Arboricultural Method Statement

Cardigan Tidal FRMS

Date: February 2026

Submitted to:

Natural Resources Wales

c/o Binnies

Prepared by:

RSK ADAS Limited

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Contents

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Where field investigations have been carried out, these have been restricted to a level of detail required to achieve the stated objectives of the work.

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Revision History

Revision	Date	Amendment
-	February 2026	Initial Report
Rev A	March 2026	Client Comments

1 Executive Summary

Natural Resources Wales are proposing to install a new flood defence wall, engineered riverbank, new intertidal area and enhanced public realm area, as well as associated walkway changes and compound areas, within a site known as Strand, which runs along the river Teifi, Cardigan, SA43 1EX.

ADAS was originally commissioned by Binnies, on behalf of Natural Resources Wales, to undertake an arboricultural survey and prepare an Arboricultural Impact Assessment (AIA) to inform the design of the proposed development. Following the completion of the Tree Survey Schedule and Tree Constraints Report, Binnies were advised that Ceredigion County Council requires a more detailed Arboricultural Method Statement (AMS) to support the planning application. This document therefore provides the requested Arboricultural Method Statement, setting out the measures necessary to protect retained trees throughout the construction process.

ADAS undertook a survey of the site on the 21st of July 2025 in order to inform the production of this Arboricultural Method Statement, including a tree protection methodology for the works.

The survey identified 17 features comprising of 11 individual trees and 6 groups of trees which have the potential to be impacted by the development of the new flood defence wall, engineered riverbank, new intertidal area and enhanced public realm area, as well as associated walkway changes and compound areas.Of these tree features, none were awarded a high-quality A grade, 7 were awarded a moderate-quality B grade, 8 were awarded a low-quality C grade and two were awarded a U grade and recommended for removal irrespective of the development proposals.

An enquiry was made via email to Ceredigion County Council on 26th of November 2025 has established that the main development site (not the two site compounds) sits within the Cardigan Planning Conservation Area (CA) and that there are no Tree Preservation Orders (TPOs) within or in close proximity the sites.

An additional search was made on Data Map Wales interactive map and has established that the site does not contain an ancient woodland which could be impacted by the works. The search also established that the River Teifi, which borders the site, is considered a Site of Special Scientific Interest (SSSI) and a Special Area of Conservation (SAC).

Damage to the roots, crowns or stems of trees owned by a third party (either public or private) could result in a claim for compensation should it have a negative impact on the condition of the tree. Should unauthorised works or damage be sustained to a tree within their work area, then Natural Resources Wales and/or its contractors could be subject to a civil case.

This report will provide the principles to adopt when working in close proximity to trees and can also be used to provide reassurance to the local council that Natural Resources Wales are taking reasonable steps to plan their work around trees.

ADAS believes that adopting the approach specified within this report will ensure that the proposed works will not have a significant impact on the health and stability of the trees which are to be retained and will particularly ensure that these trees continue to contribute to the amenity value of the local area.

2 Introduction

The Author

This document has been prepared by Assistant Arboricultural Consultant Lemmy O'Brien. Lemmy is an associate member of the Arboricultural Association, has a BSc in Ecology and over 4 months experience within the arboricultural industry.

Client Instruction

ADAS was instructed by Myles Harding, Environmental Scientist at Binnies, on behalf of Natural Resources Wales, on the 9th of April 2025 to carry out a tree survey and produce an Arboricultural Impact Assessment (later changed to an Arboricultural Method Statement) for the proposed development of the intertidal area, flood defence wall, flood embankment as well as the associated path changes and compound areas.

Purpose of Report

The purpose of this document is to provide reference and clarification on tree protection and working methods for works near to trees. To achieve this, the methodology for works that may affect the trees will be clearly set out.

Proposed Works

The proposed works are to replace the current river front infrastructure located along the area known as Strand, with a new sheet pile flood defence wall, engineered riverbank, new intertidal area and a enhanced public realm area. Two existing slipways will be closed and a new up-and-over ramp for canoe/kayak access will be installed, with associated walkway on the landward side of the flood defence wall leading to this. A single building will be demolished to facilitate the works. Two site compounds will be developed, one located north east of the site, Pont-Y-Cleifion, Cardigan, SA43 1DW, and the other located south of the site, across the river, off Station Road, Cardigan, SA43 3AD.

Assumptions and Limitations

The Tree Constraints Plan (TCP) contained in **Appendix 1** and the Tree Protection Plan (TPP) contained in **Appendix 2** have been developed from the ADAS tree survey information, a topographical survey (ref: ISM-Binnies-4021883-The Strand-Cardigan-Infill survey-3D-Rev1.dwg) and multiple design proposals (ref: 4021883-BUK-ZZ-00-DR-C-00002.dwg, 4021883-BUK-ZZ-00-DR-C-01001.dwg, 4021883-BUK-ZZ-00-DR-C-02001.dwg, 4021883-BUK-ZZ-00-DR-C-03001.dwg, 4021883-BUK-ZZ-00-DR-C-04001.dwg) provided by the client, which have been used to assess the potential impact to each arboricultural feature.

The topographical survey was commissioned and distributed, so the tree features included in the plans have accurate locations. No Topographical mapping was provided for the two proposed compound locations, therefore all tree locations in these two areas are indicative only.

This report is not a full hazard or risk assessment of trees and should not be used as such.

Trees are living organisms and are constantly adapting to their ever-changing environment. No tree is completely safe and there is no guarantee that problems or deficiencies may not arise in the future, which have not been identified in this report. Therefore, this report is only valid for a period of one year from the date of the initial site inspection.

Tree Survey Methodology

The tree survey was carried out on the 25th of July 2025 by ADAS Principal Arboricultural Consultant Ed Lusk.

The tree survey was carried out in accordance with the recommendations contained within 'BS5837:2012 Trees in Relation to Design, Demolition and Construction: Recommendations' and the guidance contained in Street Works UK (formerly National Joint Utilities Group (NJUG)) Volume 4 Issue 2.

All trees have been visually inspected from ground level unless otherwise stated, with no climbing or boring tests being undertaken. The comments made on their condition are based on observable factors present at the time of inspection.

The information, shown in **Table 1** below, was recorded as part of the tree survey.

Table 1: Tree Survey Schedule heading descriptions

Column Heading	Description
Tree Ref No.	All individual trees and groups of trees have been given a unique reference number. Each number is prefixed by a letter. ▪ T = Individual tree ▪ G = Group of trees
Species	The English common name has been used.
Single or Multiple stem (S or M)	▪ 'S' represents a tree which has a single clear stem to at least 1.5m above ground level. ▪ 'M(a)' represents a tree where the main stem divides into two to five stems below 1.5m above ground level, and ▪ 'M(b)' represents a tree where the main stem divides into 6 or more stems below a height of 1.5m.
Height (m)	Where possible tree heights are measured using a laser. In some instances, such as in close groups of trees, one height may be measured, and other nearby trees estimated from this height. Measurements are provided in metres.

Column Heading	Description
Stem Diameter (mm)	S_n represents the stem number. Measurements are provided in millimetres at 1.5m above ground level for single stemmed trees.
Very Large Girth (y/n)	Girth is very large for species in accordance with Fig 1.3 of publication 'Ancient and other Veteran trees: further guidance on management' Ancient Tree Forum 2013.
Ancient (A), Veteran (V), Notable (N)	Result of the RAVEN 2 assessment © Julian Forbes-Laird 2018 www.flac.uk.com; provided on separate ADAS Sheet 2. (RAVEN = Recognition of Ancient, Veteran and Notable Trees)
Branch Spread (m)	Measured in metres to the four cardinal compass points (N, E, S, W).
Crown Clearance	(1) Height in metres of the first significant branch, and the direction of growth. (2) Height in metres of lowest part of crown.
Life Stage	The stage at which the tree is within its lifecycle (Y = young, SM = semi-mature, EM = early-mature, M = mature, OM = over mature)
General Observations	Any relevant observations are recorded, with particular reference to structural and/or physiological condition.
Preliminary Management Recommendations	Recommendations are made where management work is required for reasons of health and safety or sound arboricultural management.
Estimated Remaining Contribution (years)	An estimation of how long the feature will contribute to its surroundings. This is recorded in bands of either <10 years, 10+ years, 20+ years and 40+ years.
Tree Quality Grading	The trees are graded to the categories prescribed within BS5837:2012 (U, A, B & C). Details of this grading system can be found in **Appendix 2.**
Root Protection Area	Calculated as prescribed in section 4.6 of BS5837:2012, provided as an area (m^2) and a radius from the tree's stem (m).
Note: Those measurements shown in *italics* have been estimated, usually where access has restricted it being taken.	

