

Arboricultural Method Statement (including Arboricultural Impact Assessment & Tree Protection Plan) to B§5837:2012

Anglesey Land Holdings Ltd.

Prosperity Parc, London Road, Holyhead, Anglesey, LL65 2UJ.

11 November 2024

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Table of Contents

If this report has been released electronically the appendices referred to herein can be found in the annexed zip folder/s as .pdf files. If this report has been released in hard copy the appendices will be bound into the back of this report. Plans are annexed separately as A0, A1, A2 or A3 as appropriate.

Introduction	
Executive Summary	4
General Information	6
Tree Survey	7
Arboricultural Impact Assessment	
Arboricultural Method Statement	
Tree Works	
Protected Species	
Site Management	
Prohibition	17
Sequencing of works	
Protective Measures	
Demolition	21
Construction	
Services	
Landscaping	
Monitoring and Supervision	
Appendix 1: Arboricultural Impact Assessment - Plans	
Appendix 2: Tree Protection Plan	
Appendix 2: Tree Survey Schedule	
Appendix 4: Tree Protection Notice	
Appendix 5: Contact Details	
Document Production Record	



Introduction

Arbtech Consulting Limited (Arbtech) received written instruction on 08 February 2024 from Anglesey Land Holdings Ltd. to attend Prosperity Parc, London Road, Holyhead, Anglesey, LL65 2UJ (site) to undertake an arboricultural survey to BS5837:2012 guidance to assess trees, hedges and major shrub groups growing on and within influencing distance of the site and to produce a Schedule of Trees, Tree Constraints Plan, Arboricultural Impact Assessment, Arboricultural Method Statement and Tree Protection Plan.



Figure 1: OS Map (Bing Maps) showing site location.



Figure 2: Site redline boundary.



Executive Summary

This report describes the extent and effect of the proposed development at the site on individual trees and groups of trees within and adjacent to the site.

Trees within the survey area were surveyed; using a methodology guided by British Standard 5837:2012 'Trees in relation to design, demolition and construction – Recommendations' ("BS5837").

This report and its appendices follow precisely the strategy for arboricultural appraisal intended to provide local planning authorities with evidence that trees have been properly considered throughout the development process.

Subsequently, this report has been produced, balancing the layout of the proposed development against the competing needs of trees. This report comprises all of the requisite elements of an arboricultural implications assessment, method statement and supporting plans.

The proposal requires some tree removals from the interior of the site but will retain all trees along the site boundary, to provide screening for the proposed development. The design layout for the proposal has taken into consideration & avoided the 3 No. tree preservation order (TPO) areas located within the site boundary; these are highlighted on the AIA & TPP plans.

Mitigation replacement tree planting will form part of the landscape proposal for the development.

It is the conclusion of this report that the overall quality and longevity of the amenity contribution provided for by the retained trees and groups of trees within and adjacent to the site will not be adversely affected as a result of the local planning authority consenting to the proposed development. It is considered that any issues raised in this report, or beyond the scope of it can be dealt with by planning conditions.

Checklist for Submission to Local Planning Authority

Tree survey	
Tree constraints plan	
Arboricultural impact assessment	\boxtimes
Arboricultural method statement	
Tree protection plan	



Proposal



Figure 3: Parameters Plan showing area designated as development zone / built infrastructure.

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General Information

Client: Anglesey Land Holdings Ltd.

Site: Prosperity Parc, London Road, Holyhead, Anglesey, LL65 2UJ.

Brief proposal description: Outline permission for the redevelopment of the site to include demolition of structures and buildings for construction of new employment floorspace including general industrial (use class B2), storage and distribution (use class B8 – including potential data centre), light industrial and 'Research and Development' uses (use class B1b), other industrial processes (use Class B1c), and battery energy storage (Unique use). Development to include drainage arrangements, retained and new landscaping, gatehouses and other associated buildings, infrastructure and engineering works. All matters reserved except for (retained) site accesses from the A5.

Document	Reference No.
Topographical Survey	MIG_655_3DT
Proposed layout drawing	11906-L-05 Rev I
Landscape master plan drawing	N/A
LPA pre-app comments	N/A
British Standard 5837:2012	"BS5837"
Arboricultural Impact Assessment	Arbtech AIA 01
Tree Protection Plan	Arbtech TPP 01

Table 1: Documents referred to.

Site description

The site is the the former Anglesey Aluminium works located on the Penrhos Estate on the outskirts and to the south of Holyhead. The site is bounded to the north by the A5, to the south by the A55 (North Wales Expressway) and adjacent railway line, and to the west by Holyhead Retail Park. The land is largely flat with mounds and embankments to the north and west with the vast majority of the trees located along here.



Tree Survey

Survey: An arboricultural survey to BS5837 of all trees within impacting distance of the site was undertaken by Russell Pearce of Arbtech Consulting in October & November 2023.

A total of 15 No. individual trees, 47 No. groups of trees were surveyed. Details for each of the trees surveyed are provided in the Schedule of Trees (see Appendix 3)

Table 2: Documents u	pon which th	nis tree survey	has been based
		,	

Document	Originator	Reference Number	Title
Topographical Survey	Morris Infrastructure Group UK	MIG_655_3DT	3D Topographical Survey

Limitations: The survey was made at ground level using visual observation only. Detailed examinations, such as climbing inspections and decay detection equipment were not employed, though may form part of the survey's management recommendations. Measurements were taken using specialist tapes, laser and GPS devices. Where this was not possible, measurements are estimated.

Scope: Pre-development tree surveys make arboricultural management recommendations based exclusively upon the individual tree or group of trees condition relative to their present context (*i.e. not in relation to the proposed development*).

Legal Status: No statutory protection check has been performed. BS5837 does not draw any distinction between trees subject to statutory protection, such as a Tree Preservation Order ("TPO"), and those trees without. This is principally because a detailed planning consent overrides any TPO protection. Consequently, we do not seek to offer any comparison between or infer any difference in the quality or importance of TPO trees and other trees.

* For more information on the surveyed trees please see Arbtech Consulting Ltd, Tree Survey Schedule (Appendix 1), Tree Survey Report and Tree Constraints Plan.

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Arboricultural Impact Assessment

Table 3: Documents upon which this assessment has been based

Document	Originator	Reference Number	Title
Topographical Survey	Morris Infrastructure Group UK	MIG_655_3DT	3D Topographical Survey
Proposals	FPCR	11906-L-05 Rev I	Parameters Plan Rev I

There are a number of issues that may need to be addressed in an arboricultural impact assessment between the trees and the proposed development, these are as follows:

- The effect and extent of the proposed development within the root protection areas (RPAs) of retained trees;
- The potential conflicts of the proposed development with canopies of retained trees; and
- The likelihood of any future remedial works to retained trees beyond which would have been scheduled as a part of usual management.

Table 4: Impacts upon the RPAs of retained trees

Tree Number	Species	Structure	Incursion
T12	Sycamore	Development Zone / Built Infrastructure	RPA
G15	Various	Development Zone / Built Infrastructure	RPA

These impacts can be seen on the Arboricultural Impact Assessment drawing number Arbtech AIA 01 in Appendix 1.



Trees to be removed

The proposal requires the removal of 2 no. category B trees & 1 No category C tree, 3 No. category B groups, 4 No. category C groups & the partial removal of 4 No. category B groups 7 4 No. category C groups. A breakdown of all tree removals and pruning works can be seen in Table 8: Summary of Tree Works

Table 5: Number of individual trees to be removed.

U	А	В	С
0	0	2	1

Table 6: Number of groups to be removed. () Indicates partial removal of a group.

U	А	В	С
0	0	6 (3)	4 (4)

Mitigation tree planting will form part of the landscape proposal for the development.

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Arboricultural Method Statement

The purpose of this method statement is to demonstrate how any aspect of the development that has potential to result in loss or damage to a tree may be implemented and provide an adequate level of protection for those trees that are to be retained during the proposed works.

Details of key site personnel, including site / project manager will be submitted to the Council's Tree Officer prior to the commencement of site works.

This method statement is to be approved and agreed to in writing by all key personnel prior to the commencement of site works.

No site personnel are to be present and no demolition, site clearance, building work or delivery of materials is to occur until the protective measures are in accordance with this method statement and the Tree Protection Plan drawing number Arbtech TPP 01.

Protective measures should be in accordance with this method statement and the Tree Protection Plan; drawing number Arbtech TPP 01 will remain unaltered and in situ, unless otherwise specified, for the entire duration of the construction.

Table 7: Documents upon which this assessment has been based

Document	Originator	Reference Number	Title
Topographical Survey	Morris Infrastructure Group UK	MIG_655_3DT	3D Topographical Survey
Proposals	FPCR	11906-L-05 Rev I	Parameters Plan Rev I



Tree Works

For reasons of public safety, all tree works referred to herein must be carried out prior to any site personnel commencing works or any building materials being delivered.

No.	Species	Works	Category
T13	Sycamore	Fell to ground level; remove stump	B1
T14	Scots pine	Fell to ground level; remove stump	B1
T15	White poplar	Fell to ground level; remove stump	C1
G14	Various	Partial removal of group	C2
G16	Various	Partial removal of group	B2
G17	Sycamore	Partial removal of group	C2
G28	Alder	Partial removal of group	C2
G29	Scots pine	Fell to ground level; remove stumps	B1
G30	Various	Fell to ground level; remove stumps	B2
G31	Various	Partial removal of group	C2
G32	Goat willow	Fell to ground level; remove stumps	C2
G35	Various	Fell to ground level; remove stumps	C2
G36	Various	Fell to ground level; remove stumps	B2
G37	Various	Fell to ground level; remove stumps	C2
G38	Various	Fell to ground level; remove stumps	B2
G39	Various	Fell to ground level; remove stumps	B2
G40	Various	Partial removal of group	B2
G41	Various	Fell to ground level; remove stumps	B2

Table 8: Summary of Tree Works

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No.	Species	Works	Category
G42	Various	Fell to ground level; remove stumps	C2

Notes

All tree work is to be undertaken in accordance with British Standard BS 3998:2010, Recommendations for tree work. All arising's are to be removed and the site is to be left as found. Care is to be taken of the ground around retained trees to make sure that it does not become compacted as a result of tree surgery operations. No equipment or vehicles such as timber Lorries, tractors, excavators or cranes shall be parked or driven beneath the crowns of any retained trees, to prevent subsequent compaction and root death.

Tree removal

A tree should be felled in one piece only when there is no significant risk of damage to people, property or protected species (see Annex A).

Where restrictions (e.g. lack of space, buildings, other features, land ownership or use, or other trees which are to be retained) cannot be overcome, trees should be dismantled in sections.

This also applies where a tall stump is being retained but where branches are to be removed/pruned.

Extensively decayed trees can be unpredictable when they are being felled, and special precautions should therefore be taken, such as the use of a winch to guide the direction of fall.

Stump removal – stump grinding

Stump grinding should be to a minimum of 300mm deep or to extend through the base of the stump leaving the major roots disconnected if the intention is to reduce the potential for the spread of Honey fungus.

The grinding residue should be treated as arising's and removed from site.

NOTE Mechanical destruction of a stump by stump grinding is less disruptive to the site than digging out.

The hole left by stump removal, should be filled with soil or other material. The filling should be appropriate for future site usage, and for any surface treatment that is to be installed.

Where future plant growth is desired, the backfill material should be firmed in 150 mm layers by treading, avoiding excessive compaction and destruction of the soil structure.



