra space provided. The northern section will however require pruning back and a small number of trees to the NE removed to provide a suitable easement to unit 2. Given the proximity planting of this group and lack of any management, removing a small section, and undertaking some pruning works will be completely unnoticed and as a result will have no adverse impact on the landscape value, they afford the site and wider locale. Group 5 are small low-quality trees along the frontage that have seen little if any management since planting. Removing a small section for the vehicular access will have no adverse impact whatsoever.

8.3 Masterplan option 4b, provided for illustrative purposes only shows a minor incursion within the RPA of tree number 8 to accommodate a pedestrian pavement adjacent to the main access road. This incursion is 2m on the outer extremity of the RPA where significant root activity is unlikely. To comply with the BS, this pavement section will be constructed to a no-dig design specification using a three-dimensional cellular confinement system such as 'Cellweb' to ensure no damage to underlying tree roots and help maintain adequate gaseous diffusion for tree roots below. A full specification will be submitted by the project structural engineer as part of reserved matters that will comply with recommendations contained within para. 7.2 of BS5837: 2012.

8.4 There are no other perceived construction impacts to retained trees as all works will be executed outside designated RPA's and canopy spreads. Tree protection measures will be detailed within a site-specific Arboricultural Method Statement and Tree Protection Plan that will be submitted in support of reserved matters.

© Tree Solutions Ltd (2024)



P1 – Linear group of trees (T1-T16) that run across the site



P2 –Group 2, low grade Willow scrub in silted up pond area



P3 –Trees to NE of group 1 to be removed/pruned for unit 2

© Tree Solutions Ltd (2024)



P4 –Low quality trees (G5) along site frontage to be removed for new access

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
- Taking the above into consideration, we can see no viable Arboricultural grounds for refusal.

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*.

© Tree Solutions Ltd (2024)

Appendix One

Tree Survey Schedule

© Tree Solutions Ltd (2024)

TREE SURVEY SCHEDULE (BS5837: 2012)

TREE SOLUTIONS

SITE:	LAND OFF DAVY WAY, LLAY INDUSTRIAL ESTATE
CLIENT:	R.A & C.E PLATT LTD
BRIEF:	ARBORICULTURAL IMPACT ASSESSMENT

SURVEYOR:	A HENDERSON
ASSESSMENT DATE:	OCT 2023
VIEWING CONDITIONS:	GOOD
JOB REFERENCE:	23/AIA/WRM/314

TREE NO. T - Tree G - Group H- Hedge	SPECIES (COMMON NAME)	AGE	HEIGHT (m) + CROWN CLEARANCE/ DIRECTION OF GROWTH (N.S.E.W)	RADIAL CROWN SPREAD (m) N	S	E	W	STEM/ MULTI-STEM* DIA. (mm)	VITALITY	COMMENTS	MANAGEMENT	CATEGORY & SUB-CATEGORY GRADING BS 5837	BS 5837 RADIUS (m) RPA (m^2)
T1	Oak	M	14 0	6	6.5	7	6	860	G	• Part of original field boundary planting & forms linear group • High value tree • E.R.C. 40	• No works	A2	10.3 335m²
T2	Oak	M	13 0	5	6.5	7	4	660	G	• Good quality tree that forms closed canopy with T1 • No obvious defects detected • E.R.C. 40	• No works	A2	7.9 197m²
T3	Oak	EM	10	4.5	4.5	5	7	630	G	• Low canopy lost by surrounding naturally regenerated Willow scrub • Not as visually prominent as T1 & could potentially be removed with no adverse impact to group • E.R.C. 20	• No works	B2	7.5 180m²
T4	Cherry (Bird)	EM	6	3	1.5	3.5	4.5	340	G	• Small insignificant tree • E.R.C. 10	• No works	C3	4 52m²
T5	Oak	M	15 4.5S	6.5	7.5	8.5	7	860	G	• High quality tree • Forms part of linear group • No visual defects • E.R.C. 40	• No works	A2	10 335m²

