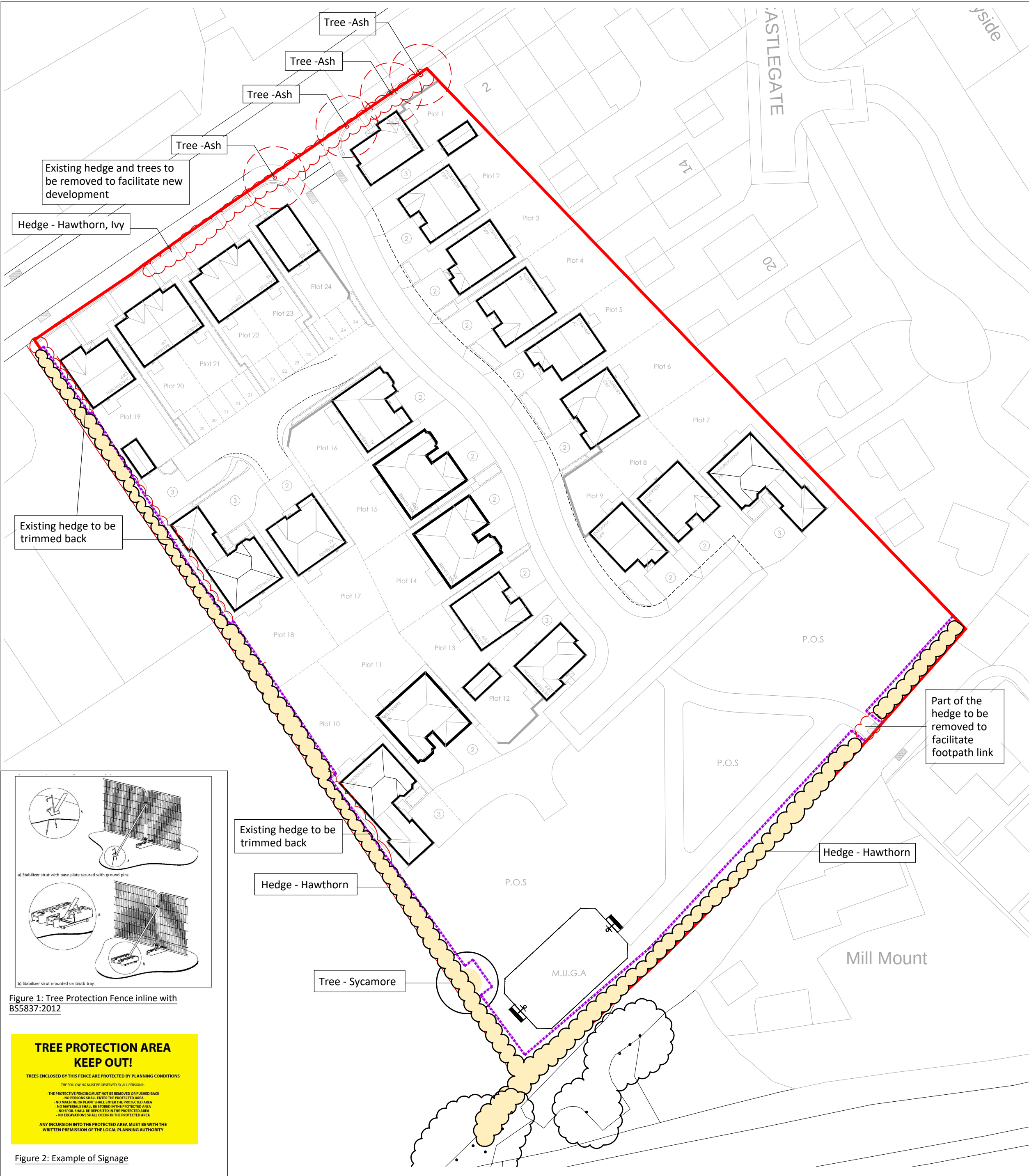




ARBORICULTURAL METHOD STATEMENT

This method statement has been produced from current guidelines BS5837:2012 Trees in relation to design, demolition and construction recommendations.

If in doubt on any issues relating to the retention and protection of the existing trees on site please contact TPM Landscape (project arboriculturist) on 0161 235 0600.

The appointed contractor should consider and follow these recommendations whilst working on the project. The appointed contractor must consult the project arboriculturist who will oversee any critical operations close to the existing trees and make regular checks to ensure that the tree protection fence and working methods as described below are adhered to.