Legislation

2.1.1 Tree Preservation Orders and Conservation Areas

Local Planning Authorities (LPAs) have the power to preserve selected trees and woodlands through the making of TPOs. Similarly, special provision is provided to trees located within CAs which are not the subject of a TPO. The LPAs powers to do this are provided by the following Act of Parliament and its associated regulations:

- Town and Country Planning Act 1990

- Town and Country Planning (Determination of Appeals by Appointed Persons) (Prescribed Classes) (Wales) Regulations 2015
- Town and Country Planning (Trees) (Amendment) (Wales) Regulations 2017

The principal effect of a TPO is to prohibit the cutting down, uprooting, topping, lopping, wilful damage or wilful destruction of trees without first obtaining the consent of the relevant Local Authority.

Where works to trees within a CA are proposed, six weeks notification must first be given to the relevant Local Authority.

Unauthorized works to trees either protected by a TPO or those that are located within a CA, could result in an unlimited fine for each tree.

An enquiry made via email to Ceredigion County Council on the 26th of November 2025 has established that the main development site (not the two site compounds) sits within the Cardigan Planning Conservation Area (CA) and that there are no Tree Preservation Orders (TPOs) within the site. Due to the site's classification as a CA, a relevant planning application to the Local Authority will be required before works can commence. The results from this search are included in **Appendix 3**.

2.1.2 Additional Designations

An additional search was made on Data Map Wales interactive map and has established that the site does not contain an ancient woodland which could be impacted by the works. The search also established that the River Teifi, which borders the site, is considered an SSSI and an SAC, See **Appendix 4**.

3 Tree Survey Results

Overview

The main development site is located along a section of the Teifi riverfront known as Strand, Cardigan, SA43 1EX, with two compounds located north east of the site, Pont-Y-Cleifion, Cardigan, SA43 1DW, and the other located south of the site, across the river, off Station Road, Cardigan, SA43 3AD.

The main development proposals are located north of the River, with the southern site boundary meeting the rivers edge. The development site runs parallel to the river, containing mulitple pre-exisiting buildings, and a car park on its eastern end. Planted trees are located along the pre-existing walkway and car park, with some being in private property and therefore innaccessible. Both compounds sit in grey-field sites, the northern compound is bordered by multiple tree groups, and the southern compound contains a few features in its northern region.

The survey identified 17 features comprising of 11 individual trees and 6 groups of trees which have the potential to be impacted by the development of the flood defence wall, walkway, engineered riverbank, intertidal area and the associated compounds.

Of these tree features, none were awarded a high-quality A grade, 7 were awarded a moderate-quality B grade, 8 were awarded a low-quality C grade and two were awarded a U grade and recommended for removal. The full Tree Survey Schedule (TSS) is included in **Appendix 5**.

4 Arboricultural Impact Assessment

Overview

The impact that the development works are likely to have on the existing trees has been assessed under the following categories, and the findings are summarised in **Table 2** below.

- Trees proposed for removal due to their position directly in the development works area.
- Retained trees that require extra protection due to their proximity to the development works area.
- Retained trees which are unaffected by the proposed development works.

Table 2: Arboricultural Impact Assessment

Impact	Reason	Tree Quality Assessment Category Grading*				Totals
		A	B	C	U	
Trees/ groups of trees to be removed or partially removed	Directly inside the development works area or in a condition that removal is recommended	None	T2	T4	None	**2**
Retained trees that are at risk of damage due to proximity to the development works area	RPA/overhead parts fully or partially within the installation works area	None	T3, G17, G19	T6, G13, T9, T15, G20	G14	**9**
Retained trees which are unaffected by the development works	Not within works area	None	T10, T18, G21	T11, T12	T16	**6**
	Totals	**0**	**7**	**8**	**2**	**17**

Impacts on Retained Trees

The proposed development will cause impacts to trees and groups of moderate quality B grade and low-quality C grade.

Moderate quality, B grade trees and groups which may be impacted consist of T3, G17 and G19.

Low quality, C grade trees and groups which may be impacted include T5, T9, G13, T15 and G20.

The development footprint is situated within, or directly adjacent to, the RPAs of the trees and groups listed above, therefore the proposed building demolition works and subsequent installation of the flood

wall, engineered riverbank, intertidal zone and site compounds will impact on these features. The features T5 and G13 are located within the car park area, which is currently under revision, therefore impacts have been assumed and mitigated against accordingly. The Impacts are low for all affected features, T3, T5, T9, T15, G13, G17, G19 and G20 assuming mitigation methods are employed.

4.1.1 Building Demolition Within Tree RPA

The proposed development requires the removal of one Third-Party Structure located within the RPA of T9. Based on the construction type, it is not anticipated that any excavation will be required during the demolition process. The portion of the RPA affected is assessed as an area of low rooting potential, due to the presence of an intervening wall between the tree stem and the structure, as well as the building footprint itself, both of which significantly limit root development.

Given the low likelihood of root presence and the presumed absence of invasive ground works, arboricultural supervision is not required in this instance. However, should it become apparent that hard-surface removal or sub-surface disturbance is necessary during demolition, the project arboricultural consultant must be contacted so that this report and the method statement can be updated accordingly, and any required mitigation incorporated.

4.1.2 Ground Level Increase Within RPAs

In order to facilitate a new landscaped area, ground level increases are required within the RPA of T3. The ground level will be increased to a maximum of 450mm at the outer edge of the RPA of the trees southern aspect, then tapering downwards towards the stem. 32% of the RPA will be affected by the ground level change, with the level beginning to increase at 1m from the stem.

Ground level increases within tree RPAs can result in reduced aeration, moisture and nutrient uptake within the root system. However, due to the gradual decrease in level change nearing the stem it is believed that the tree will be able to adapt without significant impact on health under these new conditions.

Tree Pruning

T9 will require canopy pruning to allow clearance for construction works, it is recommended that a 1.5m branch reduction is conducted on branches overhanging the pre-existing wall on the features eastern aspect. It is considered likely that canopy pruning will be required on G17 due to overhang onto the northern compound entrance. If this is confirmed, then a 1m reduction on branches overhanging lower than 5m on the western aspect of the group will allow sufficient clearance for vehicle entrance.

Canopy pruning may also be necessary on features T5 and G13 but due to the design proposals of the area being under consideration, until more detailed plans are provided, it is assumed pruning will not be necessary.

Tree Removal

To facilitate the development of the flood wall, engineered riverbank and walkway, it will be a requirement to remove T2 and T4.

There are also multiple areas of shrub that have been identified on site, shown as 'Out of Scope for Survey' on the Tree Protection Plan (TPP) contained in **Appendix 2.** One of these areas found on 'Sheet 2' of the TPP will require removal due to encroachment on the footprint of the new flood wall (see TPP annotations), and another found on 'Sheet 3' will require partial removal due to encroachment on the flood wall and intertidal area footprint (see TPP annotations).

Remedial Tree Planting

In order to counteract the impact on the local tree stock resulting from the removal of trees T2 and T4, it is recommended that remedial planting is undertaken. In line with Planning Policy Wales 12, where trees are removed to facilitate development, they must be replaced at a ratio of three trees planted for every one tree removed.

Binnies have proposed that 5x Upright Hawthorn trees (Crataegus Monogyna Stricta) will be within Area 1.

5 Method Statement

Overview

The contractors working for / on behalf of Natural Resources Wales will be following the precautions set out below.

Facilitation Tree Work

5.1.1 Tree Removals

To facilitate the development of the flood wall, engineered riverbank and walkways it will be a requirement to remove T2, and T4.

There are also multiple areas of shrub that have been identified on site, shown as 'Out of Scope for Survey' on the Tree Protection Plan (TPP) contained in **Appendix 2.** One of these areas found on 'Sheet 2' of the TPP will require removal due to encroachment on the footprint of the new flood wall (see TPP annotations), and another found on 'Sheet 3' will require partial removal due to encroachment on the flood wall and intertidal area footprint (see TPP annotations).

5.1.2 Tree Pruning

As detailed in **Section 4.3**, T9 will require canopy pruning to allow clearance for construction works, it is recommended that a 1.5m branch reduction is conducted on branches overhanging the pre-existing wall and building on the features eastern aspect. It is considered likely that canopy pruning will be required on G17 due to overhang onto compound entrance. If this is confirmed, then a 1m reduction on branches overhanging lower than 5m on the western aspect of the group will allow sufficient clearance for vehicle entrance.

Canopy pruning may also be necessary on features T5 and G13, but due to the design proposals of the area being under consideration, it is assumed pruning will not be a requirement. Should future designs require further facilitation pruning, the appointed arboricultural consultant will be contacted and plans will be amended and approved before any works are undertaken.

5.1.3 Remedial Tree Planting

Remedial tree planting shall follow the recommendations set out in BS 8545:2014 Trees: from nursery to independence in the landscape. It is recommended to plant one standard grown nursery trees for every tree which is removed, and they shall be planted in or near the existing location. Advice can be sought from the appointed arboricultural consultant.