HEADINGS & ABBREVIATIONS

TREE NO.	REFERENCE NUMBER. REFER TO PLAN OR NUMBERED TAGS WHERE APPLICABLE (T = TREE, G = GROUP, H = HEDGE)
SPECIES:	COMMON NAME (LATIN NAMES AVAILABLE ON REQUEST)
AGE RANGE/LIFE STAGE:	Y = YOUNG, SM = SEMI MATURE, EM = EARLY MATURE, M = MATURE, PM = POST MATURE
HEIGHT:	ESTIMATED AND RECORDED IN METRES. APPROXIMATELY 1 IN 10 TREES ARE MEASURED USING A CLINOMETER AND THE REMAINDER ESTIMATED AGAINST THE MEASURED TREES
CROWN SPREAD:	MAXIMUM CROWN RADIUS MEASURED TO THE FOUR CARDINAL COMPASS POINTS FOR SINGLE SPECIMENS ONLY (MEASUREMENT FOR TREE GROUPS - MAXIMUM RADIUS OF THE GROUP)
CROWN CLEARANCE & DIRECTION OF GROWTH:	HEIGHT IN METERS OF CROWN CLEARANCE ABOVE ADJACENT GROUND LEVEL (TO INFORM ON GROUND CLEARANCE, CROWN/STEM RATIO AND SHADING)
STEM DIA/MULTI-STEM DIA:	STEM DIAMETER - MEASURED AT APPROXIMATELY 1.5 METRES ABOVE GROUND LEVEL OR A COMBINATION OF STEMS FOR MULTI-STEMMED TREES
VITALITY:	A MEASURE OF PHYSIOLOGICAL CONDITION. D = DEAD, MD = MORIBUND, P = POOR, M = MODERATE, G = GOOD
E.R.C. = ESTIMATED REMAINING CONTRIBUTION:	RELATIVE USEFUL LIFE EXPECTANCY (YEARS)
BS 5837CATEGORY & SUB-CATEGORY GRADING:	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)
BS 5837 RADIUS & BS 5837 RPA:	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^2) NOTE – ALL CALCULATIONS ROUNDED TO NEAREST DECIMAL

TREE SURVEY SCHEDULE (BS5837: 2012)

TREE SOLUTIONS

SITE:	LAND OFF DAVY WAY, LLAY INDUSTRIAL ESTATE
CLIENT:	R.A & C.E PLATT LTD
BRIEF:	ARBORICULTURAL IMPACT ASSESSMENT

SURVEYOR:	A HENDERSON
ASSESSMENT DATE:	OCT 2023
VIEWING CONDITIONS:	GOOD
JOB REFERENCE:	23/AIA/WRM/314

TREE NO. T - Tree G - Group H- Hedge	SPECIES (COMMON NAME)	AGE	HEIGHT (m) + CROWN CLEARANCE/ DIRECTION OF GROWTH (N.S.E.W)	RADIAL CROWN SPREAD (m) N	S	E	W	STEM/ MULTI-STEM* DIA. (mm)	VITALITY	COMMENTS	MANAGEMENT	CATEGORY & SUB-CATEGORY GRADING BS 5837	BS 5837 RADIUS (m) RPA (m^2)
T6	Oak	EM	13 6E	2	3.5	7	5	590	G	• Suppressed with asymmetric crown due to proximity between T5 & T7 • Fence embedded in stem • E.R.C. 20	• No works	B2	7 157m²
T7	Oak	M	13 5E	5	5	7.5	6	760	G	• Good quality tree with no obvious defects • E.R.C. 40	• No works	A2	9 261m²
T8	Oak	M	13 5E	6	6	6	5.5	720	G	• As T7	• No works	A2	8.6 235m²
T9	Oak	EM	12 4E	6	5.5	7	5	580	G	• Part of closed canopy group • Not as visually prominent as others • E.R.C. 20+	• No works	B2	7 152m²
T10	Oak	EM	9	1.5	3	3	8	300	G	• Majorly suppressed • E.R.C. 20	• No works	B2	3.6 41m²
T11	Oak	M	14 5E	6	6	7	8.5	830	G	• Good quality tree • E.R.C. 40	• No works	A2	10 312m²
T12	Oak	EM	12 4E	3	5	3	3.5	500	G	• Small tree with suppressed crown form • E.R.C. 20	• No works	B2	6 113m²
T13	Oak	EM	8 3W	2	1	1	3	310	M	• Low quality tree with poor structural form • E.R.C. 10	• No works	C1	3.7 43m²
T14	Oak	SM	10 4.5E	1.5	4	4.5	3	400	G	• Crown bias east due to suppression by T15 • E.R.C. 20	• No works	B2	4.8 72m²
T15	Oak	M	10	5	3	5	4	680	G	• No obvious defects • E.R.C. 40	• No works	A2	8 209m²