Stump removal - digging

Stump removal by digging out should include disposal/utilisation of woody material (see Clause **13**).

NOTE Whether done by hand or machine, digging out can cause severe disturbance of the site.

Where possible, when winching out a stump, a ground or other type of anchor should be used rather than a tree to be retained. If there is no alternative to using such a tree as an anchor, appropriate protective measures should be adopted.

After stump removal

The hole left by stump removal, whether by digging out or grinding, should be filled with soil or other material. The filling should be appropriate for future site usage and for any surface treatment that is to be installed.

Where future plant growth is desired, the back fill material should be firmed in 150mm layers by treading, avoiding excessive compaction and destruction of the soil structure.



Protected Species

Conservation Status of British Bats

The general consensus in Britain and Europe is that virtually all bat species are declining and vulnerable. Our understanding of population status is poor as there is very little historical data for most bat species. Certain species, such as the horseshoe bats, are better understood and have well documented contractions in range and population size.

Given this general picture of decline in UK Government within the UK Biodiversity Action Plan has designated five species of bats as priority species (greater and lesser horseshoe bats, barbastelle, Bechstein's and pipistrelle). These plans provide an action pathway whereby the maintenance and restoration of the former populations levels are investigated.

Legal Status of British Bats

Given the above position all British bats as well as their breeding sites and resting places enjoy national and international protection.

All bat species in the UK are fully protected under the Wildlife and Countryside Act 1981 (as amended) through inclusion in Schedule 5. All bats are also listed on Annex IV (and some on Annex II) of the EC Habitats Directive giving further, European protection. Taken together the act and Conservation of Habitats and Species Regulations 2012 (as amended)* make it an offence to; intentionally or deliberately kill, injure or capture (take) bats;

- Deliberately disturb bats (whether in a roost or not);
- Damage, destroy or obstruct access to bat roosts;
- Possess or transport a bat or any part of a bat, unless acquired legally;
- Sell, barter or exchange bats, or parts of bats

The legislation although not strictly affording protection to foraging grounds does protect roost sites. Bat roosts are protected at all times of the year whether or not bats are present. Any disturbance of a roost due to development must be licenced.

*the regulations that delivered by the UK's commitments to the Habitats Directive.



Breeding birds

All nesting birds are protected under the Wildlife and Countryside Act (as amended) 1981, which makes it an offence to intentionally kill, injure or take any wild bird or take, damage or destroy its nest whilst in use or being built, or take or destroy its eggs. Furthermore a number of birds enjoy further protection under that Act and are listed on Schedule 1 of the Act. These further protected birds are also protected from disturbance and it may be necessary to operate "no-go" buffer zones around such nests – typically out to 100m.

Planning policy guidance on the treatment of species identified as priorities under the biodiversity action programme suggests that local authorities should take measures to protect the habitats of these species from further decline through policies in local development documents and should ensure that they are protected from the adverse effects of development, where appropriate, by using planning conditions or obligations. The conservation of these species should be promoted through the incorporation of beneficial biodiversity designs within developments.



Site Management

The site manager will be responsible for briefing and inducting all personnel who will be working on any stage of this development and especially those who will be working within or adjacent to the canopies or RPAs of retained trees; and will make them aware of, and provide a copy of this method statement and tree protection plan drawing number Arbtech TPP 01; this is to include but not exclusively of the movement and or operation of plant, excavations, unloading deliveries, mixing and or pouring of cement and concrete.

The site manager will be responsible for the day to day running and protection of all retained trees and for liaising with the project arborist about any tree related matters and prior to any works that may or will affect the RPAs or canopies of retained trees; this is to include but not exclusively the movement and or operation of plant, excavations, unloading deliveries, mixing, pouring and storage of all caustic materials that may cause harm to retained trees.

Any incidents of damage to retained trees or of tree protection measures will be documented by the site manager who will then report these incidents to the project arboriculturist immediately and make sure that works within this area cease until the project arborist has had an opportunity to inspect the damage and where appropriate, agree a mitigation plan with the local planning authority tree officer.

The site manager may designate another person to take charge of briefing and inducting process of new site personnel or visitors in his absence.

If the site manager is replaced or is absent from site for more than three consecutive working days the project arborist will be informed and a prestart meeting will be held with the new or acting site manager.

It is the responsibility of the site manager to ensure that the planning conditions attached to the planning consent are adhered to at all times and that a monitoring regime and supervision of any works within or adjacent to the RPAs are adopted.

If at any time pruning works are required other than those previously approved, permission must be sought from the LPA tree officer and once permission is granted they are to be carried out by a suitably qualified person in accordance with BS3998:2010 Tree work – Recommendations.



Prohibition

- Mechanical digging or scraping is not permitted within a defined root protection area or within areas cordoned off by protective barrier fencing.
- No access will be permitted within the protected areas;
- No materials, equipment or debris will be stored within any of the fenced areas, or against the fencing;
- Fires are not permitted within 10m of any vegetation.
- Leaning objects against or attaching of objects to a tree is not permitted.
- Machinery, plant and vehicles are not permitted to be washed down within 10m of vegetation.
- Chemicals and materials are not to be transported, stored, used or mixed within a root protection area or within areas cordoned off by protective barrier fencing.
- Cement silos, mixing site to be situated within a bunded area to prevent pillage/leaking of chemicals harmful to trees. These areas are to be sited well clear of protected trees.
- Refuelling of plant or machinery is prohibited within 10m of the construction exclusion zones.
- It is essential that allowance should be made for the slope of the ground so that damaging materials such as concrete washings, mortar or diesel oil cannot run towards trees.
- Where machinery is to be used within 5m of retained tree canopies a banks man will be required at all times whilst setting up, moving or operating within this distance of retained trees canopies.
- Storage of all caustic material and chemicals are to be situated well clear of protected areas and preferably on lower ground if slopes are present, or to be situated within a bonded area to prevent any spills or leaks entering the ground.



Sequencing of works

A logical sequence of events is to be observed and shall be phased as follows.

Table 9: Sequence of Events

Stage	Event
Stage 1	Pre-commencement site meeting
Stage 2	Carry out tree works as specified within the summary of tree works
Stage 3	Installation of protective measures in accordance with the approved tree protection plan/s
Stage 4	Site set up
Stage 5	Undertake and complete construction works
Stage 6	Undertake external landscaping works outside of the construction exclusion zones
Stage 7	Removal of all machinery and materials form site
Stage 8	Dismantle and removal of protective measures
Stage 9	Undertake external landscaping works within the construction exclusion zones
Stage 10	Sign off from project arboriculturist



Protective Measures

Protective measures are to be installed immediately following the completion of the tree works, and are to be sited and aligned in accordance with the tree protection plan Arbtech TPP 01 (Appendix 2) prior to the commencement of any works or the introduction of any machinery or material to site.

Upon installation of the protective measures around the retained trees the project arboriculturist will visit the site to inspect and document the position and specifications of the protective measures.

In the event that the protective measures and their positions do not comply with this arboricultural method statement document number Arbtech AMS 01 (11-11-24) and tree protection plan drawing number Arbtech TPP 01, the project arboriculturist shall inform the client and fencing contractor so adjustments can be made.

When the protective measures comply with document number Arbtech AMS 01 (11-11-24) and tree protection plan drawing number Arbtech TPP 01, the project arboriculturist will sign off the protective measures in writing to the client and will send a copy to the fencing contractor, site agent and local authority tree officer.

If the protective measures become damaged or there is any accident or emergencies involving trees, these areas are to be cordoned off immediately with high visibility plastic mesh fencing. The site agent is to photograph and document the damage and inform the project arboriculturist immediately after the incident and all work within in this area is to cease until the project arboriculturist has made a visit to the site. Any and all damaged sections of protective measures shall be replaced within 48 hours of the initial incident.

The protected area is sacrosanct and will not be invaded by the storage of materials, mixing of concrete or other products, accessed by machinery, equipment or pedestrians or in any other way disturbed by construction activity.

The protective measures will remain in place until the completion of stage 8 (see Sequencing of Works), thereafter they will be carefully dismantled only with the agreement of the project arboriculturist and or the local authority tree officer.

The existing site boundary measures are to be retained for the duration of the development. If for any reason the existing boundary measures are not to be used protective barrier fencing is to be installed along the line of the boundaries and is only to be removed upon the written permission of the project arboriculturist or LPA tree officer upon the completion of the development or immediately prior to the installation of the permanent boundary measures.

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No equipment, vehicles or plant shall operate beyond the tree protection fencing. Booms, hoists and rigs should be kept as far away from the canopies of retained trees at all times. Where it is necessary to operate within 5m of a tree canopy, it will be done with the utmost caution and under the control of a banks man. Damage to trees will be considered a breach of this tree protection plan, which in turn could be a breach of planning permission.

Protective Barrier Fencing

Protective barrier fencing should be appropriate for the intensity and proximity of the development to protect trees where development activity is in proximity.

<u>Specification:</u> To comprise of 2m tall, welded mesh panels on rubber or concrete feet. Panels are to be joined together using a minimum of two anti-tamper couplers, installed so that they can only be removed from inside the fence. The panels should be supported on the inner side by stabiliser struts, which should be attached to a base plate and secured with ground pins.



Signage denoting the words "*tree protection area*" at 5.0m intervals should be fixed to the protective barrier fencing (See Appendix 4).



Demolition

Prior to the demolition of the existing site features, all tree works are to have been completed, tree protection measures are to be in place as per Arbtech Consulting Ltd. tree protection plan document number Arbtech TPP 01 and have been signed off and a copy of the demolition method statement has been submitted and approved by the project arboriculturist and LPA tree officer, to ensure that there is no conflict with this method statement.

Any demolition work within or immediately adjacent to RPAs or canopies of retained trees is to be undertaken under the direct on-site supervision of an arboriculturist.



Construction

Prior to the construction of the proposal, a copy of the construction method statement should have been submitted and approved by the project arboriculturist and LPA tree officer, to ensure that there is no conflict with this method statement.

Any excavations and construction work within or immediately adjacent to RPAs or canopies of retained trees is to be undertaken under the direct on-site supervision of an arboriculturist.

Supervised Excavation

If excavation is required for development within the RPAs of T12 & group G15, these will be carried out under direct on-site arboricultural supervision to the required depth of the excavation.

The soil is to be loosened with the aid of a fork or pick axe and then cleared with the aid of an Air-spade, Air-vac and or shovel. Any roots found will be cleanly severed by the arboricultural consultant with either a hand saw or secateurs.

Any roots found with a diameter of less than 25mm shall be cleanly severed by the arboricultural consultant. Any roots of 25mm and above shall be excavated around without damaging them; the arboricultural consultant shall decide if it's feasible or necessary to retain the root, if not it shall be severed.

The edge of the excavation closest to the trees will be covered with damp hessian to prevent soil collapse or contamination by concrete.



Services

Detailed drawings of proposed underground services are not available at this time; hence it is not possible to identify any specific potential impacts associated with the scheme at this stage.

Existing services within the site should be retained wherever possible. Where existing services within RPAs require upgrading, the upmost care must be taken to minimise disturbance, and where feasible trenchless techniques are to be employed, and only where necessary should open excavations be considered.

Where new services are to be introduced into the site they should be located outside of RPAs, where they will not interfere with tree roots. If any excavations are required within the RPAs all trenches are to be excavated by hand and radially to the tree trunks under direct on-site arboricultural supervision and are to be carried out under NJUG guidelines.