5.1.4 Proposed Site Compound Locations

The current site compound locations contain multiple tree features which would be impacted by the works, these being G11, G17 and G19. Therefore, ADAS proposes a slight change to the site compound designs to mitigate these impacts, details can be seen in the Tree Protection Plan (TPP) contained in **Appendix 2.**

5.1.5 Standard of tree work

All felling and pruning operations will be carried out in accordance with BS 3998:2010 'Recommendations for Tree Work'; current arboricultural industry guidelines and best practice; and all relevant Health & Safety standards. Tree work is a specialist task that requires operatives to be appropriately qualified, skilled, and adequately insured. Guidance on selecting an appropriate contractor can be obtained from the Arboricultural Association, who also maintains a directory of Approved Contractors. The Arboricultural Association can be contacted on 01242 522152 or via their website http://www.trees.org.uk.

5.2 General Precautions When Working Around Trees

The following precautions will be taken where works are proposed within or adjacent to the RPA or above ground parts of trees:

1. Tree Protection Barriers will be installed on features T5, G13, T15, G17 and G19 to prevent accidental damage as they sit within the works area. An example is shown in **Appendix 9**.
2. If the current design remains unchanged, pre-existing hard surfaces can be used as ground protection for trees with RPAs affected by heavy machinery.
3. Facilitation pruning will be conducted on the feature T9, and likely on the feature G17, prior to the commencement of construction works (see **section 6.22** for details).
4. All excavation work will be conducted outside the RPAs of retained trees.
5. Use of machinery with booms will have a banksman to prevent accidental contact of the boom with the retained trees.
6. As the roots of the trees extend well beyond the limits of the RPAs, no fuels or chemicals should be poured or stored with in an area equal to the height of the tree.
7. Nothing will be attached to the trees.

5.3 Construction Exclusion Zone (CEZ)

The CEZ is defined around the retained trees by the tree protection barriers. Tree protection fencing required on site is shown by a brown line on the Tree Protection Plan (TPP) (**Appendix 2**). Where possible the CEZ is positioned to protect both the crowns and the Root Protection Areas (RPA) of the retained trees. Guidance on RPA's is contained in **Appendix 8**.

5.4 Ground Level Increase within RPAs

Ground level increase is a requirement within the RPA of the feature T3. In order to minimise the damage caused to the feature, The following recommendations should be followed: All machinery will work outside of the RPA of T3, should it prove impossible to achieve this, ground protection methods outlined in **Section 5.5** will be implemented to reduce soil compaction. Fill material should incorporate good quality organic matter to maintain soil structure (subject to engineering requirements). Soil stripping within the RPA prior to filling should be avoided to prevent decaying matter causing anerobic soil conditions.

5.5 Ground Protection

The main site and both site compounds are located on grey field sites with pre-existing hard surfaces throughout. Therefore, it is recommended that the pre-existing hard surfaces will act as ground protection for the retained trees on site. Should the extents of the site change, or should there be any requirements for machinery or tools to be used on soft, unprotected surfacing, ground protection such as TuffTrack will be installed within the RPAs of affected trees prior to works commencing. See **Appendix 7** for details on ground protection such as TuffTrack and **Appendix 8** for further guidance on works within RPAs.

5.6 Barriers

Tree protection barriers will be erected around the RPAs of T3, T6, G13, T15, G17, G19 and G20.

In the case of T9, the pre-existing wall positioned on its eastern aspect can be used as tree protection fencing.

In line with Section 6.2.2 of BS 5837:2012, which requires that the tree protection barriers be fit for the purpose of excluding construction activity and that they provide adequate protection to the trees, it is proposed that they will consist of 2m tall, welded mesh panels supported on concrete feet. Each panel will be secured to its neighbour with a minimum of 2 anti-tamper couplers secured so that they can only be undone from inside the CEZ. The panels will be further supported by stabilizer struts which will be pinned to the ground. An example of this type of barrier is contained in **Appendix 9**. The location of the tree protection barriers is provided on the TPP contained in **Appendix 2**. Their precise location and construction will be agreed on site between the appointed arboricultural consultant and the Local Planning Authority before any site works commence.

Inside the CEZ the following prohibitions will be complied with:

- No excavations, including by hand; unless approved by Ceredigion County Council
- No storage of machinery;
- No storage or handling of building materials, fuel, chemicals, or spoil;
- No fires;
- No vehicular access;
- No pedestrian access; unless approved by Ceredigion County Council
- No alteration, increase or decrease, to existing ground levels; unless approved by Ceredigion County Council;
- No excavation or installation of services; unless approved by Ceredigion County Council.

In order to ensure that the CEZ remains intact, the tree protection barriers will not be moved or temporarily dismantled except in the situations previously mentioned.

To enable site operatives to appreciate the purpose of the protective fencing and reduce the risk of operatives attempting to move them, all-weather notices will be erected on the barriers similar to the example in **Appendix 10**. The barriers will only be adjusted or removed if prior written approval is obtained from Ceredigion County Council.

5.7 Excavations within RPAs

The current design proposals include demolition of an existing building located within the RPA of T9; however, due to the construction type, it is not expected that excavation will be necessary during the demolition process.

Should it become apparent at a later stage that excavation or sub-surface disturbance is required as part of the demolition or any other works within RPAs, the project Arboricultural Consultant will be contacted

prior to works commencing. This will ensure that the appropriate amendments can be made to this report, and that the correct methodology—including arboricultural supervision where necessary—is implemented to mitigate damages to the retained tree.

5.8 Arboricultural Supervision

It is not anticipated that arboricultural supervision will be required for this project. However, should it become apparent at a later date that additional arboricultural impacts, such as excavation, will be required within the RPA of any retained tree, the project Arboricultural Consultant should be contacted prior to works commencing, and supervision will be arranged if they deem it necessary.

6 Arboricultural Input

6.1 Sequence of Events

The following Arboricultural Sequence of Events shall be referenced during the works process:

Ceredigion County Council **Approval of Arboricultural Method Statement**
▼
Pre-commencement site meeting (if necessary) / Arboricultural Tool-box Talk
▼
Removal of features T2 and T4 and crown reduction works undertaken on features T9 and G17 if deemed necessary.
▼
Installation of additional temporary tree protection fencing
▼
Commencement of building removal, compound development and installation of the new flood wall, flood embankment, intertidal area and footpath.
▼
All Binnies works completed
▼
Removal of tree protection fencing and ground protection

See **Appendix 11** for more details on 'BS 5837 Sequence of Events'

6.2 Key Contacts during Development

A list of key contacts relevant to this site that may be required throughout the duration of the works has been included in **Appendix 12**.

6.3 Arboricultural Monitoring

It is not anticipated that arboricultural monitoring will be necessary for this project. However, the appointed arboricultural consultant will be kept informed of the progress of works and the root and crown pruning works.

7 Conclusion

ADAS has identified 17 arboricultural features which have the potential to be impacted by the proposed development within the site known as The Strand, Cardigan. The features have been recorded in the Tree Survey Schedule and plotted on the Tree Protection Plan, which form part of this report.

To facilitate the development works, it will be a requirement to remove three features, the moderate quality category B feature T2 and the low-quality category C feature T4. Multiple shrub groups shown on the TPP in **Appendix 2** will also require removal to facilitate works.

An enquiry made via email to Ceredigion council on the 26th of November 2025 has established that the main development site (not the two site compounds) sits within the Cardigan Planning Conservation Area (CA) and that there are no Tree Preservation Orders (TPOs) within the site. Due to the sites classification as a CA, a relevant planning application to the Local Authority will be required before works can commence. The results from this search are included in **Appendix 3**.

Additional searches were made on Data Map Wales interactive map and has established that the site does not contain an ancient woodland which could be impacted by the works. The site does border the River Teifi, which is classed as an SSSI, and an SAC. The results of this search are included in **Appendix 4.**

To mitigate against tree loss and in line with Planning Policy Wales 12, removed trees must be replaced at a ratio of three trees planted for every one removed. Therefore, It has been proposed by Natural Resources Wales that five Upright Hawthorn (Crataegus Monogyna Stricta) will be planted to replace the removed features. It is not a requirement to replace any trees for the removal of a category U tree.