SITE OFFICES/WELFARE FACILITIES AND COMPOUND

Site offices, welfare facilities and compound should NOT be set up inside of the tree protection areas. If the cabins are to be used in parts as the tree protection barrier then they should be set on pads to avoid compaction of the soil.

There should be no discharge of effluent into the tree protection area and the site should be arranged so that there is no run off into the trees or any chance of hazardous substances leaching into the ground.

This drawing must be used by the appointed contractor to work up a site works drawing which shows the position of the temporary site office, welfare facilities, storage compound, temporary hard standing and site access for vehicles and pedestrians. This drawing should also show the position of the Tree protection Fence which should be regarded as sacrosanct.

TREE WORKS

All trees and groups (shown in a red dashed line) as indicated on the plan to be removed inline with good arboricultutal practice inline with BS3998:2010 and outside of the bird nest season (31st March-31st August) or following a bird nest inspection by a qualified ecologist. Stumps should be ground out and the surface left flat (avoid any unnecessary disturbance in the RPA of the existing trees to be retained).

TREE PROTECTION FENCE

All trees as shown to be retained on the approved plan should be protected by a tree protection fence and/ or ground protection before any materials or machinery brought onto the site or stripping of topsoil commences. Please refer to drawing for location of the Tree Protection Fence and Figures 1 for the specification.

All-weather notices should be attached to the barrier with words such as: "TREE PROTCTION AREA - KEEP OUT" Please refer to Figure 2 for an example of the signage.

The contractor should invite the project arboricultutalist or the tree officer at Wrexham County Borough Council to site once the fencing and any ground protection has been installed to check the works.

TREE PROTECTION NOTES

Where all activity can be excluded from the Root Protection Area (RPA) the fence should be erected to create a construction exclusion zone. Where, due to site constraints, construction activity cannot be fully or permanently excluded in this manner from all or part of a tree's RPA, appropriate ground protection should be installed. This temporary ground protection should look to fulfil the following;

- a) for pedestrian movements only, a single thickness of scaffold boards placed either on top of a driven scaffold frame, so as to form a suspended walkway, or on top of a compression-resistant layer (e.g. 100 mm depth of woodchip), laid onto a geotextile membrane;
- b) for pedestrian-operated plant up to a gross weight of 2 t, proprietary, inter-linked ground protection boards placed on top of a compression-resistant layer (e.g. 150 mm depth of woodchip), laid onto a geotextile membrane;
- c) for wheeled or tracked construction traffic exceeding 2 t gross weight, an alternative system (e.g. proprietary systems or pre-cast reinforced concrete slabs) to an agreed specification to accommodate the likely loading to which it will be subjected.

The protected area should be regarded as sacrosanct, and, once installed, barriers and ground protection (unless identified on the drawing) should not be removed or altered without prior recommendation/ approval by the project arboriculturist and, where necessary, approval from the local planning authority.

Fires on sites should be avoided if possible where there are existing trees. Where they are unavoidable, they should not be lit in a position where heat could affect foliage or branches. The potential size of a fire and the wind direction should be taken into account when determining its location, and it should be attended at all times until safe enough to leave.

Any materials whose accidental spillage would cause damage to a tree should be stored and handled well away from the outer edge of its RPA.

The fence should be maintained at all times throughout the construction works and ensure that they remain rigid and complete.

Fencing
For Fence posts within the RPA no excavations using mechanical diggers will be allowed. Localised holes to be dug by hand to accommodate the fence posts. The location of the post holes should be positioned to avoid damaging any major roots.

Paths / Parking
Paths/Parking areas over RPA's are to be constructed on top of existing levels to a NO DIG construction method. Foundations should be formed with an angular (free draining) MOT. Any edgings to be formed using EXCEL edge and pinned into position.

Excavation for paving foundations should be undertaken carefully, using hand-held tools and preferably by compressed air soil displacement. Roots, whilst exposed, should immediately be wrapped or covered to prevent desiccation and to prevent from rapid temperature changes. Any wrapping should be removed prior to backfilling, which should take place as soon as possible.

EXISTING HARD SURFACES WITHIN RPA
Excavations should be undertaken carefully, using hand-held tools or the smallest possible mechanical bucket and/ or compressed air soil displacement. These works should be carried out under the supervision of a contractor (who understands the importance of tree roots) or a qualified arboriculturist. The existing surface should be excavated working backwards over the area, so that the machine is not moving over the exposed ground. To avoid damage to tree roots, existing ground levels of existing surface or back fill material should be retained within the RPA.