Final positions of any proposed services should be verified and approved by the arboricultural consultant and local authority tree officer before implementation.

New Underground services

Trenching for installation of underground services and drainage routes could sever any roots that may be present and as such adversely affects the health of the tree. For this reason particular care should be taken in routing and methods of installation of all underground services. All underground services and drainage routes should be located so that no excavations are required within RPAs.

Where it has been impossible to keep underground services from passing through RPAs or within close proximity to trees, these sections are to be installed in one of three ways in accordance with the guidance set out in National Joint Utilities Group guidelines (NJUG 4), under on-site arboricultural supervision.

Trenchless Techniques

There are three main types of trenchless techniques, these include, guided and unguided boring and pipe replacement by lining or bursting. These allow for the installation, maintenance or renewal of underground services, without the disturbance of soil in which roots are likely to be growing. Starting and receiving pits for the boring machinery are to be located outside of the RPAs of any retained trees, with the bore depth being maintained at a minimum depth of 600mm below the existing ground level. Techniques involving external lubrication of the equipment shall use no material other than water as other lubricants could contaminate the soil (e.g. oil, bentonite, etc.).



Broken Trench – Hand Dug

This technique combines both trenchless techniques and manual excavation where excavation is unavoidable. Excavations should be limited to where there is clear access around and below the roots. All trenches shall be excavated by hand with the same precautions taken as for manual excavation. Open section of trench should only be large enough to allow access for linking to the next section.



Landscaping

The proposed mitigation replacement tree planting should take into consideration the available space for tree growth and development in order to ensure the trees are physically suited to the site at maturity. A specification for and notation relating to the precise alignment of replacement trees will be contained in the landscape proposals.

Landscaping around retained trees may only be carried out once all tree protection measures have been removed (planting, turfing, fencing etc.).

All excavations within the Root Protection Areas shall be undertaken by hand and without reducing current ground levels unless it is agreed in writing with the LPA. At no time is the use of a rotavator permitted within the RPAs of retained tree.

Any tree roots discovered will be left in-situ and shall not be cut or otherwise damaged. Where possible, the soil structure within the Root Protection area shall be preserved.

No works will be carried out within the RPAs of any trees if the soil moisture is of such a level that soil compaction may be likely. Should the soil become compacted or has poor structure which would hinder the development of the existing trees and plants or any new plantings the arboriculturist should be consulted about soil decompaction techniques.



Monitoring and Supervision

Where trees have been identified within this method statement and tree protection plan drawing number Arbtech TPP 01 for retention, there should be an auditable system of arboricultural monitoring. This is to extend to arboricultural supervision whenever demolition or construction activity is to take place within or adjacent to any canopy or RPA.

The development's tree protection measures are to be monitored and all demolition and construction works to be undertaken within or adjacent to the RPAs of retained trees are to be supervised by project arboriculturist, who should be retained to record and report observations to the council at appropriate intervals.

Pre-commencement site meeting

Prior to the commencement of any works or machinery and materials arriving on site a pre-commencement site meeting involving the project arborist, landowner or agent, site manager, contractors and engineer (as appropriate) and the relevant LPA officers will be held to ensure that all aspects of the arboricultural method statement and tree protection are understood and for all parties to swap contact details (see Appendix 5).

Monitoring and supervision schedule

The initial monitoring visit will be to check that the tree protective measures are in the correct location and as specified within the approved method statement, if so to sign off their installation.

There after monitoring visits are to take place at regular intervals, to ensure that tree protection measures are in place and are functioning as designed or whenever necessary to undertake works to be carried out under arboricultural supervision. The frequency of the monitoring visits is to be determined with the LPA tree officer at the pre-commencement site meeting.

A record of all arboricultural monitoring and supervision visits will be kept and any faults will be logged, this will then be copied to the site agent, developer, and local planning authority in a digital format.

If during the course of the development, it is necessary for areas to be re-designed so that they would require changes to the approved arboricultural method statement or tree protection plan and so affecting retained trees the project arborist and LPA tree officer will be invited to attend a site meeting with all relevant parties. Prior to any changes being implemented these must have been approved in writing by the LPA tree officer.



Supervision

The arboricultural consultant will be required to attend site to directly supervise all demolition and construction works that are to be undertaken within or adjacent to the RPAs of all retained trees and will be advised a minimum of 72 hours prior to the commencement of any works that require his attendance, these will include:

- 1. Pre-commencement site meeting.
- 2. Location of protective measures.
- 3. Any demolition and or excavations within or adjacent to RPAs, including foundations, hard surfacing or underground services (a non-exhaustive list).

Completion meeting

Once all construction works have been completed all materials and machinery has been removed from site the project arborist shall be informed and will invite the LPA tree officer to meet on site to discuss the process and discuss any final remedial works that may be required and to sign the development off so that the protective measures may be removed.

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Appendix 1: Arboricultural Impact Assessment - Plans







Sheet 2

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G30

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G31

G31

Note: No unauthorised excavations are to be carried out within the RPAs of any retained trees. Any level changes must form part of a construction method statement & must protect the rooting environments of all retained trees.



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Sheet 3

-**G22**

form part of a construction method statement & must protect the rooting environments of all retained trees.

a drawing was produced in colour - a monochrome copy should not be relied upon.

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	Tree Categories
N	Trace are estagarized in accordance with the second chart in Table
NW NOW NO NE	of the British Standard BS 5837:2012 'Trees in relation to design, demolition and construction - Recommendations'
WNW ENE	Category 'U' - Trees in such condition that they cannot realistically be
W WSW ESE	for longer than 10 years.
SW SSW SSE SE	expectancy of at least 40 years. Category 'B' - Trees of moderate quality with an estimated remaining
S	life expectancy of at least 20 years. Category 'C' - Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a
Indicative only	stem diameter below 150mm.
	Root Protection Area
	In order to avoid damage to the roots or rooting environment of retained trees, the Root Protection Areas (RPAs) should be plotted
	around each of the category A, B and C trees. This is a minimum area in m^2 which should be left undisturbed around each retained tree.
	The RPA is calculated using the British Standard BS 5837:2012 'Tree
	The calculated RPA is capped to 707m ² , which is the equivalent to a
	circle with a radius of 15m. Where there appears to be restrictions to root growth the root protection area is reshaped to more accurately
	reflect the likely distribution of the roots.
	Arboricultural Impacts
	Impacts Nos. of tree
	Trees to be removed 3 Groups / Hedges to be removed (Partial removal of groups) 10 (7)
	Trees with proposed incursions into RPAs 1
	Groups / Hedges with proposed incursions into RPAs 1 Trees that will require pruning 0
	Groups / Hedges that will require pruning 0
	Trees to be transplanted 0 Groups / Hedges to be transplanted 0
	No. Species Proposed structure Incursion
	T12 Sycamore Development Area RPA
	Sheet Layout
	Sheet 2
	Sheet 3
	Sipeet 4
	Ken 2 / / /
	Tree Work Schedule
	No. Species Works Categor
	T13 Sycamore Fell to ground level; remove stump B1
	T14 Scots pine Fell to ground level; remove stump B1 T15 White pender Fell to ground level; remove stump C1
	G14 Various Partial removal of group C1
	G16 Various Partial removal of group B2
	G17 Sycamore Partial removal of group C2 G28 Alder Partial removal of group C2
	G29 Scots pine Fell to ground level; remove stumps B1
	G30 Various Fell to ground level; remove stumps B2
	G31 Various Partial removal of group C2 G32 Goat willow Fell to ground level; remove stumps C2
	G32 Goat willow Fell to ground level; remove stumps C2 G35 Various Fell to ground level; remove stumps C2
	G36 Various Fell to ground level; remove stumps B2
	G37 Various Fell to ground level; remove stumps C2
	G38 Various Fell to ground level; remove stumps B2 G39 Various Fell to ground level; remove stumps B2
	G40 Various Partial removal of group B2
	G41 Various Fell to ground level; remove stumps B2
	G42 Various Fell to ground level; remove stumps C2 All tree work is to be undertaken in accordance with British Standard
	BS 3998:2010 Tree work - Recommendations. All arising's are to be removed and the site is to be left as found.
	Care is to be taken of the ground around retained trees to make sure that it does not become compacted as a result of tree surgery
	operations. No equipment or vehicles such as timber lorries, tractors, excavators or cranes shall be parked or driven beneath the crowns of any rationad trace, to recover a ubacquient comparison and rest death
	No. of individual trace to be removed
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Appendix 2: Tree Protection Plan

Sheet 2

Note: No unauthorised excavations are to be carried out within the RPAs of any retained trees. Any level changes must form part of a construction method statement & must protect the rooting environments of all retained trees.

G18

G3'

G17

Sheet 3

form part of a construction method statement & must protect the rooting environments of all retained trees.

G24

-G22





Appendix 2: Tree Survey Schedule

Arbtech Consulting Ltd 5678552 GB903660148 Directors: R. M. Oates Unit 3 Well House Barn, Chester Road, Chester, CH4 0DH Tel. 01244 661170 Web. <u>www.arbtech.co.uk</u>

Tree Survey Schedule Prosperity Parc, London Road, Holyhead. Anglesey, LL65 2UJ

Client	Anglesey Land Holdings Ltd.
Survey Date	30/10/2023 - 01/11/2023
Weather Conditions	Overcast with intermittent heavy showers – Clear sunny spells – Heavy wind at times.
Surveyor	Russell Pearce
<u>Key:</u>	
Tree No.	A unique number or reference to identify trees or groups as shown on associated plans.
Species	Common and/or taxonomic name.
Ht.	The height of the tree in meters (m).
Trunk Diameter	The stem diameter in millimetres (mm) taken at 1.5m above ground level unless otherwise specified.
Crown Spread	The extents of the crown taken, in meters (m), at cardinal points of the compass: North (N); East (E); South (S) and West (W); or intercardinal points: Northeast (NE); Southeast (SE); Southwest (SW); Northwest (NW)
Crown Clear.t	The height of the crown above the current ground level, in meters (m), taken at cardinal points of the compass: North (N); East (E); South (S) and West (W); or intercardinal points: Northeast (NE); Southeast (SE); Southwest (SW); Northwest (NW)
Age Class	Age classification: Young (Y); Semi-mature (SM); Early Mature (EM); Mature (M); Over Mature (OM).
Phys. Cond.	The general physiological condition of the tree: Good; Fair; Poor; Decline; Dead.
Struct. Cond.	The general structural condition of the tree: Good, Fair, Poor, Hazardous.
Comments	Notes and general comments on the structural condition of the tree, its environment and it estimated remaining contribution.
Est. Rem. Cont.	Estimated remaining contribution (years): <10; 10+; 20+ 40+
Cat.	Retention Category as described in the Cascade Chart for Tree Quality Assessment at Appendix 1: A, B, C, U (subcategories 1, 2, 3)