TREE SURVEY SCHEDULE (BS5837: 2012)

TREE SOLUTIONS

SITE:	LAND OFF DAVY WAY, LLAY INDUSTRIAL ESTATE
CLIENT:	R.A & C.E PLATT LTD
BRIEF:	ARBORICULTURAL IMPACT ASSESSMENT

SURVEYOR:	A HENDERSON
ASSESSMENT DATE:	OCT 2023
VIEWING CONDITIONS:	GOOD
JOB REFERENCE:	23/AIA/WRM/314

TREE NO. T - Tree G - Group H- Hedge	SPECIES (COMMON NAME)	AGE	HEIGHT (m) + CROWN CLEARANCE/ DIRECTION OF GROWTH (N.S.E.W)	RADIAL CROWN SPREAD (m) N	S	E	W	STEM/ MULTI-STEM* DIA. (mm)	VITALITY	COMMENTS	MANAGEMENT	CATEGORY & SUB-CATEGORY GRADING BS 5837	BS 5837 RADIUS (m) RPA (m^2)
T16	Oak	M	10	4	8.5	5	5	700	G	• Edge tree to linear group • No obvious defects • E.R.C. 40	• No works	A2	8.4 222m²
T17	Oak	SM							P	• Cracked down stem below union • Hazard tree • E.R.C. 0	• Remove	U	N/A
T18	Oak	SM	6	3	3	2.5	3	250	G	• No obvious defects • Insignificant self-set tree amongst group • E.R.C. 10	• Remove	C3	3 28m²
G1	Oak, Ash, Birch, Willow	SM	≤9					≤200	G	• Linear mixed group on boundary • Mostly semi-mature trees that have seen no form of management since planting • All Ash are in decline from Chalara Ash Dieback • E.R.C. 20	• Reduce northern canopy and remove 10 trees to NE for development • Requires thinning out • Remove all Ash	B2	2.4 18m²
G2	Willow 80% Hawthorn	EM	≤7					≤150	M	• Mass of scrub around silted up pond • Multiple stem failures and uprooted trees due to heavily saturated ground conditions • All past coppice now falling apart • E.R.C. 0	• Remove all	C2	1.8 10m²
G3	Oak x 6	SM / EM	≤9	3	3	3	3	≤290	G	• Linear group on heavily saturated ground • Not visually prominent • E.R.C. 10	• Remove if required	C2	3.5 38m²
G4	Oak	SM	5					≤200	G	• Small trees located off-site • E.R.C. 10	• 3rd party trees, no works	C2	2.4 18m²

TREE SURVEY SCHEDULE (BS5837: 2012)

TREE SOLUTIONS

SITE:	LAND OFF DAVY WAY, LLAY INDUSTRIAL ESTATE
CLIENT:	R.A & C.E PLATT LTD
BRIEF:	ARBORICULTURAL IMPACT ASSESSMENT

SURVEYOR:	A HENDERSON
ASSESSMENT DATE:	OCT 2023
VIEWING CONDITIONS:	GOOD
JOB REFERENCE:	23/AIA/WRM/314

TREE NO. T - Tree G - Group H- Hedge	SPECIES (COMMON NAME)	AGE	HEIGHT (m) + CROWN CLEARANCE/ DIRECTION OF GROWTH (N.S.E.W)	RADIAL CROWN SPREAD (m) N	S	E	W	STEM/ MULTI-STEM* DIA. (mm)	VITALITY	COMMENTS	MANAGEMENT	CATEGORY & SUB-CATEGORY GRADING BS 5837	BS 5837 RADIUS (m) RPA (m^2)
G5	Field Maple, Willow (Goat)	Y	5					≤150	G	• Young trees planted along site frontage • No maintenance since planting – easily replaced • E.R.C. 10	• Remove section for new vehicular access	C1	1.8 10m²
G6	Oak	SM	≤9	4	4	3	3.5	≤300	G	• Linear closed canopy group • Well established • E.R.C. 20+	• No works	B2	3.6 41m²
H1	Field Maple, Hawthorn, Hornbeam, Hazel, Guilder Rose	Y						N/A	G	• Young hedge planted along boundary fence line • Well established but being crowded out by scrub to south • E.R.C. 20+	• Requires reducing to 1m and siding back to form dense hedge • Remove scrub to south	N/A	N/A
H2	Hawthorn	M							P	• Original field boundary hedge • Majorly suppressed and significant gaps • E.R.C. 10	• Coppice/lay and plant gaps to reinstate former hedge boundary • Remove small section for vehicular access road if opting for option 4b	N/A	N/A