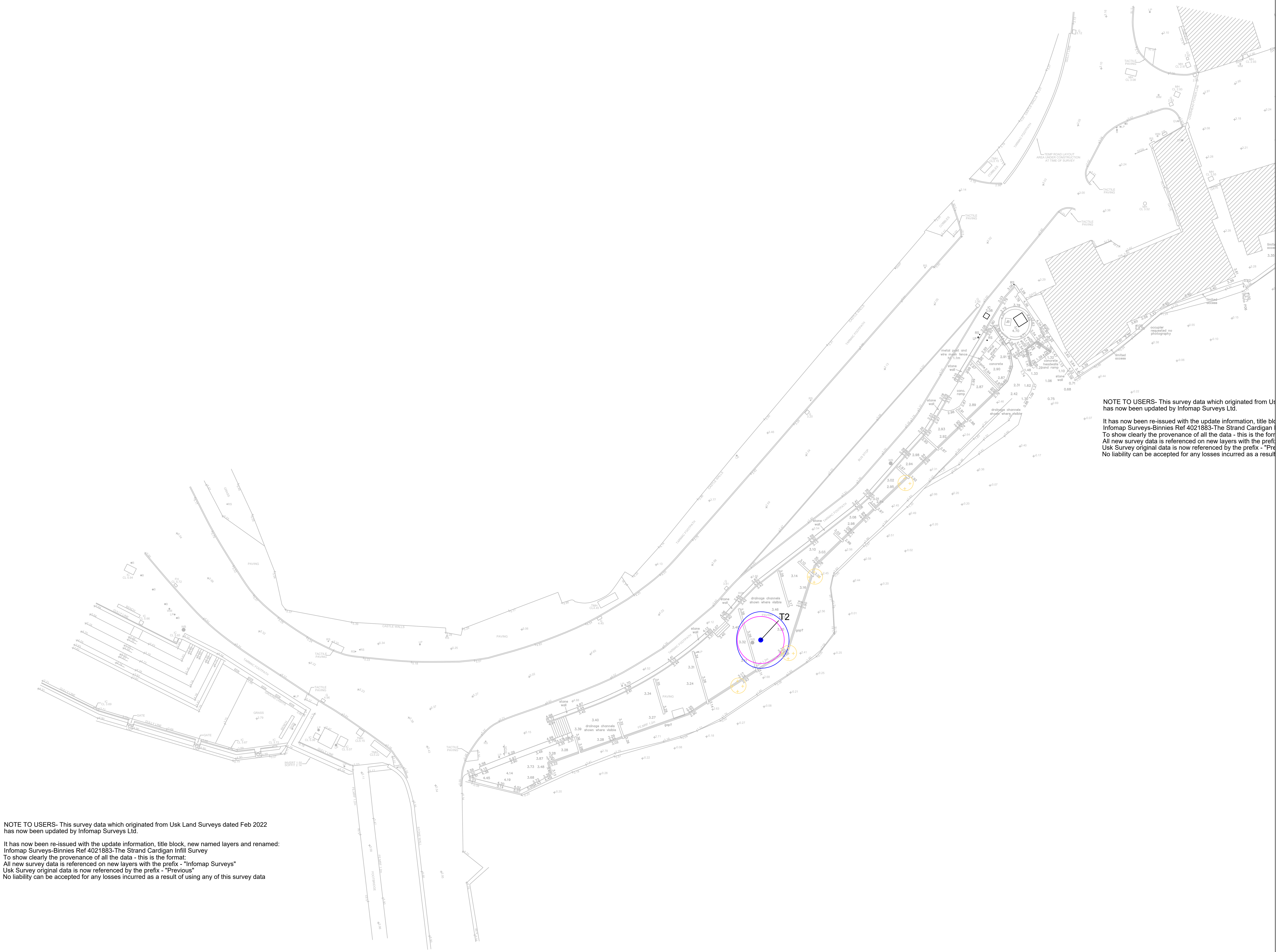
It will also be a requirement to undertake canopy pruning works on T9 due to parts of its canopy encroaching on the footprint of a building set for demolition. It is also likely that pruning will be necessary on G17, due to branches on its western canopy overhanging the entrance to the northern compound.

During the development works, precautions will need to be taken as set out in **Section 5** of this report to ensure that the trees can be successfully retained with the use of ground protection and tree protection fencing.

ADAS is satisfied that if the recommendations contained within this Arboricultural Method Statement are followed, then the installation works can take place with minimal harm being caused to the retained trees.

Appendix 1: Tree Constraints Plan

See following page.



NOTE TO USERS- This survey data which originated from Us
has now been updated by Infomap Surveys Ltd.

It has now been re-issued with the update information, title blo
Infomap Surveys-Binnies Ref 4021883-The Strand Cardigan I
To show clearly the provenance of all the data - this is the form
All new survey data is referenced on new layers with the prefix
Usk Survey original data is now referenced by the prefix - "Pre
No liability can be accepted for any losses incurred as a result

NOTE TO USERS- This survey data which originated from Usk Land Surveys dated Feb 2022
has now been updated by Infomap Surveys Ltd.

It has now been re-issued with the update information, title block, new named layers and renamed:
Infomap Surveys-Binnies Ref 4021883-The Strand Cardigan Infill Survey
To show clearly the provenance of all the data - this is the format:
All new survey data is referenced on new layers with the prefix - "Infomap Surveys"
Usk Survey original data is now referenced by the prefix - "Previous"
No liability can be accepted for any losses incurred as a result of using any of this survey data

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LEGEND

TREE CATEGORIES - NOTE: Quality class description derived from BS5837:2012

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

Category B
Trees / Groups of moderate quality: with an estimated remaining life expectancy of at least 20 years.

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

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

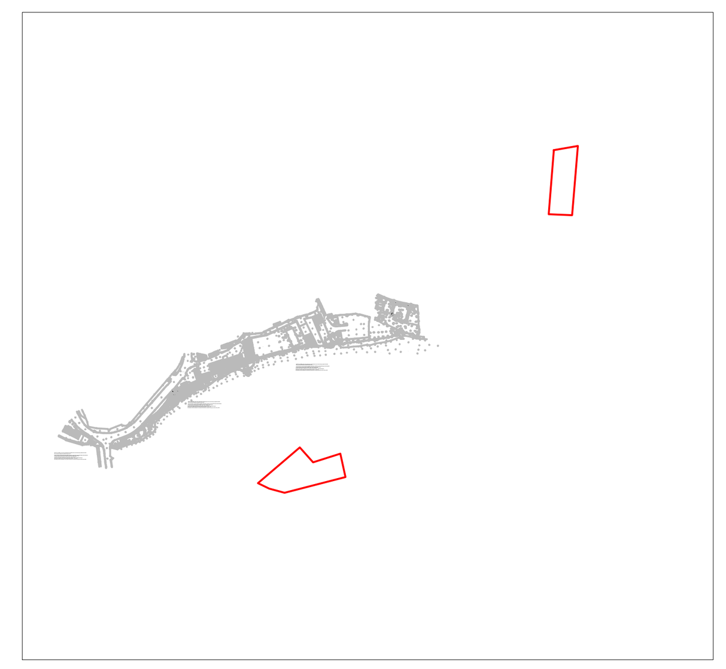
Root Protection Area (RPA)

T#* — Trees not included in original site survey and therefore positions are indicative only.

Out of Scope for Survey
Scrub and shrub vegetation less than 75mm in diameter.

Based on ISM-Binnies-4021883-The Strand-Cardigan-Infill survey-3D-Rev1.dwg. Please see original for details.

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



Rev.	Issue Details.	Date.
First Issue	-	July 2025

Client:
Binnies

Project:
Cardigan

Drawing Title:
Tree Constraints Plan (Sheet 1)

Drawing No: ADAS_1053270_Binnies_Cardigan_TCP

Scale: 1:250 at A1

Drawn by: EL Date: 24.07.25

Checked by: IW Date: 25.07.25

ADAS, Spring Lodge, 172 Chester Road,
Helsby, WA6 0AR

Tel: 0333 0142950

NOTE TO USERS- This survey data which originated from Usk Land Surveys dated Feb 2022
has now been updated by Infomap Surveys Ltd.
It has now been re-issued with the update information, title block, new named layers and renamed:
Infomap Surveys-Binnies Ref 4021883-The Strand Cardigan Infill Survey
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0 10m 1:250

LEGEND

TREE CATEGORIES - NOTE: Quality class description derived from BS5837:2012

Category A
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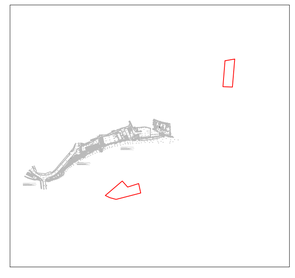

Rev.	Issue Details.	Date.
First Issue	-	July 2025

Client:
Binnies

Project:
Cardigan

Drawing Title:
Tree Constraints Plan (Sheet 2)