Tree No.	Species	Ht. (m)	Trunk Diam.	Cr	own S	pread	(m)	С	rowr (n Cle m)	ear.	Age Class	Phys. Cond.	Struct. Cond	Comments	Est. Rem. Cont.	Cat.
			(mm)	Ν	Е	S	W	Ν	Е	S	W					(years)	
T1	Sycamore	6	190 200	6	4	3	2	2	2	2	2	SM	Fair	Fair	Codominant bifurcation at 1m. Proliferation of basal growth. Exposed asymmetric imbalanced crown with weight bias to NE. Minor deadwood throughout.	10+	C1
T2	Sycamore	11	410 230	5	6	4	5	0	0	0	0	EM	Good	Good	Open balanced crown. Codominant bifurcation at 1m. Minor Dieback in upper East side of crown.	20+	B1
Т3	Sycamore	12	554	5	7	6	6	0	0	0	0	EM	Good	Good	Prolifically multistemmed below 1.5m. DBH estimated. Open balanced spreading crown. Hazard beams in lower crown.	40+	B2
T4	Beech	18	750	10	8	9	10	5	5	5	5	EM	Good	Good	Open balanced spreading crown. Deadwood in lower crown. Excellent specimen.	40+	A1
T5	Alder	13	431	4	6	5	3	4	4	4	4	SM	Good	Good	Multistemmed at base with acute primary unions. Minor crown asymmetry due to proximity of adjacent trees.	20+	B1

Tree No.	Species	Ht. (m)	Trunk Diam. (mm)	Cr	own S	pread	(m)	С	rowr (I	n Cle m)	ear.	Age Class	Phys. Cond.	Struct. Cond	Comments	Est. Rem. Cont.	Cat.
			()	Ν	Е	S	W	Ν	Е	S	W					(years)	
Т6	Alder	13	388	3	5	6	5	4	4	4	4	EM	Good	Good	Multistemmed at base with acute primary unions. Minor crown asymmetry due to proximity of adjacent trees. Ivy covered stems. Slender stems.	20+	B1
T7	Alder	10	180 250	4	4	3	3	4	4	4	4	SM	Fair	Fair	Multistemmed at base. Suppressed by adjacent trees. Minor crown asymmetry due to proximity of adjacent trees. Ivy covering stems.	10+	C1
T8	Sycamore	8	211	3	2	2	2	1	1	1	1	Y	Good	Good	Located on embankment. Multiple below 0.5m. Some cankering to x1 stem.	20+	C1
T9	Sycamore	7	272	4	3	3	3	0	0	0	0	Y	Good	Good	Located on embankment. Multistemmed below 1.5m. No defects noted.	20+	C1
T10	Sycamore	12	340 290	5	5	6	5	1	1	1	1	EM	Good	Good	Codominant bifurcation below 1m. Open balanced spreading crown. Ivy covered stems. Hazard beams in lower crown.	40+	B1

Tree No.	Species	Ht. (m)	Trunk Diam.	Cr	own S	pread	(m)	Cı	rowr (n Cle m)	ear.	Age Class	Phys. Cond.	Struct. Cond	Comments	Est. Rem. Cont.	Cat.
			(1111)	Ν	Е	S	W	Ν	Ε	S	W					(years)	
T11	Sycamore	10	507	4	6	6	8	2	2	2	2	EM	Good	Good	Open balanced spreading crown. Slightly squat form. Multistemmed below 1m with acute primary unions. Dense ivy covering stems and primary branch framework.	40+	B1
T12	Sycamore	11	420 430	5	6	6	6	2	2	2	2	EM	Good	Good	Open balanced spreading crown. Slightly squat form. No defects noted.	40+	B1
T13	Sycamore	12	440 290 280	6	6	6	5	2	2	2	2	EM	Good	Good	Open balanced spreading crown. Multistemmed at base.	40+	B1
T14	Scots Pine	10	440	5	4	5	4	2	2	2	2	SM	Good	Good	Open balanced spreading crown. Pruning wounds from recent crown lift. No defects noted.	40+	B1
T15	White Poplar	7	210 200 180	5	6	4	2	0	0	0	0	SM	Good	Poor	Historically failed at root plate - to east - tree supported by ground. Large partially occluded stem wound to central stem. Limited SULE	10+	C1

Tree No.	Species	Ht. (m)	Trunk Diam.	Crown Spread (m)			Cı	rowr (n Cle m)	ear.	Age Class	Phys. Cond.	Struct. Cond	Comments	Est. Rem. Cont.	Cat.	
			(1111)	Ν	Е	S	W	Ν	Ε	S	W					(years)	
G1	Sycamore	8 to 12	450	5	5	5	5	1	1	1	1	SM	Good	Good	Approx x40 trees. Most trees multistemmed below 1m. Acute unions throughout group. Minor deadwood within canopy. Some small, suppressed birch and elder in understory. No significant defects.	40+	B2
G2	Alder	5 to 7	280	3	3	3	3	0	0	0	0	SM	Fair	Fair	Exposed to coastal winds. Asymmetric imbalanced crowns with weight bias to NE. Scrubby group. Prolifically multistemmed below 0.5m - DBH estimated. Low aesthetic value.	10+	C2
G3	Alder & Sycamore	4 to 6	240	2.5	2.5	2.5	2.5	0	0	0	0	SM	Fair	Fair	Scrubby dense exposed group. Asymmetric imbalanced crowns with weight bias to NE. Dense ivy covering stems of majority of trees. Predominantly Alder with Sycamore interspersed within. Low aesthetic value.	10+	C2

Tree No.	Species	Ht. (m)	Trunk Diam. (mm)	Cr	own S	pread	(m)	C	rowr (i	n Cle m)	ear.	Age Class	Phys. Cond.	Struct. Cond	Comments	Est. Rem. Cont. (vears)	Cat.
G4	Alder, Goat Willow, Hawthorn & Elder	3 to 4	160	2	2	2	2	0	0	0	0	Y	Fair	Fair	Dense scrubby exposed group. Reduced vitality. Asymmetric imbalanced crowns with weight bias to NE. Low aesthetic value.	10+	C2
G5	Alder & Birch	4 to 8	140	3	3	3	3	0	0	0	0	SM	Fair	Fair	Located in low lying waterlogged area. Reduced vitality and crown density. Some standing deadwood within group. Limited access to group due to dense vegetation and heavily water-logged ground.	10+	C2
G6	Goat Willow	10 to 12	510	6	6	6	6	0	0	0	0	EM	Good	Fair	Located on and adjacent to supporting embankment by perimeter fence. Large group of trees - multistemmed at bases. Multiple included union failures within group. Minor deadwood throughout.	20+	B2
G7	Unknown	2 to 7	150	0	0	0	0					SM	Dead	Poor	Long time dead trees - appear to be Alder. Large number of monoliths. Located in constantly waterlogged area. Likely to have significant basal decay.		U

Tree No.	Species	Ht. (m)	Trunk Diam. (mm)	Cr	own S	pread	(m)	C	rowr (n Cle m)	ear.	Age Class	Phys. Cond.	Struct. Cond	Comments	Est. Rem. Cont.	Cat.
G8	Sycamore	6 to 8	350	N 5	E 5	S 5	W 5	N	Е	S	0	SM	Good	Good	Group of trees located on mound. Open balanced spreading crowns. Multiple stems covered in ivy. No	(years) 20+	B2
G9	Sycamore	7 to 9	470	6	6	6	6	0	0	0	0	SM	Good	Good	significant defects noted. Linear group of x7 trees. Open balanced crown. No defects noted.	40+	B2
G10	Osier, Grey Alder, Sycamore, White Poplar & Ash	3 to 6	140	3	3	3	3	0	0	0	0	Y	Poor	Fair to Poor	Roadside group. Multiple limb/branch snap outs. Ash with bacterial canker and dieback. Low vitality. Limited SULE.		U
G11	Ash	7	320	3	3	3	3	0	0	0	0	SM	Decline	Fair	ADB present - trees in advanced state of decline with >50% Dieback.		U
G12	Sycamore	5 to 6	240	4	4	4	4	0	0	0	0	SM	Fair	Good	Previous minor crown retrenchment - possibly frost nip. Appears to have recovered. Linear group of x4 trees and x3. Limited access - dense vegetation and fencing.	10+	C2

Tree No.	Species	Ht. (m)	Trunk Diam.	Cr	own S	pread	(m)	С	rowr (I	n Cle m)	ar.	Age Class	Phys. Cond.	Struct. Cond	Comments	Est. Rem. Cont.	Cat.
			()	N	E	S	W	Ν	E	S	W					(years)	
G13	Osier, Grey Alder, English Oak, Elder, Hawthorn, Ash	4 to 6	140	3	3	3	3	0	0	0	0	Y	Fair	Fair	Young dense scrubby group. Roadside. Exposed. No significant defects. SM Elder and Ash within group. Ash in decline with ADB.	10+	C2
G14	English Oak, Ash, Alder,	3 to 7	110	2	2	2	2	0	0	0	0	Y	Fair	Fair	Large scrubby competing group. Slender phototrophic form. Large amount of small deadwood throughout canopy. Large number of ash trees - ADB present to varying degrees. Large number of stems DBH <75mm.	10+	C2
G15	Sycamore, Cherry, Hawthorn, Oak, Ash	10 to 13	380	6	6	6	6	0	0	0	0	SM to EM	Good	Good	Group located on mound - trees on N side of embankment are protected from exposure - exhibit open balanced crowns. Trees to south are exposed and have smaller imbalanced crown and slightly smaller stems. SM to EM group higher	40+	B2

Tree No.	Species	Ht. (m)	Trunk Diam.	Cr	own S	pread	(m)	Cı	rowr (n Cle m)	ar.	Age Class	Phys. Cond.	Struct. Cond	Comments	Est. Rem. Cont.	Cat.
			(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Ν	Е	S	W	Ν	Е	S	W					(years)	
G16	Sycamore, Spruce, Beech	12 to 15	250	4	4	4	4	0	0	0	0	SM	Good	Fair	Slender phototrophic form - typical for woodland group. Multiple failed hung-up spruce within group. Minor deadwood throughout. Large number of sweeping stems.	20+	B2
G17	Sycamore	7 to 14	180	3	3	3	3	3	3	3	3	Y to SM	Poor	Fair	Densely planted. Slender phototrophic form. Reduced vitality. Small crowns. Multiple standing dead trees within group. Low aesthetic value.	10+	C2
G18	Sycamore, Spruce, Beech,	16 to 20	320	4	4	4	4	6	6	6	6	EM	Good to Fair	Good to Fair	Slender phototrophic form. Predominantly sycamore. Standing deadwood throughout group. Partially failed hung up trees present.	20+	B2
G19	Sycamore & Ash	14 to 16	460	8	8	8	8	2	2	2	2	EM	Fair	Good	Trees along edge of 3rd party woodland group picked up. Overhanging grass verge - no road overhang. Some contorted peripheral growth in Ash trees - not significant. Ivy covered stems.	20+	B1

Tree No.	Species	Ht. (m)	Trunk Diam.	Cr	own S	pread	(m)	Cı	rowr (n Cle m)	ear.	Age Class	Phys. Cond.	Struct. Cond	Comments	Est. Rem. Cont.	Cat.
			(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Ν	E	S	W	Ν	Е	S	W					(years)	
G20	White Poplar, Hybrid Poplar & Goat Willow.	10 to 14	390	3	3	3	3	0	0	0	0	SM	Good	Good	Limited access due to dense brambles, fencing, uneven ground, waterlogging. Multiple trees with stems and primary branch framework covered in ivy. No significant defects noted. Understory of Hawthorn & Elder.	20+	B2
G21	Wild Cherry & Hawthorn	2 to 4	110	2	2	2	2	0	0	0	0	SM	Fair	Good	Dense scrubby group with reduced vitality. Low aesthetic value. Significant number of trees within group have DBH below 75mm. No significant defects noted.	10+	C2
G22	Larch	15 to 20	250	3	3	3	3	3	3	3	3	EM	Fair to Poor	Fair to Poor	Closely proximal group with slender phototrophic form typical of plantation. Large number of dead, dying, partially failed - hung up trees and failed trees - particularly in centre of group and low- lying waterlogged area.	20+	C2