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	• 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 the 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**.*			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

© The British Standards Institution 2012

Appendix Two

Preliminary Tree Constraints Plan

© Tree Solutions Ltd (2024)

N

W E

S

G6

H1*

Blackthorn scrub

G5

H2*

G1

Small Willow scrub

H2*

G2

G3

G4

5m 10m 20m 30m 40m 50m

Legend

Root Protection Area Modified to Account for Site Features

Category

Crown Spread

Tree Number

Root Protection Area

- 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: R.A. & C.E. Platt Ltd	
Project: Land off Davy Way, Llay Industrial Estate	
Title: Tree Constraints Plan	
Scale: 1:500 @ A1	Date: October 2023
Drawn By: NB	Revision: -
Job Ref: 23/AAI/WXM/314	Drawing No: 01

Do not scale from this drawing all dimensions to be checked on site.

The copyright of this document resides with Tree Solutions unless assigned in writing by the company

Tree Solutions

E: info@tree-solutions.co.uk
W: www.tree-solutions.co.uk
T: 01244 389114

Company Registration No. 04548901

Appendix Three

Impact Assessment Plan

© Tree Solutions Ltd (2024)



Legend

Root Protection Area Modified to Account for Site Features

Category
Crown Spread
Tree Number
Root Protection Area

- 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: R.A. & C.E. Platt Ltd	
Project: Land off Davy Way, Llay Industrial Estate	
Title: Arboricultural Impact Assessment - Option 4b	
Scale: 1:500 @ A1	Date: April 2024
Drawn By: NB	Revision: -
Job Ref: 23/AAI/WXM/314	Drawing No: 02

Do not scale from this drawing all dimensions to be checked on site.

The copyright of this document resides with Tree Solutions unless assigned in writing by the company

Tree Solutions
E: info@tree-solutions.co.uk
W: www.tree-solutions.co.uk
T: 01244 380114
Company Registration No: 04548901

N

W E

S

RACKERY LANE

DAVEY WAY

Existing tree line to be retained where possible

Access point shown subject to input from Highways Engineer (Extent of gap in tree line TBC)

Potential open attenuation

Existing boundary fence to be retained subject to confirmation

Space allocation for sprinkler tanks and pumphouse if required

17no. Trailer Spaces

Blackthorn scrub

Potential open attenuation

Potential open attenuation

10no. Dock Levellers

Fishing Lake

Fishing Platform

Replacement pond shown subject to confirmation by Ecologist and Civils Engineer

Small Willow scrub

Potential trim trail shown subject to confirmation

Existing boundary paladin fence to be retained subject to confirmation

5no. Trailer Spaces

Potential staff amenity area

Refuse area

Cycle Parking

95no. Parking Spaces incl 5no. accessible

Balancing Pond

UNIT GIA
Ground Floor Warehouse:
8,816m² / 94,890ft²
First Floor Office: 707m² / 7,610ft²
TOTAL : 9,523m² / 102,500ft²

UNIT GEA
TOTAL : 9,849m² / 106,040ft²

12.5m to U/S haunch

Meritor Fitness Centre

RACKERY LANE

Extent of surveyed bottom of pond bank incomplete dashed red

Minimum 5m landscape corridor to connect neighbouring ecological areas

G1 G2 G3 G4 G5 G6 H1* H2* H2* T1 T2 T3 T4 T5 T6 T7 T8 T9 T10 T11 T12 T13 T14 T15 T16 T17 T18

5m 10m 20m 30m 40m 50m

Legend

Root Protection Area Modified to Account for Site Features

Category
Crown Spread
Tree Number
Root Protection Area

- 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: R.A. & C.E. Platt Ltd	
Project: Land off Davy Way, Llay Industrial Estate	
Title: Arboricultural Impact Assessment - Option 5	
Scale: 1:500 @ A1	Date: April 2024
Drawn By: NB	Revision: -
Job Ref: 23/AAI/WXM/314	Drawing No: 02

Do not scale from this drawing all dimensions to be checked on site.

The copyright of this document resides with Tree Solutions unless assigned in writing by the company

Tree Solutions
E: info@tree-solutions.co.uk
W: www.tree-solutions.co.uk
T: 01244 380114
Company Registration No: 04548901