Drawing No: ADAS_1053270_Binnies_Cardigan_TCP

Scale: 1:250 at A1

Drawn by: EL Date: 24.07.25

Checked by: IW Date: 25.07.25

ADAS, Spring Lodge, 172 Chester Road,
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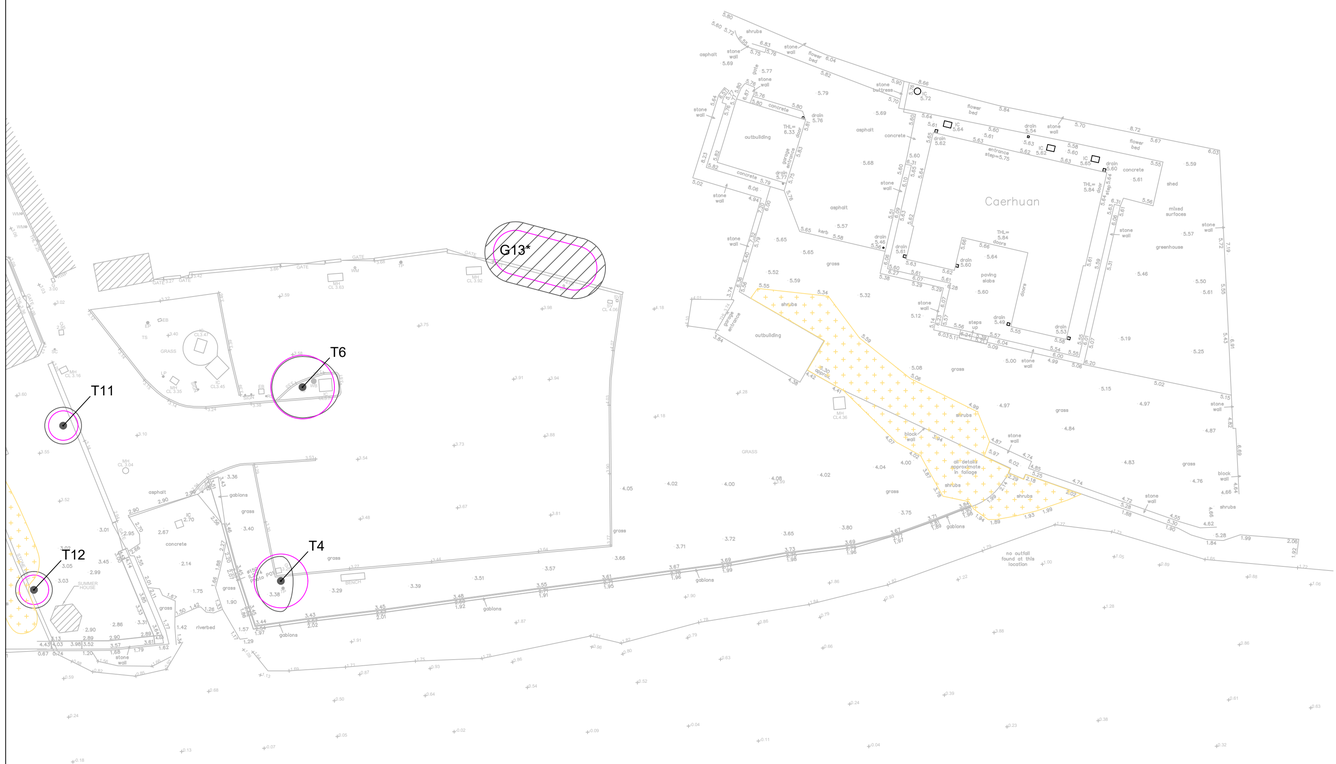

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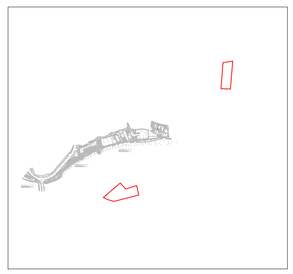

Rev.	Issue Details.	Date.
First Issue	-	July 2025

Client:
Binnies

Project:
Cardigan

Drawing Title:
Tree Constraints Plan (Sheet 3)

Drawing No: ADAS_1053270_Binnies_Cardigan_TCP

Scale: 1:250 at A1

Drawn by: EL Date: 24.07.25

Checked by: IW Date: 25.07.25

ADAS, Spring Lodge, 172 Chester Road,
Helsby, WA6 0AR

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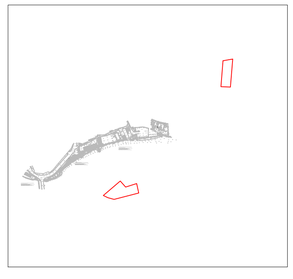

Rev.	Issue Details.	Date.
First Issue	-	July 2025

Client:
Binnies

Project:
Cardigan

Drawing Title:
Tree Constraints Plan (Sheet 4)

Drawing No: ADAS_1053270_Binnies_Cardigan_TCP

Scale: 1:250 at A1

Drawn by: EL Date: 24.07.25

Checked by: IW Date: 25.07.25

ADAS, Spring Lodge, 172 Chester Road,
Helsby, WA6 0AR

Tel: 0333 0142950

T18*

G19*

G21*

G20*

G17*

0 10m 1:250

LEGEND

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Rev.	Issue Details.	Date.
First Issue	-	July 2025

Client:
Binnies

Project:
Cardigan

Drawing Title:
Tree Constraints Plan (Sheet 5)

Drawing No: ADAS_1053270_Binnies_Cardigan_TCP

Scale: 1:250 at A1

Drawn by: EL Date: 24.07.25

Checked by: IW Date: 25.07.25

ADAS, Spring Lodge, 172 Chester Road,
Helsby, WA6 0AR

Tel: 0333 0142950

Appendix 2: Tree Protection Plan

See following page.

LEGEND

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Root Protection Area (RPA)

Trees To Be Removed
Trees / Groups: which are to be removed

Building Demolition Within RPA

Tree Protection Fencing

Proposed Site Compound

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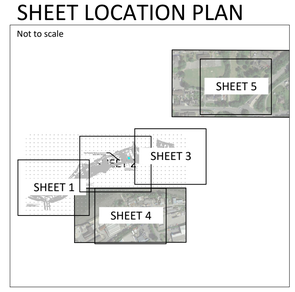
SHEET LOCATION PLAN

Not to scale



Rev.	Issue Details.	Date.
Rev A	-	March 2026
First Issue		February 2026

Client:
Binnies

Project:
Cardigan

Drawing Title:
Tree Protection Plan (Sheet 1)

Drawing No: ADAS_1053270_Binnies_Cardigan_TPP

Scale: 1:250 at A1

Drawn by: LO Date: 12.02.26

Checked by: EL Date: 13.02.26

ADAS, Spring Lodge, 172 Chester Road,
Helsby, WA6 0AR

Tel: 0333 0142950

Facilitation pruning of 1.5m back to pre-existing wall to allow clearance from construction works

Maximum of 450mm ground level increase within 32% of RPA.

Tree Protection Barrier to ensure no further RPA incursion

Building demolition to encroach into tree RPA. No excavation anticipated therefore risk of root damage low. Existing stone wall to act as protection barrier

Overgrown shrub group to be removed to facilitate works

T3 T4 T6 T9 T10 T11 T12 G13

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N

0 10m 1:250

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Trees / Groups: which are to be removed

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Tree Protection Fencing

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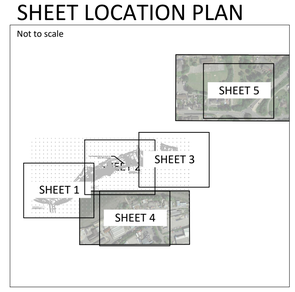
SHEET LOCATION PLAN

Not to scale



Rev.	Issue Details.	Date.
Rev A	-	March 2026
First Issue		February 2026

Client:
Binnies

Project:
Cardigan

Drawing Title:
Tree Protection Plan (Sheet 2)