Tree No.	Species	Ht. (m)	Trunk Diam. (mm)	Cr	rown S	pread	(m) 	C	rowr (n Cle m)	ear.	Age Class	Phys. Cond.	Struct. Cond	Comments	Est. Rem. Cont. (years)	Cat.
G23	Beech, Hornbeam, Sycamore	6 to 12	300	5	5	5	5	2	2	2	2	SM	Good	Fair	Dimensions taken from peripheral trees, and they are larger. Dense group with slender phototrophic form. Multiple trees have previously been topped with some decay at old topping points. Standing deadwood within group.	20+	B2
G24	Spruce, Oak, Sycamore, Hawthorn, Goat Willow	10 to 16	260	4	4	4	4	2	2	2	2	SM to EM	Good	Good	Densegroup.PredominantlySpruce.Smallerspeciessuppressedandperiphery.Slenderphototrophicform.Standingdeadwoodwithin crown.	20+	B2
G25	Sycamore, Wild Cherry, Goat Willow, Silver Birch, Gorse	6 to 12	300	4	4	4	4	2	2	2	2	Y to SM	Good	Good	Mixture of Y and SM trees with desire line/footpath running through centre. Ivy covered stems. No significant defects noted.	20+	B2
G26	Sycamore	8 to 13	350	5	5	5	5	3	3	3	3	SM to EM	Good	Good	Limited access due to security fence. Densely proximal in places. Dense ivy covering the majority of stems and primary branch frameworks. No significant defects noted.	40+	B2

Tree No.	Species	Ht. (m)	Trunk Diam.	Cr	own S	pread	(m)	Cı	rowr (n Cle m)	ear.	Age Class	Phys. Cond.	Struct. Cond	Comments	Est. Rem. Cont.	Cat.
			(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Ν	Е	S	W	Ν	Ε	S	W					(years)	
G27	Goat Willow	6	230	3	3	3	3	0	0	0	0	SM	Good	Fair	Located on embankment. Vast majority are multistemmed at base with acute included unions. Low value group. Good value as screening group.	20+	C2
G28	Alder	4 to 6	180	3	3	3	3	0	0	0	0	SM	Fair	Fair	Dense Alder Carr. Scrubby. Competing. Slender phototrophic stems. Minor deadwood throughout. Limited access. Sycamore interspersed within group. Reduced vitality. Heavily waterlogged area. Standing deadwood within. Failed hung up trees.	20+	C2
G29	Scots Pine	13	420	4	4	4	4	2	2	2	2	SM	Good	Good	Open balanced crowns. No defects noted.	40+	B1
G30	Sycamore & English Oak	8 to 13	320	6	6	6	6	2	2	2	2	SM to EM	Good	Good	Limited access due to terrain and security fence. Sycamore dominant. Large number of ivy clad stems. SM to EM.	40+	B2

Tree No.	Species	Ht. (m)	Trunk Diam.	Cr	own S	pread	(m)	Cı	Crown Clear. (m)		Age Class	Phys. Cond.	Struct. Cond	Comments	Est. Rem. Cont.	Cat.	
			()	N	Е	S	W	Ν	Ε	S	W					(years)	
G31	Goat Willow, Sycamore, Hawthorn & Wild Cherry	2 to 5	140	3	3	3	3	0	0	0	0	SM	Fair	Good	Dense low-lying scrub. Goat Willow dominant. Limited access due to dense vegetation and security fence	10+	C2
G32	Goat Willow	3 to 4	100	3	3	3	3	0	0	0	0	Y	Good	Good	Good structure. Young self-sewn group adjacent to palisade fencing. Multistemmed at base. DBH estimated.	20+	C2
G33	Goat Willow	3 to 5	110	3	3	3	3	0	0	0	0	SM	Good	Fair	3rd party group directly adjacent to boundary chain-link fence. Trees are prolifically multistemmed at bases - DBH estimated. No significant defects noted.	20+	C2
G34	Goat Willow, Silver Birch & Hawthorn	2 to 5	150	3	3	3	3	0	0	0	0	SM	Good	Good	Straddles either side of boundary line - growing through chain-link fence in multiple places. Self- sewn. Low aesthetic value. Provides screening of railway line.	20+	C2

Tree No.	Species	Ht. (m)	Trunk Diam. (mm)	Cr	own S	pread	(m)	С	rowr (n Cle m)	ar.	Age Class	Phys. Cond.	Struct. Cond	Comments	Est. Rem. Cont.	Cat.
G35	Alder, Goat Willow & Scots Pine	2 to 7	120	N 2.5	Е 2.5	S 2.5	W 2.5	N 0	0	0	0	SM	Good	Fair	Very dense group. Majority of trees with group have DBH<75mm. Limited access - dense vegetation. Competing. Slender phototrophic form. Low aesthetic value Good screening	20+	C2
G36	White Poplar, Alder, White Willow & Sycamore	8 to 12	400	5	5	5	5	4	4	4	4	SM	Good	Fair	Slender phototrophic stems. Willow with acute primary unions. Limited access - fencing and dense vegetation. Sea buckthorn, Elder, and tamarisk understory.	20+	B2
G37	Goat Willow, Sycamore & Scots Pine	4 to 7	220	3.5	3.5	3.5	3.5	0	0	0	0	Y to SM	Good	Good	Limited access due to dense vegetation. No significant defects noted.	10+	C2
G38	Black Pine & Scots Pine	16 to 20	280	2	2	2	2	0	0	0	0	SM to EM	Good	Fair	Plantation group spaced avg 1.5m. No evidence of thinning other than through cladoptosis. Standing deadwood and snapped out stems throughout group. Slender phototrophic form. Sycamore and Sweet Chestnut sporadic within group.	20+	B2

Tree No.	Species	Ht. (m)	Trunk Diam.	Cr	own S	pread	(m)	С	Crown Clear. (m)			Age Class	Phys. Cond.	Struct. Cond	Comments	Est. Rem. Cont.	Cat.
			(1111)	Ν	Е	S	W	Ν	Е	S	W					(years)	
G39	Sycamore, Sweet Chestnut & Silver Birch	12 to 17	240	3	3	3	3	0	0	0	0	Y to SM	Good	Fair	Sycamore plantation. Spaced at 2m. Very slender phototrophic form. Y to SM group. Multistemmed trees have acute, included or optimised included unions. No evidence of thinning. Good screening group.	20+	B2
G40	Black Pine & Sweet Chestnut	14 to 20	290	3	3	3	3	0	0	0	0	Μ	Good	Fair	Plantation group spaced on avg 3m. Predominantly Pine. Sweet chestnut interspersed throughout - particularly on SW sides. Standing deadwood and partially failed stems throughout. Suppressed trees throughout.	20+	B2
G41	Birch, Sycamore, Spruce, Alder, Sweet Chestnut , Rowan, Scots Pine, Wild Cherry & Larch	14 to 18	310	4	4	4	4	1	1	1	1	SM to EM	Good	Fair	Slender phototrophic form. Many multistemmed trees with acute and occluded unions. Standing deadwood within group. Minor deadwood throughout.	20+	B2

Tree No.	Species	Ht. (m)	Trunk Diam. (mm)	Cr	own S	pread	(m)	С	Crown Clear. (m)		Age Class	Phys. Cond.	Struct. Cond	Comments	Est. Rem. Cont.	Cat.	
G42	Sycamore, Hawthorn, Wild Cherry, Ash & Goat Willow	2 to 5	150	N 3	Е 3	S 3	W 3	N	E	S	W 0	Y to SM	Good	Good	Assessed from a distance. No access due to dense vegetation and 6ft brambles. Dimensions estimated. No significant defects noted.	(years) 10+	C2
G43	Sycamore, Wild Cherry, Ash, Scots Pine & Goat Willow	8 to 12	240	4	4	4	4	0	0	0	0	SM	Fair	Good	Located on embankment adjacent to boundary with 3rd party. No access due to dense vegetation and brambles. Dimensions estimated. No significant defects visible.	20+	B2
G44	Sycamore	10 to 17	470	7	7	7	7	2	2	2	2	SM to EM	Good	Good	Located on embankment adjacent to 3rd party boundary line. Understory of Hawthorn, Holly and Elder. Standing deadwood. Hazard beams in lower crown. High Amenity value - good aesthetic value - highly visible from highway. No significant defects noted.	40+	A2
G45	Scots Pine	10 to 11	400	6	6	6	6	0	0	0	0	SM	Good	Good	Group of x3 trees forming x1 canopy. Deadwood throughout. Hazard beams in lower crown.	20+	B2

Tree No.	Species	Ht. (m)	Trunk Diam. (mm)	Cr	own S	pread	(m)	C	Crown Clear. (m)		Age Class	Phys. Cond.	Struct. Cond	Comments	Est. Rem. Cont.	Cat.	
			()	Ν	Е	S	W	Ν	Е	S	W					(years)	
G46	Sycamore	9	180	5	5	5	5	0	0	0	0	SM	Good	Good	Slightly suppressed by adjacent trees. No defects noted.	20+	B2
G47	Hawthorn, Goat Willow, Sycamore & Elder	2 to 5	150	3	3	3	3	0	0	0	0	SM	Good	Fair	No access to area due to very dense vegetation, brambles, and gorse. Dimensions estimated. Locations estimated using overhead mapping. Polygon does not represent canopy - Trees are present with interspersed within polygon.	20+	C2

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Appendix 4: Tree Protection Notice

(To be printed at A3 or larger)

Arbtech Consulting Ltd 5678552 GB903660148 Directors: R. M. Oates Unit 3 Well House Barn, Chester Road, Chester, CH4 0DH Tel. 01244 661170 Web. <u>www.arbtech.co.uk</u>

Tree Protection Area KEEP OUT Do not move this fence

(TOWN & COUNTRY PLANNING ACT 1990) TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY PLANNING CONDITIONS AND/OR ARE THE SUBJECT OF A TREE PRESERVATION ORDER. CONTRAVENTION OF A TREE PRESERVATION ORDER MAY LEAD TO CRIMINAL PROSECUTION

ANY INCURSION INTO THE PROTECTED AREA MUST BE WITH THE WRITTEN PERMISSION OF THE LOCAL PLANNING AUTHORITY



Arbtech Consulting Limited. Unit 3, Well House Barn, Chester Road, Chester, CH4 0DH https://arbtech.co.uk - 01244 661170



Appendix 5: Contact Details

Name	Position	Company	Contact
	Client	Anglesey Land Holdings Ltd.	
	Tree Officer		
Alan Thompson	Arboricultural Consultant	Arbtech Consulting Ltd.	01244 661170 07703 676216 <u>at@arbtech.co.uk</u> <u>https://arbtech.co.uk</u>
	Site Manager		
	Main contractor		

Arbtech Consulting Ltd 5678552 GB903660148 Directors: R. M. Oates Unit 3 Well House Barn, Chester Road, Chester, CH4 0DH Tel. 01244 661170 Web. <u>www.arbtech.co.uk</u>

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Document Production Record

Document number	Editor	Signature	Position	lssue number	Date
Arbtech AMS 01	Alan Thompson	A.S.Thom	Arboricultural Consultant	1	11/11/2024

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Arboricultural Survey to BS5837:2012

Anglesey Land Holdings Ltd.

Prosperity Parc, London Road, Holyhead, Anglesey, LL65 2UJ.