Prior to backfilling, retained roots should be surrounded with topsoil or uncompacted sharp sand (builders' sand should not be used because of its high salt content, which is toxic to tree roots), or other loose inert granular fill, before soil or other suitable material is replaced. This material should be free of contaminants and other foreign objects potentially injurious to tree roots.

PROPOSED HARD SURFACES WITHIN RPA - REQUIRED EXCAVATIONS

Working with the RPA which require disturbing the ground and potentially tree roots should follow the guidelines below. Excavation works should be supervised by an arboriculturist and at NO point should roots be ripped or dragged out by a mechanical digger.

The digger should work from the outside in to ensure that the arm does not damage or rip any low hanging branches and digger should sit outside of the tree protection fence.

Water the tree a few days before works are carried out, making sure the ground is moist within the drip line of the tree (only required during the growing season).

If tree roots are encountered make sure the cuts are done with hand tools that will make clean, quick cuts (ie.chain saw or axe), do not use large mechanical equipment.

Make sure cut roots are covered with soil and woodchips as soon as possible, DO NOT LEAVE EXPOSED. If roots are going to be exposed for more than an hour cover with a damp cloth.

METHOD FOR CUTTING TREE ROOTS

Water the tree a few days before works are carried out, making sure the ground is moist within the drip line of the tree (only required during the growing season).

Roots smaller than 25mm diameter may be pruned back, making a clean cut with a suitable sharp tool (e.g. bypass secateurs or handsaw) except where they occur in clumps. Roots occurring in clumps or of 25mm diameter and over should be severed only following consultation with an arboriculturist, as such roots might be essential to the trees health and stability.

Prior to backfilling, retained roots should be surrounded with topsoil or uncompacted sharp sand (builders' sand should not be used because of its high salt content, which is toxic to tree roots), or any other loose inert granular fill, before soil or other suitable material is replaced. This material should be free of contaminants and other foreign objects.

LEGEND



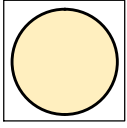
Existing Trees and Hedgerow to be Retained

To be retained and protected inline with BS5837:2012 throughout the demolition and construction associated with the development.

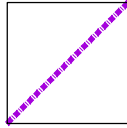


Existing Tree and Hedgerows to be Removed

To facilitate new development. Works carried out inline with good arboricultural practice and outside of the bird nesting season (31st March - 31st August) unless a bird nest survey is carried out by an ecologist.



Root Protection Area (RPA)



Proposed Tree Protection Fence

To be installed prior to any enabling works on site and to remain in position during construction of proposed building and landscape works.

Fence to be secured in this position until all buildings and surfaces have been constructed and heavy machinery has been removed from site.

GENERAL NOTES

- 1. This drawing is the copyright of tpm landscape Ltd and cannot be reproduced in any form without the consent of the company.
- 2. This drawing is to be read in conjunction with detail landscape drawings, details and specification.
- 3. This drawing is to be read in conjunction with all relevant Architects', Engineer's, Specialists, Bills of Quantities and Specifications.
- 4. The insertion of any firm or proprietary brand on this drawing is an indication of the class or quality required and does not exclude the use of alternative materials that are equal in performance, quality and appearance, provided that they have been approved in writing by the Landscape Architect.
- 5. The Contractor is responsible for accurately ascertaining the position of underground services and responding to all relevant service easement requirements.
- 6. All dimensions are in millimetres unless stated otherwise, for the purposes of construction this drawing must not be scaled and only written dimensions used. Written and scaled dimensions to be checked on site, any discrepancies reported prior to work commencing. IF IN DOUBT PLEASE ASK.
- 7. All work and materials are to be in accordance with the relevant British Standards and Code of Practice.
- 8. All Proprietary products are to be used strictly in accordance with the manufacturer's instructions and details.

REVISION NOTES

Rev	By	Description	Date
A	GJC	Updates in line with the architect layout	14.02.20

Client

MacBryde Homes

Project

Wrexham Road, Holt

Description

Tree Protection Plan

Status

For approval

Scale @ A2	Drawn	Checked	Date
1:500	MW	KP	31.10.19
Job number	Drawing number	Revision	
3455	102	A	

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