Drawing No: ADAS_1053270_Binnies_Cardigan_TPP

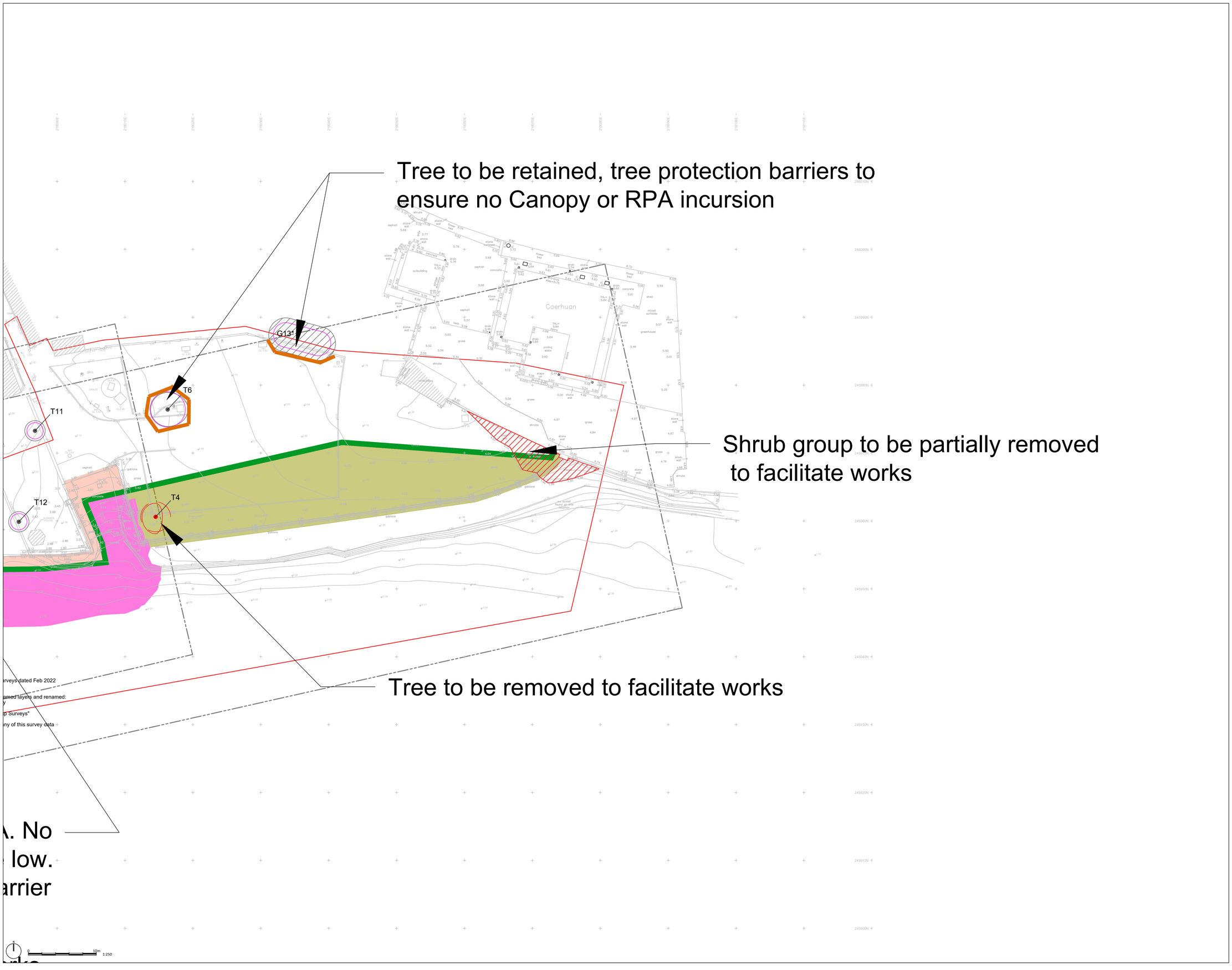
Scale: 1:250 at A1

Drawn by: LO Date: 12.02.26

Checked by: EL Date: 13.02.26

ADAS, Spring Lodge, 172 Chester Road,
Helsby, WA6 0AR

Tel: 0333 0142950



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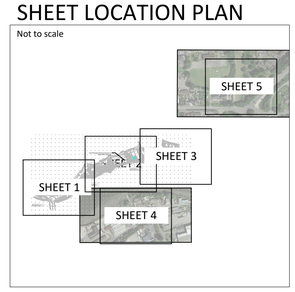

Rev.	Issue Details.	Date.
A	-	March 2026
First Issue	-	February 2026

Client:
Binnies

Project:
Cardigan

Drawing Title:
Tree Protection Plan (Sheet 3)

Drawing No: ADAS_1053270_Binnies_Cardigan_TPP

Scale: 1:250 at A1

Drawn by: LO Date: 12.02.26

Checked by: EL Date: 13.02.26

ADAS, Spring Lodge, 172 Chester Road,
Helsby, WA6 0AR

Tel: 0333 0142950

Afon Teifi

G14*

T15*

Tree protection barriers to ensure works don't encroach on RPA

AJS Farm & Animal Supplies

Tivy Tyres

Cardigan railway station

T16*

Compound to be sited outside of Tree RPAs

Williams Corbett & Sons

0 10m 1:250

LEGEND

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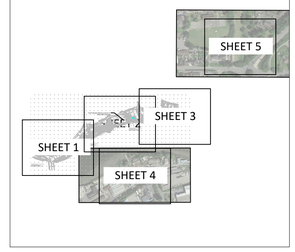

Rev.	Issue Details.	Date.
Rev A	-	March 2026
First Issue		February 2026

Client:
Binnies

Project:
Cardigan

Drawing Title:
Tree Protection Plan (Sheet 4)

Drawing No: ADAS_1053270_Binnies_Cardigan_TPP

Scale: 1:250 at A1

Drawn by: LO Date: 10.02.26

Checked by: EL Date: 11.02.26

ADAS, Spring Lodge, 172 Chester Road,
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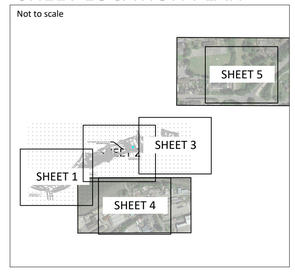

Rev.	Issue Details.	Date.
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Drawn by: LO Date: 12.02.2026

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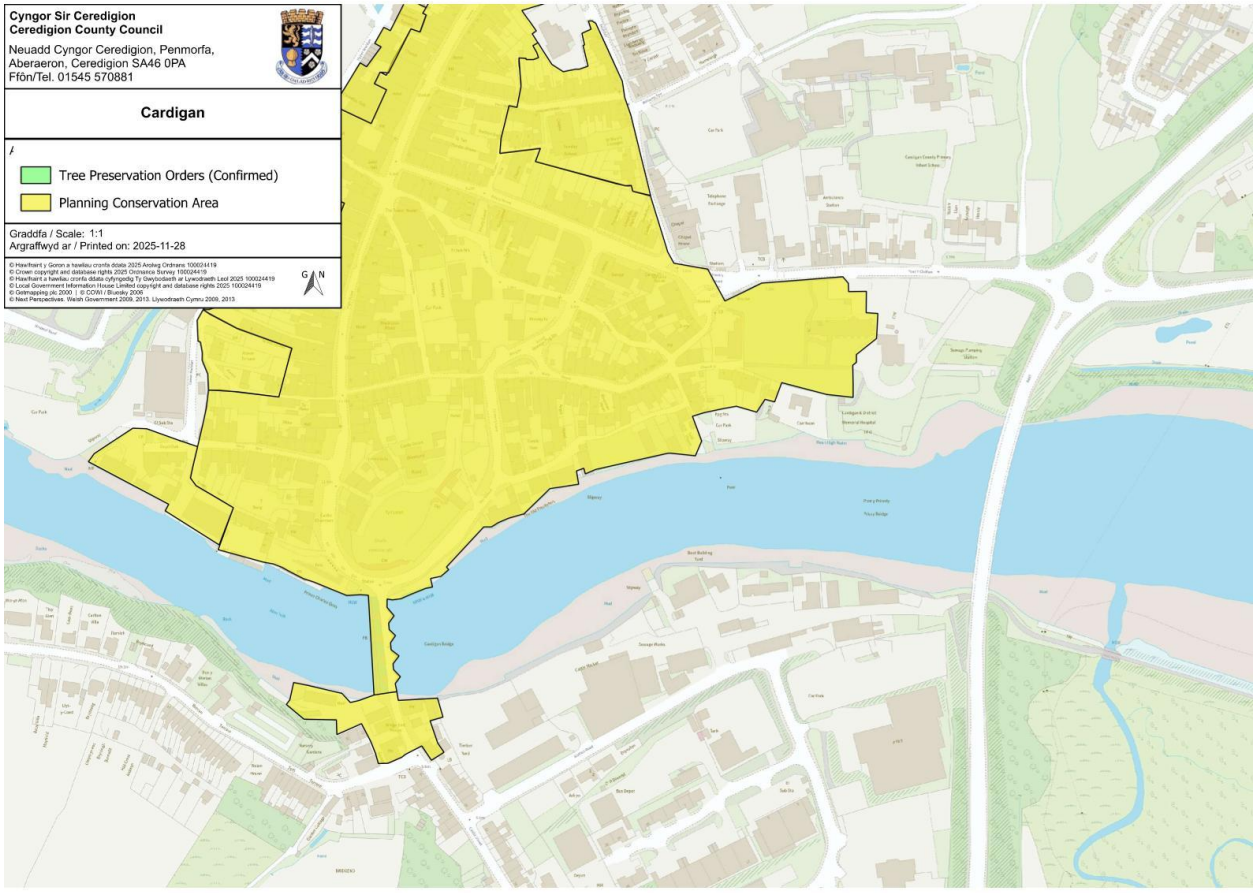
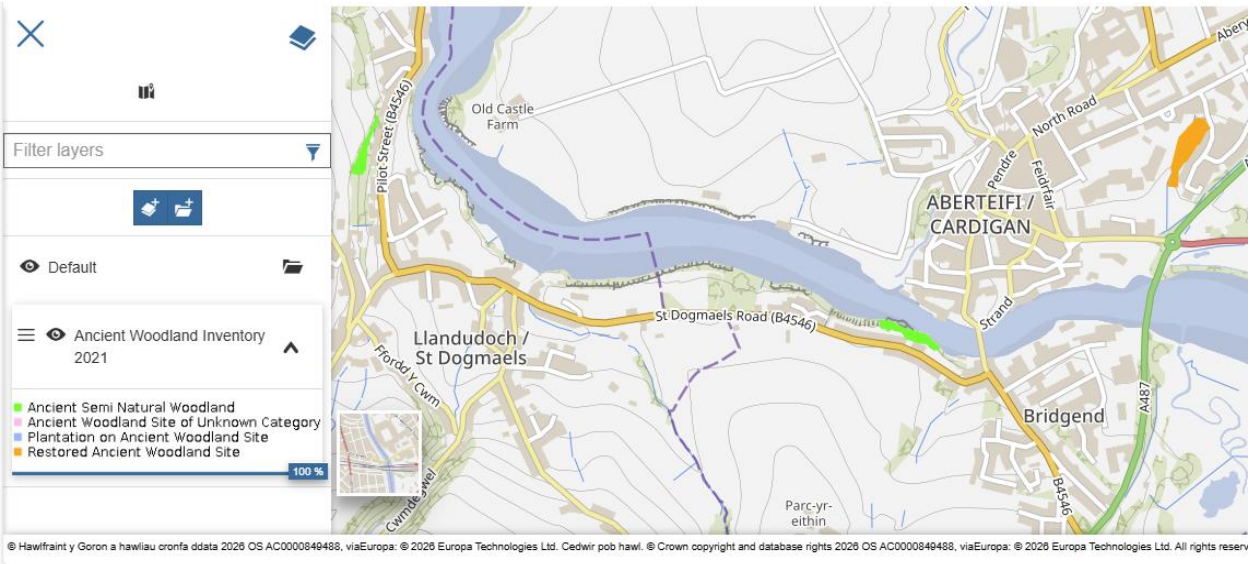
ADAS, Spring Lodge, 172 Chester Road,
Helsby, WA6 0AR