03 November 2023

Russell Pearce BSc (Arb) MArborA

Introduction

Arbtech Consulting Limited (Arbtech) received written instruction in October 2023 from Anglesey Land Holdings Ltd to attend Prosperity Parc, London Road, Holyhead, Anglesey, LL65 2UJ to undertake an arboricultural survey a to BS5837:2012 guidance to assess trees, hedges and major shrub groups growing on and within influencing distance of the site and to produce a Schedule of trees, Tree Constraints Plan, Arboricultural Impact Assessment, Arboricultural Method Statement and Tree Protection Plan.

I am Russell Pearce, an arboricultural surveyor for Arbtech Consulting Ltd. I undertook the tree survey on 30th,31st October & 1st November 2023 and subsequently, have produced the summary of my findings.

I graduated from UCLan in 2014 with a *BSc (Hons) Arboriculture* degree and have in 9 years' experience within the arboriculture industry. I have experience working in the public and private sectors, having previously worked for Kent County Council, Medway Unitary Council and reputable consultancy firms. I am LANTRA certified in Professional Tree Inspection and has various NPTC qualifications. I also have experience carrying out CAVAT valuation surveys, and TEMPO assessments in relation to the statutory protection of trees.

The advice below and appended is underwritten by our Professional Indemnity insurance for the business practice of Arboricultural Consultancy in the sum of one million Pounds Sterling in each and every claim.

Document	Reference No.
Survey base drawing	MIG_655_3DT NEW
LPA pre-app comments	N/A
British Standard 5837:2012	"BS5837"
Tree Survey Schedule	Arbtech TS 01
Tree Constraints Plan	Arbtech TCP 01

Table 1: Documents referred to.

Tree Survey

Survey: An arboricultural survey to BS5837 of all trees within impacting distance of the site was undertaken by Russell Pearce on 30th,31st October & 1st November 2023.

During the survey, I categorised the trees using "Table 1 – Cascade chart for tree quality assessment" of the BS5837:2012 (see Appendix 1).

A total of 15 (fifteen) individual trees and 47 (forty-seven) groups of trees were surveyed. Details for each of the trees surveyed are provided in the Schedule of Trees (see Appendix 2).

Table 2: Documents upon which this tree survey has been	based.
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Document	Originator	Reference Number	Title
Topographical Survey	Morris Infrastructure Group UK	MIG_655_3DT	3D Topographical Survey

Limitations: The survey was made at ground level using visual observation only. Detailed examinations, such as climbing inspections and decay detection equipment were not employed, though may form part of the survey's management recommendations. Measurements were taken using specialist tapes, laser and GPS devices. Where this was not possible, measurements are estimated.

Scope: Pre-development tree surveys make arboricultural management recommendations based exclusively upon the individual tree or group of trees condition relative to their present context (*i.e. not in relation to the proposed development*).

Legal Status: No statutory protection check has been performed. BS5837 does not draw any distinction between trees subject to statutory protection, such as a Tree Preservation Order ("TPO"), and those trees without. This is principally because a detailed planning consent overrides any TPO protection. Consequently, we do not seek to offer any comparison between or infer any difference in the quality or importance of TPO trees and other trees.

* For more information on the surveyed trees please see Arbtech Consulting Ltd, Tree Survey Schedule (Appendix 1), Tree Survey Report and Tree Constraints Plan.

Site description

The site is a the derelict Anglesey Aluminium site located on the Penrhos Estate on the outskirts and to the south of Holyhead. The site is bounded to the north by the A5, to the south by the A55 (North Wales Expressway) and adjacent railway line, and to the west by Holyhead Retail Park. The land is largely flat with mounds and embankments to the north and west with the vast majority of the trees located along here.



Figure 1: OS Map (Bing Maps) showing site location



Figure 2: Aerial Image of Site (Google Earth) Illustrating site boundary



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BS5837:2012 Scope

This standard recognises that there can be problems for development close to existing trees which are to be retained, and of planting trees close to existing structures. This standard sets out to assist those concerned with trees in relation to construction to form balanced judgements. It does not set out to put arguments for or against development, or for the removal or retention of trees. Where development, including demolition, is to occur, the standard provides guidance on how to decide which trees are appropriate for retention, on the means of protecting these trees during development, including demolition and construction work, and on the means of incorporating trees into the developed landscape.

Methodology

The methodology used to assess the trees was the British Standard 5837:2012 'Trees in Relation to Construction' tree survey method. The aim of the survey is to establish which trees are moderate and good quality; suitable for retention and justifying protection. And, which trees are low or poor quality; either undesirable or unsuitable to retain and protect.

The tree survey includes all trees included in the land survey red line boundary plan, as well as any that may have been missed, and it should categorize trees or groups of trees, including woodlands for their quality and value within the existing context, in a transparent, understandable and systematic way. Where the arboriculturist has deemed it appropriate, the trees have been tagged with small metal or plastic tags, placed as high as is convenient on the stem of each tree.

Whilst master plan proposals for the development of the site might be available, the trees have been surveyed without taking these into consideration. All detailed design work on site layout should take into consideration the results of the tree survey (and the TCP).

Trees forming groups and areas of woodland (including orchards, wood pasture and historic parkland) are identified and considered as groups where the arboriculturist has determined that this is appropriate, particularly where they contain a variety of species and age classes that could aid long-term management. It is often expedient to assess the quality and value of such groups of trees as a whole, rather than as individuals. However, an assessment of individuals within any group has been undertaken if they are open-grown or if there is a need to differentiate between them.

The quality and value of each tree or group of trees has been recorded by allocating it to one of the four categories: A, B, C, or U (highest to lowest quality respectively). The categories are differentiated on the tree survey plan by colour, or by suffixing the category adjacent to the tree identification number on the TCP.

The survey schedule lists all the trees or groups of trees. The following information is also provided:

- Sequential reference number (to be recorded on the tree survey plan);
- Species (common and/or taxonomic names);
- Height in meters (m);
- Trunk diameter in millimetres (mm) at 1.5 m above adjacent ground level or immediately above the root flare for multi-stemmed trees;
- Crown (branches) spread in meters taken at the four cardinal and/or intercardinal compass points;
- Height of crown clearance above adjacent ground level in meters (m);
- Age class
- Physiological condition
- Structural condition
- Comments/description of features
- Estimated remaining contribution
- Retention Category as described by application of the BS5837:2012 Cascade Chart for Tree Quality Assessment (Appendix 1)

Definitions

Arboriculturist

An arboriculturist (or arboricultural consultant) is a person who has, through relevant education, training and experience, gained recognized qualifications and expertise in the field of trees in relation to construction.

Tree Survey

A tree survey should be undertaken by an arboriculturist and should record information about the trees on a site independently of and prior to any specific design for development. As a subsequent task, and with reference to a design or potential design, the results of the survey should be included in the preparation of a tree constraints plan, which should be used to assist with site layout design.

Tree Constraints Plan

A TCP is a plan, typically delivered as an AutoCAD drawing (.dxf or .dwg file format), prepared by an arboriculturist for the purposes of layout design showing the root protection area and representing the effect that the mature height and spread of retained trees will have on layouts through shade, dominance, etc.

Root Protection Area

An RPA is a layout design tool indicating the area surrounding a tree that contains sufficient rooting volume to ensure the survival of the tree, shown in plan form in m².

Construction Exclusion Zone (also termed Tree Protection Zone)

A construction exclusion or tree protection zone is an area based on the RPA (in m²), identified by an arboriculturist, to be protected during development, including demolition and construction work, by the use of barriers and/or ground protection fit for purpose to ensure the successful long-term retention of a tree.

Arboricultural Impact Assessment

This is a study, undertaken by an arboriculturist, to identify, evaluate and possibly mitigate the extent of direct and indirect impacts on existing trees that may arise as a result of the implementation of any site layout proposal.

Tree Protection Plan

A TPP is a plan, typically delivered as an AutoCAD drawing (.dwg file format), prepared by an arboriculturist showing the finalized layout proposals, tree retention and tree and landscape protection measures detailed within the arboricultural method statement, which can be shown graphically.

Arboricultural Method Statement

This is a methodology for the implementation of any aspect of development that has the potential to result in loss of or damage to a tree. The AMS is likely to include details of an on-site tree protection monitoring regime.



Limitations

Trees were inspected from using visual observation from ground level only. Trees were not climbed or inspected below ground level. Inaccessible trees will have best estimates made about the location, physical dimensions and characteristics. Trees have been grouped where BS5837 guides us that it is expedient to do so. Trees have been excluded from the survey if they are found by us to be sufficiently far away from the proposed developable area or if they are outside of the red line boundary plan showing the expectations of our Client for the extent of the survey. BS5837 does not draw any distinction between trees subject to statutory protection, such as a Tree Preservation Order ("TPO"), and those trees without. This is principally because a detailed planning consent overrides any TPO protection. Consequently, we do not seek to offer any comparison between or infer any difference in the quality or importance of TPO trees and other trees.

Appendices

The following documents were released to the Client as appendices to this report:

- Survey Schedule (.pdf)
- Tree Constraints Plan drawing (.dwg/.dxf & .pdf)

If you require clarification of information contained herein, please do not hesitate to contact us via 01244 660558.

Yours Sincerely,

Russell Pearce BSc

Surveyor

ARBTECH

Appendix 1: Cascade Chart for Tree Quality Assessment

Cascade Chart for Tree Quality Assessment (BS5837:2012)

Category and definition	Criteria (including subcategories when appropriate									
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 serious, irremediable, struct become unviable after removal of other categor by pruning) Trees that are dead or are showing signs of Trees infected with pathogens of significance adjacent trees of better quality <i>NOTE Category U trees can have existing or p</i> 	Dark red								
	1 Mainly arboricultural qualities	2 Mainly landscape qualities	3 Mainly cultural values, including conservation							
Trees to be considered for rete	ntion									
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)	Light green						
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remedial defects, including unsympathetic management and storm damage), such that they are unlikely to be suitable for retention of 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	Mid blue						
Category C Trees of low quality with an estimated remaining expectancy of at least 10 years, or young trees with a stem diameter below 150mm	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 value	Trees with no material conservation or other cultural value	Grey						

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Appendix 2: Schedule of Trees

Tree Survey Schedule Prosperity Parc, London Road, Holyhead. Anglesey, LL65 2UJ

Client	Anglesey Land Holdings Ltd.
Survey Date	30/10/2023 - 01/11/2023
Weather Conditions	Overcast with intermittent heavy showers – Clear sunny spells – Heavy wind at times.
Surveyor	Russell Pearce
<u>Key:</u>	
Tree No.	A unique number or reference to identify trees or groups as shown on associated plans.
Species	Common and/or taxonomic name.
Ht.	The height of the tree in meters (m).
Trunk Diameter	The stem diameter in millimetres (mm) taken at 1.5m above ground level unless otherwise specified.
Crown Spread	The extents of the crown taken, in meters (m), at cardinal points of the compass: North (N); East (E); South (S) and West (W); or intercardinal points: Northeast (NE); Southeast (SE); Southwest (SW); Northwest (NW)
Crown Clear.t	The height of the crown above the current ground level, in meters (m), taken at cardinal points of the compass: North (N); East (E); South (S) and West (W); or intercardinal points: Northeast (NE); Southeast (SE); Southwest (SW); Northwest (NW)
Age Class	Age classification: Young (Y); Semi-mature (SM); Early Mature (EM); Mature (M); Over Mature (OM).
Phys. Cond.	The general physiological condition of the tree: Good; Fair; Poor; Decline; Dead.
Struct. Cond.	The general structural condition of the tree: Good, Fair, Poor, Hazardous.
Comments	Notes and general comments on the structural condition of the tree, its environment and it estimated remaining contribution.
Est. Rem. Cont.	Estimated remaining contribution (years): <10; 10+; 20+ 40+
Cat.	Retention Category as described in the Cascade Chart for Tree Quality Assessment at Appendix 1: A, B, C, U (subcategories 1, 2, 3)

Tree No.	Species	Ht. (m)	Trunk Diam. (mm)	Crown Spread (m)				Crown Clear. (m)			ear.	Age Class	Phys. Cond.	Struct. Cond	Comments	Est. Rem. Cont.	Cat.
				Ν	Е	S	w	Ν	Е	S	W					(years)	
Τ1	Sycamore	6	190 200	6	4	3	2	2	2	2	2	SM	Fair	Fair	Codominant bifurcation at 1m. Proliferation of basal growth. Exposed asymmetric imbalanced crown with weight bias to NE. Minor deadwood throughout.	10+	C1
T2	Sycamore	11	410 230	5	6	4	5	0	0	0	0	EM	Good	Good	Open balanced crown. Codominant bifurcation at 1m. Minor Dieback in upper East side of crown.	20+	B1
Т3	Sycamore	12	554	5	7	6	6	0	0	0	0	EM	Good	Good	Prolifically multistemmed below 1.5m. DBH estimated. Open balanced spreading crown. Hazard beams in lower crown.	40+	B2
T4	Beech	18	750	10	8	9	10	5	5	5	5	EM	Good	Good	Open balanced spreading crown. Deadwood in lower crown. Excellent specimen.	40+	A1
Τ5	Alder	13	431	4	6	5	3	4	4	4	4	SM	Good	Good	Multistemmed at base with acute primary unions. Minor crown asymmetry due to proximity of adjacent trees.	20+	B1
Tree No.	Species	Ht. (m)	Trunk Diam. (mm)	Cr	Crown Spread (m) (N E S W N	С	rowr (I	n Cle m)	ear.	Age Class	Phys. Cond.	Struct. Cond	Comments	Est. Rem. Cont.	Cat.		
-------------	----------	------------	------------------------	----	---------------------------------	---	------------	-------------	------	--------------	----------------	-----------------	----------	-----------------------	---	---------	----
			()	Ν	Е	S	W	Ν	Е	S	W					(years)	
Т6	Alder	13	388	3	5	6	5	4	4	4	4	EM	Good	Good	Multistemmed at base with acute primary unions. Minor crown asymmetry due to proximity of adjacent trees. Ivy covered stems. Slender stems.	20+	B1
T7	Alder	10	180 250	4	4	3	3	4	4	4	4	SM	Fair	Fair	Multistemmed at base. Suppressed by adjacent trees. Minor crown asymmetry due to proximity of adjacent trees. Ivy covering stems.	10+	C1
T8	Sycamore	8	211	3	2	2	2	1	1	1	1	Y	Good	Good	Located on embankment. Multiple below 0.5m. Some cankering to x1 stem.	20+	C1
T9	Sycamore	7	272	4	3	3	3	0	0	0	0	Y	Good	Good	Located on embankment. Multistemmed below 1.5m. No defects noted.	20+	C1
T10	Sycamore	12	340 290	5	5	6	5	1	1	1	1	EM	Good	Good	Codominant bifurcation below 1m. Open balanced spreading crown. Ivy covered stems. Hazard beams in lower crown.	40+	B1

Tree No.	Species	Ht. Tru (m) (m	Trunk Diam.	Cr	own S	pread	(m)	Cı	rowr (n Cle m)	ear.	Age Class	Phys. Cond.	Struct. Cond	Comments	Est. Rem. Cont.	Cat.
			(1111)	Ν	Е	S	W	Ν	Ε	S	W					(years)	
T11	Sycamore	10	507	4	6	6	8	2	2	2	2	EM	Good	Good	Open balanced spreading crown. Slightly squat form. Multistemmed below 1m with acute primary unions. Dense ivy covering stems and primary branch framework.	40+	B1
T12	Sycamore	11	420 430	5	6	6	6	2	2	2	2	EM	Good	Good	Open balanced spreading crown. Slightly squat form. No defects noted.	40+	B1
T13	Sycamore	12	440 290 280	6	6	6	5	2	2	2	2	EM	Good	Good	Open balanced spreading crown. Multistemmed at base.	40+	B1
T14	Scots Pine	10	440	5	4	5	4	2	2	2	2	SM	Good	Good	Open balanced spreading crown. Pruning wounds from recent crown lift. No defects noted.	40+	B1
T15	White Poplar	7	210 200 180	5	6	4	2	0	0	0	0	SM	Good	Poor	Historically failed at root plate - to east - tree supported by ground. Large partially occluded stem wound to central stem. Limited SULE	10+	C1

Tree No.	Species	Ht. (m)	Trunk Diam.	Cı	Crown Spread (m)			Cı	rowr (n Cle m)	ear.	Age Class	Phys. Cond.	Struct. Cond	Comments	Est. Rem. Cont.	Cat.
			(1111)	Ν	Е	S	W	Ν	Ε	S	W					(years)	
G1	Sycamore	8 to 12	450	5	5	5	5	1	1	1	1	SM	Good	Good	Approx x40 trees. Most trees multistemmed below 1m. Acute unions throughout group. Minor deadwood within canopy. Some small, suppressed birch and elder in understory. No significant defects.	40+	B2
G2	Alder	5 to 7	280	3	3	3	3	0	0	0	0	SM	Fair	Fair	Exposed to coastal winds. Asymmetric imbalanced crowns with weight bias to NE. Scrubby group. Prolifically multistemmed below 0.5m - DBH estimated. Low aesthetic value.	10+	C2
G3	Alder & Sycamore	4 to 6	240	2.5	2.5	2.5	2.5	0	0	0	0	SM	Fair	Fair	Scrubby dense exposed group. Asymmetric imbalanced crowns with weight bias to NE. Dense ivy covering stems of majority of trees. Predominantly Alder with Sycamore interspersed within. Low aesthetic value.	10+	C2

Tree No.	Species	Ht. (m)	Trunk Diam. (mm)	Cr	own S	pread	(m)	C	rowr (i	n Cle m)	ear.	Age Class	Phys. Cond.	Struct. Cond	Comments	Est. Rem. Cont. (vears)	Cat.
G4	Alder, Goat Willow, Hawthorn & Elder	3 to 4	160	2	2	2	2	0	0	0	0	Y	Fair	Fair	Dense scrubby exposed group. Reduced vitality. Asymmetric imbalanced crowns with weight bias to NE. Low aesthetic value.	10+	C2
G5	Alder & Birch	4 to 8	140	3	3	3	3	0	0	0	0	SM	Fair	Fair	Located in low lying waterlogged area. Reduced vitality and crown density. Some standing deadwood within group. Limited access to group due to dense vegetation and heavily water-logged ground.	10+	C2
G6	Goat Willow	10 to 12	510	6	6	6	6	0	0	0	0	EM	Good	Fair	Located on and adjacent to supporting embankment by perimeter fence. Large group of trees - multistemmed at bases. Multiple included union failures within group. Minor deadwood throughout.	20+	B2
G7	Unknown	2 to 7	150	0	0	0	0					SM	Dead	Poor	Long time dead trees - appear to be Alder. Large number of monoliths. Located in constantly waterlogged area. Likely to have significant basal decay.		U

Tree No.	Species	Ht. (m)	Trunk Diam. (mm)	Cr	own S	pread	(m)	C	rowr (n Cle m)	ear.	Age Class	Phys. Cond.	Struct. Cond	Comments	Est. Rem. Cont.	Cat.
G8	Sycamore	6 to 8	350	N 5	E 5	S 5	W 5	N	Е	S	0	SM	Good	Good	Group of trees located on mound. Open balanced spreading crowns. Multiple stems covered in ivy. No	(years) 20+	B2
G9	Sycamore	7 to 9	470	6	6	6	6	0	0	0	0	SM	Good	Good	significant defects noted. Linear group of x7 trees. Open balanced crown. No defects noted.	40+	B2
G10	Osier, Grey Alder, Sycamore, White Poplar & Ash	3 to 6	140	3	3	3	3	0	0	0	0	Y	Poor	Fair to Poor	Roadside group. Multiple limb/branch snap outs. Ash with bacterial canker and dieback. Low vitality. Limited SULE.		U
G11	Ash	7	320	3	3	3	3	0	0	0	0	SM	Decline	Fair	ADB present - trees in advanced state of decline with >50% Dieback.		U
G12	Sycamore	5 to 6	240	4	4	4	4	0	0	0	0	SM	Fair	Good	Previous minor crown retrenchment - possibly frost nip. Appears to have recovered. Linear group of x4 trees and x3. Limited access - dense vegetation and fencing.	10+	C2

Tree No.	Species	Ht. (m)	Trunk Diam.	Cr	Crown Spread (m)		Сı	rowr (I	n Cle m)	ar.	Age Class	Phys. Cond.	Struct. Cond	Comments	Est. Rem. Cont.	Cat.	
			()	N	E	S	W	N	E	S	W					(years)	
G13	Osier, Grey Alder, English Oak, Elder, Hawthorn, Ash	4 to 6	140	3	3	3	3	0	0	0	0	Y	Fair	Fair	Young dense scrubby group. Roadside. Exposed. No significant defects. SM Elder and Ash within group. Ash in decline with ADB.	10+	C2
G14	English Oak, Ash, Alder,	3 to 7	110	2	2	2	2	0	0	0	0	Y	Fair	Fair	Large scrubby competing group. Slender phototrophic form. Large amount of small deadwood throughout canopy. Large number of ash trees - ADB present to varying degrees. Large number of stems DBH <75mm.	10+	C2
G15	Sycamore, Cherry, Hawthorn, Oak, Ash	10 to 13	380	6	6	6	6	0	0	0	0	SM to EM	Good	Good	Group located on mound - trees on N side of embankment are protected from exposure - exhibit open balanced crowns. Trees to south are exposed and have smaller imbalanced crown and slightly smaller stems. SM to EM group higher	40+	B2

Tree No.	Species	Ht. (m)	Trunk Diam.	Cr	own S	pread	(m)	Cı	rowr (n Cle m)	ar.	Age Class	Phys. Cond.	Struct. Cond	Comments	Est. Rem. Cont.	Cat.
			(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Ν	Е	S	W	Ν	Е	S	W					(years)	
G16	Sycamore, Spruce, Beech	12 to 15	250	4	4	4	4	0	0	0	0	SM	Good	Fair	Slender phototrophic form - typical for woodland group. Multiple failed hung-up spruce within group. Minor deadwood throughout. Large number of sweeping stems.	20+	B2
G17	Sycamore	7 to 14	180	3	3	3	3	3	3	3	3	Y to SM	Poor	Fair	Densely planted. Slender phototrophic form. Reduced vitality. Small crowns. Multiple standing dead trees within group. Low aesthetic value.	10+	C2
G18	Sycamore, Spruce, Beech,	16 to 20	320	4	4	4	4	6	6	6	6	EM	Good to Fair	Good to Fair	Slender phototrophic form. Predominantly sycamore. Standing deadwood throughout group. Partially failed hung up trees present.	20+	B2
G19	Sycamore & Ash	14 to 16	460	8	8	8	8	2	2	2	2	EM	Fair	Good	Trees along edge of 3rd party woodland group picked up. Overhanging grass verge - no road overhang. Some contorted peripheral growth in Ash trees - not significant. Ivy covered stems.	20+	B1