Tel: 0333 0142950

Appendix 3: Conservation Area and TPO Searches



Appendix 4: SSSI, Ancient Woodland and ATI Searches



Appendix 5: Tree Survey Schedule

See following page.

Tree Ref No.	Species	Single or Multiple Stem (S or M)	Height (m)	Stem Diameter (mm) S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	Very Large Girth (Y / N)	Ancient, Veteran or Notable (A, V or N)	Branch Spread (m) N	E	S	W	Crown Clearance (m) (1)	(2)	Life Stage	General Observations (structural / physiological condition)	Preliminary Management Recommendations	Estimated Remaining Contribution (years)	Tree Quality Grading	Root Protection Area (m^2)	(radius in m)
T2	Common Lime	S	6	240										N	-	3.5	3.5	3.5	3	2.0-N	1.5	SM	Minor deadwood and branch dieback in crown. Leaf scorch evident.	None.	20+	B1	26.1	2.9
T3	Wild Pear	M(a)	8	190	430									N	-	3.5	4	5.5	3.5	1.0-E	0.5	M	Bifurcate at base. Minor deadwood and branch dieback in crown. Basal decay cavity in Eastern stem and cavity at 0.5m on Northern aspect of Western stem	None.	20+	B1	100.0	5.6
T4	Laburnum	S	4	180										N	-	2	1	2.5	2	2.0-N	2	EM	Large stem wound with decay column from ground level to 2.0m.	None.	10+	C1	14.7	2.2
T6	Laburnum	M(a)	4	140	120	90	80							N	-	2.5	3	2.5	2.5	1.5-E	1	EM	Trifurcate at 1.0m with included bark at stem unions. Stem wounding with decay at 1.0m on Southern aspect.	None.	10+	C1	21.9	2.6
T9	Wild Pear	S	6	210										N	-	2.5	2.5	3.5	3.5	2.5-N	1.5	EM	Ivy clad tree exhibiting reduced vigour. Growing against wall. Minor deadwood and branch dieback in crown.	None.	10+	C1	20.0	2.5
T10	Sycamore	S	7	250										N	-	4	4	4	4	1.0-S	0.5	SM	Bifurcate at 1.5m. Restricted inspection due to dense bramble. Growing against wall.	None.	20+	B1	28.3	3.0
T11	Holly	S	4	100										N	-	1.5	1.5	1.5	1.5	1.0-N	1	SM	Small tree in private garden. Detailed inspection restricted due to access constraints.	None.	20+	C1	4.5	1.2
T12	Wild Pear	S	4	100										N	-	1.5	1.5	1.5	1.5	1.0-N	1	SM	Small tree in private garden. Detailed inspection restricted due to access constraints.	None.	20+	C1	4.5	1.2
G13	Willow, Mock Orange	S	5	150										N	-	2.5	2.5	2.5	2.5	1.0-N	1	SM	Off-site trees and shrubs. No access for detailed inspection.	None.	10+	C2	10.2	1.8
G14	Willow	S	11	440										N	-	6	6	6	6	3.0-E	2	M	Group of two trees. One tree is dead and other is in advanced decline. No long term potential.	Fell and remove.	<10	U	87.6	5.3
T15	Norway Maple	S	4	160										N	-	1.5	1.5	1.5	1.5	2.0-N	2	SM	Bifurcate at 1.5m. Growing close to building. Previously topped.	None.	10+	C1	11.6	1.9
T16	Ash	S	4	110										N	-	1.5	1.5	1.5	1.5	2.0-S	2	SM	In decline with Ash dieback disease evident.	None.	<10	U	5.5	1.3
G17	Bird Cherry, Sycamore, Field Maple, Dogwood, Hazel	S	12	220										N	-	4	4	4	4	0-N	0	EM	Dense group of trees adjacent to road. Japanese knotweed observed to be growing along northern edge of group.	None.	20+	B2	21.9	2.6
T18	Ash	M(a)	12	350	350									N	-	4.5	5	5	4.5	2.5-N	2	EM	Bifurcate at base. Minor deadwood in crown. Ivy clad stems.	None.	20+	B1	110.8	5.9
G19	Elm, Hawthorn, Elder, Damson	S	12	230										N	-	4	4	4	4	0-E	0	EM	Linear boundary group of off-site trees. No access for detailed assessment.	None.	20+	B2	23.9	2.8
G20	Elm, Leyland Cypress	S	2	100										N	-	1.5	1.5	1.5	1.5	0-N	0	SM	Section of scrub and edge of garden hedgerow adjacent site entrance.	None.	10+	C2	4.5	1.2
G21	Red Oak, Purple Maple	S	14	350										N	-	4.5	4.5	4.5	4.5	2.0-S	2	EM	Off-site tree group with no access for detailed survey.	None.	20+	B2	55.4	4.2

Appendix 6: Cascade Chart for Tree Quality Assessment

See following page.

Table 1 **Cascade chart for tree quality assessment**

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

Appendix 7: Ground Protection Example

See following pag

EuroMat

EuroMat

EuroMat is the ultimate solid medium duty road mat ideal for use as temporary roadways, pedestrian pathways, work areas for plant and machinery, drilling rigs, depot or storage areas.

EuroMat® is a market leading medium duty ground protection mat designed as an ideal man-handleable solution for a wide range of applications including temporary roadways, work pads, depot storage areas or as pedestrian access.

of undulating or sloping ground conditions.

Light in weight at just 35 kg, EuroMat has strategically positioned hand holes for ease of use when handling. EuroMat is fast and easy to offload and install, easily deployed by a two-person team. The unique chevron traction® surface design delivers superior grip and improved forward motion of heavy equipment or vehicles and reduces side way slippage, even in the most challenging weather or ground conditions.

Applications:

- Construction, civil engineering and ground work
- Temporary access and roadways
- Pedestrian walkways
- Emergency access routes
- Utilities and infrastructure maintenance
- Golf course and sports field maintenance
- Sports and leisure events

An optional low profile surface on the reverse of the mat makes EuroMat ideal for use in pedestrian walkways.

EuroMat has a range of connector options available to suit any ground conditions including 2 and 4-way connectors, flex connectors and fast fit connectors for quicker installations.

Features:

- 100% recycled High Density Polyethylene (HDPE)
- Load bearing capacity up to 120 tonnes*
- Unique chevron traction® surface for maximum grip
- Low profile surface option for pedestrian walkways and outdoor events
- Man-deployable thanks to its lightweight design
- Hand holes for ease of handling – Fast and easy to install
- Moulds to uneven or undulating ground conditions due to its flexible design
- Various connector options available to suit different ground conditions and application
- Rugged nub design, pedestrian traction or smooth finish on request
- Low transportation and handling cost

Length:	2410 mm	(7'11")
Width:	1200 mm	(3'11")
Depth:	12 mm	(0.5")
Usable Surface Area:	2.9 m²	(31.2 ft²)
Weight:	35 kg	(77 lbs)

View the EuroMat brochure:

*Load bearing capacity is subject to ground conditions.