Tree No.	Species	Ht. (m)	Trunk Diam.	Cr	Crown Spread (m)			Cı	rowr (n Cle m)	ear.	Age Class	Phys. Cond.	Struct. Cond	Comments	Est. Rem. Cont.	Cat.
			(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Ν	E	S	W	Ν	Е	S	W					(years)	
G20	White Poplar, Hybrid Poplar & Goat Willow.	10 to 14	390	3	3	3	3	0	0	0	0	SM	Good	Good	Limited access due to dense brambles, fencing, uneven ground, waterlogging. Multiple trees with stems and primary branch framework covered in ivy. No significant defects noted. Understory of Hawthorn & Elder.	20+	B2
G21	Wild Cherry & Hawthorn	2 to 4	110	2	2	2	2	0	0	0	0	SM	Fair	Good	Dense scrubby group with reduced vitality. Low aesthetic value. Significant number of trees within group have DBH below 75mm. No significant defects noted.	10+	C2
G22	Larch	15 to 20	250	3	3	3	3	3	3	3	3	EM	Fair to Poor	Fair to Poor	Closely proximal group with slender phototrophic form typical of plantation. Large number of dead, dying, partially failed - hung up trees and failed trees - particularly in centre of group and low- lying waterlogged area.	20+	C2

Tree No.	Species	Ht. (m)	Trunk Diam. (mm)	Cr	rown S	pread	(m) 	C	rowr (n Cle m)	ear.	Age Class	Phys. Cond.	Struct. Cond	Comments	Est. Rem. Cont. (years)	Cat.
G23	Beech, Hornbeam, Sycamore	6 to 12	300	5	5	5	5	2	2	2	2	SM	Good	Fair	Dimensions taken from peripheral trees, and they are larger. Dense group with slender phototrophic form. Multiple trees have previously been topped with some decay at old topping points. Standing deadwood within group.	20+	B2
G24	Spruce, Oak, Sycamore, Hawthorn, Goat Willow	10 to 16	260	4	4	4	4	2	2	2	2	SM to EM	Good	Good	Densegroup.PredominantlySpruce.Smallerspeciessuppressedandperiphery.Slenderphototrophicform.Standingdeadwoodwithin crown.	20+	B2
G25	Sycamore, Wild Cherry, Goat Willow, Silver Birch, Gorse	6 to 12	300	4	4	4	4	2	2	2	2	Y to SM	Good	Good	Mixture of Y and SM trees with desire line/footpath running through centre. Ivy covered stems. No significant defects noted.	20+	B2
G26	Sycamore	8 to 13	350	5	5	5	5	3	3	3	3	SM to EM	Good	Good	Limited access due to security fence. Densely proximal in places. Dense ivy covering the majority of stems and primary branch frameworks. No significant defects noted.	40+	B2

Tree No.	Species	Ht. (m)	Trunk Diam.	Crown Spread (m)	Cı	rowr (n Cle m)	ear.	Age Class	Phys. Cond.	Struct. Cond	Comments	Est. Rem. Cont.	Cat.			
			(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Ν	Е	S	W	Ν	Ε	S	W					(years)	
G27	Goat Willow	6	230	3	3	3	3	0	0	0	0	SM	Good	Fair	Located on embankment. Vast majority are multistemmed at base with acute included unions. Low value group. Good value as screening group.	20+	C2
G28	Alder	4 to 6	180	3	3	3	3	0	0	0	0	SM	Fair	Fair	Dense Alder Carr. Scrubby. Competing. Slender phototrophic stems. Minor deadwood throughout. Limited access. Sycamore interspersed within group. Reduced vitality. Heavily waterlogged area. Standing deadwood within. Failed hung up trees.	20+	C2
G29	Scots Pine	13	420	4	4	4	4	2	2	2	2	SM	Good	Good	Open balanced crowns. No defects noted.	40+	B1
G30	Sycamore & English Oak	8 to 13	320	6	6	6	6	2	2	2	2	SM to EM	Good	Good	Limited access due to terrain and security fence. Sycamore dominant. Large number of ivy clad stems. SM to EM.	40+	B2

Tree No.	Species	Ht. (m)	Trunk Diam.	Cr	own S	pread	(m)	Cı	rowr (n Cle m)	ear.	Age Class	Phys. Cond.	Struct. Cond	Comments	Est. Rem. Cont.	Cat.
			()	Ν	Е	S	W	Ν	Е	S	W					(years)	
G31	Goat Willow, Sycamore, Hawthorn & Wild Cherry	2 to 5	140	3	3	3	3	0	0	0	0	SM	Fair	Good	Dense low-lying scrub. Goat Willow dominant. Limited access due to dense vegetation and security fence	10+	C2
G32	Goat Willow	3 to 4	100	3	3	3	3	0	0	0	0	Y	Good	Good	Good structure. Young self-sewn group adjacent to palisade fencing. Multistemmed at base. DBH estimated.	20+	C2
G33	Goat Willow	3 to 5	110	3	3	3	3	0	0	0	0	SM	Good	Fair	3rd party group directly adjacent to boundary chain-link fence. Trees are prolifically multistemmed at bases - DBH estimated. No significant defects noted.	20+	C2
G34	Goat Willow, Silver Birch & Hawthorn	2 to 5	150	3	3	3	3	0	0	0	0	SM	Good	Good	Straddles either side of boundary line - growing through chain-link fence in multiple places. Self- sewn. Low aesthetic value. Provides screening of railway line.	20+	C2

Tree No.	Species	Ht. (m)	Trunk Diam. (mm)	Cr	own S	pread	(m)	С	rowr (n Cle m)	ar.	Age Class	Phys. Cond.	Struct. Cond	Comments	Est. Rem. Cont.	Cat.
G35	Alder, Goat Willow & Scots Pine	2 to 7	120	N 2.5	Е 2.5	S 2.5	W 2.5	N 0	0	0	0	SM	Good	Fair	Very dense group. Majority of trees with group have DBH<75mm. Limited access - dense vegetation. Competing. Slender phototrophic form. Low aesthetic value Good screening	20+	C2
G36	White Poplar, Alder, White Willow & Sycamore	8 to 12	400	5	5	5	5	4	4	4	4	SM	Good	Fair	Slender phototrophic stems. Willow with acute primary unions. Limited access - fencing and dense vegetation. Sea buckthorn, Elder, and tamarisk understory.	20+	B2
G37	Goat Willow, Sycamore & Scots Pine	4 to 7	220	3.5	3.5	3.5	3.5	0	0	0	0	Y to SM	Good	Good	Limited access due to dense vegetation. No significant defects noted.	10+	C2
G38	Black Pine & Scots Pine	16 to 20	280	2	2	2	2	0	0	0	0	SM to EM	Good	Fair	Plantation group spaced avg 1.5m. No evidence of thinning other than through cladoptosis. Standing deadwood and snapped out stems throughout group. Slender phototrophic form. Sycamore and Sweet Chestnut sporadic within group.	20+	B2

Tree No.	Tree Species		Trunk Diam.	Crown Spread (m)				Cı	rowr (n Cle m)	ar.	Age Phys. Class Cond.	Phys. Cond.	Struct. Cond	Comments	Est. Rem. Cont.	Cat.
			(1111)	Ν	E	S	W	Ν	Е	S	W					(years)	
G39	Sycamore, Sweet Chestnut & Silver Birch	12 to 17	240	3	3	3	3	0	0	0	0	Y to SM	Good	Fair	Sycamore plantation. Spaced at 2m. Very slender phototrophic form. Y to SM group. Multistemmed trees have acute, included or optimised included unions. No evidence of thinning. Good screening group.	20+	B2
G40	Black Pine & Sweet Chestnut	14 to 20	290	3	3	3	3	0	0	0	0	Μ	Good	Fair	Plantation group spaced on avg 3m. Predominantly Pine. Sweet chestnut interspersed throughout - particularly on SW sides. Standing deadwood and partially failed stems throughout. Suppressed trees throughout.	20+	B2
G41	Birch, Sycamore, Spruce, Alder, Sweet Chestnut , Rowan, Scots Pine, Wild Cherry & Larch	14 to 18	310	4	4	4	4	1	1	1	1	SM to EM	Good	Fair	Slender phototrophic form. Many multistemmed trees with acute and occluded unions. Standing deadwood within group. Minor deadwood throughout.	20+	B2

Tree No.	Species	Ht. (m)	Trunk Diam. (mm)	Cr	own S	pread	(m)	С	Crown Clear. (m)		Crown Clear. (m)		Crown Clear. (m)		Age Class	Phys. Cond.	Struct. Cond	Comments	Est. Rem. Cont.	Cat.
G42	Sycamore, Hawthorn, Wild Cherry, Ash & Goat Willow	2 to 5	150	N 3	Е 3	S 3	W 3	N	E	S	W 0	Y to SM	Good	Good	Assessed from a distance. No access due to dense vegetation and 6ft brambles. Dimensions estimated. No significant defects noted.	(years) 10+	C2			
G43	Sycamore, Wild Cherry, Ash, Scots Pine & Goat Willow	8 to 12	240	4	4	4	4	0	0	0	0	SM	Fair	Good	Located on embankment adjacent to boundary with 3rd party. No access due to dense vegetation and brambles. Dimensions estimated. No significant defects visible.	20+	B2			
G44	Sycamore	10 to 17	470	7	7	7	7	2	2	2	2	SM to EM	Good	Good	Located on embankment adjacent to 3rd party boundary line. Understory of Hawthorn, Holly and Elder. Standing deadwood. Hazard beams in lower crown. High Amenity value - good aesthetic value - highly visible from highway. No significant defects noted.	40+	A2			
G45	Scots Pine	10 to 11	400	6	6	6	6	0	0	0	0	SM	Good	Good	Group of x3 trees forming x1 canopy. Deadwood throughout. Hazard beams in lower crown.	20+	B2			

Tree No.	Species	Ht. (m)	Ht. (m)	Ht. (m)	Ht. (m)	Ht. (m)	Ht. (m)	Trunk Diam. (mm)	Cr	own S	pread	(m)	C	rowr (n Cle m)	ear.	Age Class	Phys. Cond.	Struct. Cond	Comments	Est. Rem. Cont.	Cat.
			()	Ν	Е	S	W	Ν	Е	S	W					(years)						
G46	Sycamore	9	180	5	5	5	5	0	0	0	0	SM	Good	Good	Slightly suppressed by adjacent trees. No defects noted.	20+	B2					
G47	Hawthorn, Goat Willow, Sycamore & Elder	2 to 5	150	3	3	3	3	0	0	0	0	SM	Good	Fair	No access to area due to very dense vegetation, brambles, and gorse. Dimensions estimated. Locations estimated using overhead mapping. Polygon does not represent canopy - Trees are present with interspersed within polygon.	20+	C2					

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Appendix 3: Tree Constraints Plan

Note: Existing dwelling(s), retaining wall(s), road(s) and structures are likely to be partial or complete root barriers. We currently do not have enough information with regards to the existing and surrounding properties and structures, foundations, soil types etc. to definitively determine the root barriers.



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G12











Tree Categories



rbtech Consulting Ltd, 2018

Document Production Record

Document number	Editor	Signature	Position	lssue number	Date	
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