Sizing is subject to a manufacturing variance of +/- 5%.

To find out more about EuroMat or if you have an enquiry, then please use our contact form below.

Send us your enquiry

Name *

E-Mail *

Subject *

Message *

Submit

Appendix 8: RPA Guidance

The Root Protection Area (RPA) is calculated from the stem diameter of the tree, in accordance with the guidance contained in section 4.6 of BS 5837:2012. Where trees have been identified as being either Ancient, Veteran or Notable, then the standing advice has been adopted to provide a 'buffer zone' of 15x the stem diameter.

These areas are normally sacrosanct, and should not be entered, by traffic or foot, during construction, or used to store materials, fuel, or chemicals.

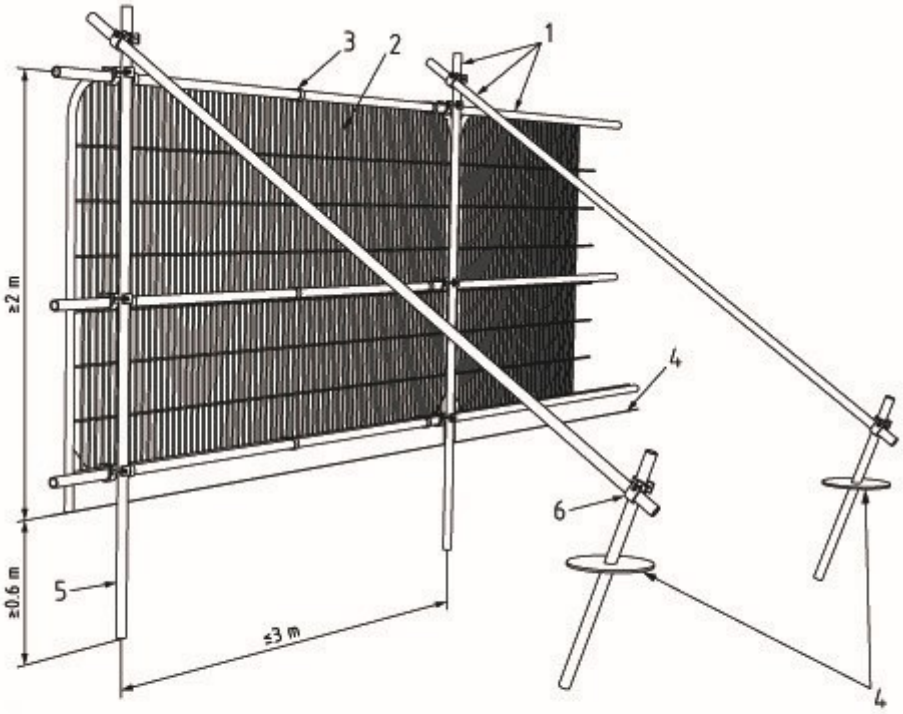
Protective fencing should be erected along the edge of the RPA, before construction begins, and should not be moved until after all construction has finished and vacated the site. The type of fencing used should be fit for purpose, and ordinarily conform to the recommendations given in section 6.2.2 of BS 5837:2012 and be erected similar to the example shown in Figure 2 of the same standard.

Where underground services cannot be routed outside the RPA, these should be installed by trenchless technology, such as a directional drill. Where this technology is used the underground channel created should be no less than 600mm below normal ground level, or the base of the tree. Also, the starting and receiving excavations should not be within the RPA. Drill channel lubricant should be avoided, other than water, unless precautions are taken to prevent contamination of soil and possibly water. Hand digging may be an alternative to trenchless excavation, but this is less desirable, and not always practical.

When determining the workable space around the RPA of a tree or trees, it is also important to maintain a working zone of one metre (which is usually sufficient) between the edge of construction and the protective fencing.

Appendix 9: Example Tree Protection Barrier

See following page.



Key

1 Standard scaffold poles

2 Heavy gauge 2 m tall galvanized tube and welded mesh infill panels

3 Panels secured to uprights and cross-members with wire ties

4 Ground level

5 Uprights driven into the ground until secure (minimum depth 0.6 m)

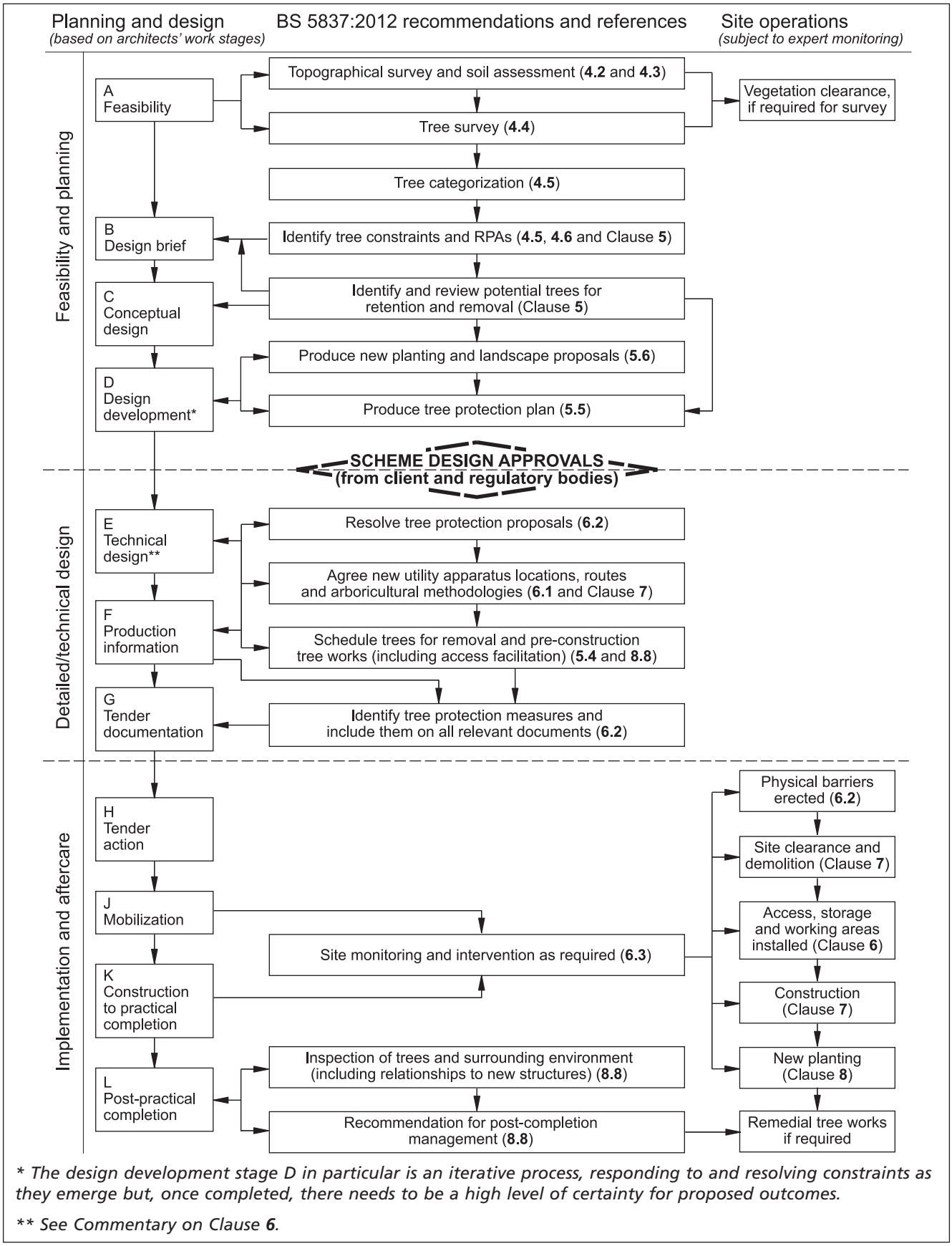
6 Standard scaffold clamps

Appendix 10: Example Tree Protection Barrier Sign

Appendix 11: BS 5837 Sequence of Events

See following page.

Figure 1 **The design and construction process and tree care**



** The design development stage D in particular is an iterative process, responding to and resolving constraints as they emerge but, once completed, there needs to be a high level of certainty for proposed outcomes.*

*** See Commentary on Clause **6**.*

Appendix 12: Contact Details

	Name	Main Contact and Details
Site Details	Cardigan Tidal FRMS	TBC
Developer	Natural Resources Wales	Bethan Hill
Site Manager	Binnies	TBC
Assistant Arboricultural Consultant	ADAS	Lemmy O'Brien RSK ADAS Ltd Abbey Park Industrial Estate Chancery House Romsey SO51 9AQ T: 07767 529908 E: lemmy.obrien@adas.co.uk
Local Authority:	Ceredigion County Council	Neuadd Cyngor Ceredigion Penmorfa Aberaeron Ceredigion SA46 0AP Tel. 01545 570881