

## Hydro Aluminium, Wrexham

# Arboricultural Method Statement

**Prepared For: Client Name**

Document Reference: 11549.007

February 2026

Version 1.0

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## Document Control

| | |
|---|---|
| **Document Title** | Arboricultural Method Statement |
| **Prepared for** | Hydro Aluminium |
| **Prepared by** | The Environment Partnership (TEP) Ltd |
| **Document Ref.** | 11549.007 |
| **Date** | February 2026 |
| **Author** | Angus Blankenstein |
| **Checked** | Robin Grimes |
| **Approved** | Robin Grimes |

## Amendment History

| Version | Date | Modified by | Approved by | Drawing Sheet Ref. | Reason(s) for amendment | Status |
|---|---|---|---|---|---|---|
| 0.1 | 19/02/2026 | AAB | RMG | Entire document | Initial production and internal proofing | Draft |
| 1.0 | 20/02/2026 | AAB | RMG | Entire document | Approval for client issue | Issue |
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## Arboricultural Method Statement

# 1.0 Scope

1.1. TEP has been commissioned by Pace Architecture to produce an Arboricultural Method Statement for Hydro Aluminium in Wrexham. It presents detailed instructions for construction activity around trees and hedgerows with the purpose of preventing unauthorised harm or deterioration of these natural assets.

1.2. This document has been produced in accordance with *BS5837: 2012 Trees in relation to Design, Demolition and Construction - Recommendations* and in pursuance of discharging planning condition 9 of Planning Approval (Ref: P/2024/1554) and builds upon an Arboricultural Impact Assessment (Report Ref: 9871.001).

1.3. It must be submitted to and approved by the Local Planning Authority prior to commencement and be available on site for the duration of works. In order to be effective, the physical protection measures, operational conduct and compliance monitoring stipulated by this document must be followed in full.

**1.4. Failure to adhere to the correct sequence, manner and timing of operations detailed within this AMS may result in irremediable damage to trees, and thereby breach of planning consent. All retained trees are protected by planning law until such time as the requirements of the planning permission have been met. Any deviation from this document, damage to trees or surrounding soils, or tree removal could result in a stop notice or prosecution.**

## Limitations

1.5. A full tree survey was undertaken in February 2024 in accordance with BS 5837 by a qualified arboriculturist. Although the age of the survey data is towards the typical extent of reliability, the nature of the site, proposals and tree cover is such that the data can be relied upon.

1.6. A topographical survey was used to record the position of trees and vegetation (drawing reference: 5967/01 Topographical Survey). Where trees were not shown on the topographical survey, their locations were estimated. Any perceived discrepancy in tree location or dimensions should be discussed with TEP.

1.7. Trees on private land outside the application boundary, and at inaccessible locations were surveyed insofar as was practicable. Whilst reasonable effort has been made to ensure the accuracy and comprehensiveness of such records, it cannot be guaranteed.

1.8. The tree survey was undertaken at ground level using visual assessment only. Feature dimensions are measured using specialist tapes and laser hypsometers. Where this was not possible, measurements were estimated.

1.9. This AMS relates to a specific development and has been produced in line with the guidance of *British Standard 5837: 2012 Trees in relation to design, demolition and construction – Recommendations* and professional judgement. It should not be interpreted as advice in any other circumstance, including but not limited to the promotion or assessment of alternative schemes; the design of foundations; management of tree risk; and tree-related subsidence.

## How to use this document

1.10. This document sets out how trees must be treated throughout construction to prevent unauthorised harm.

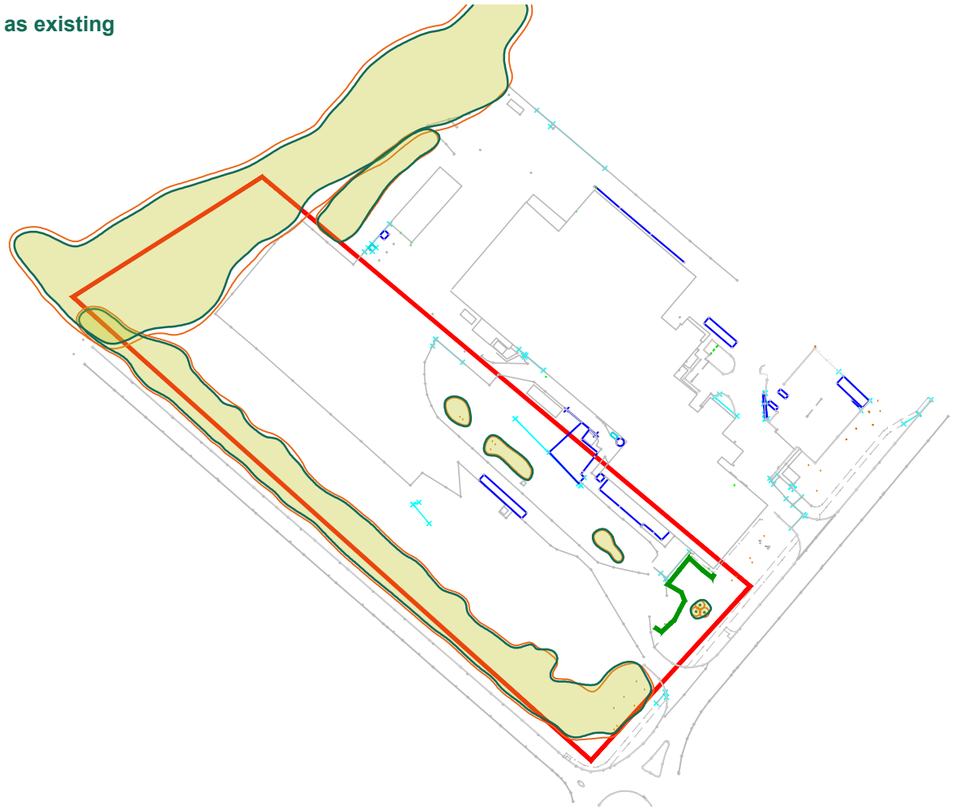
1.11. It is designed to be implemented by the Site Manager in collaboration with an Arboricultural Clerk of Works who will advise on interpretation and application of the methods and measures it prescribes in each instance. The Arboricultural Clerk of Works will be responsible for updating the AMS to reflect construction progress. Further guidance on this relationship is provided in Section 2.

1.12. This document is generally arranged chronologically, with separate pages or sections referring to types of activity or contractor specialism. An Activity Tracker is provided in Section 3 to help guide the timing of site operations in proximity of trees.

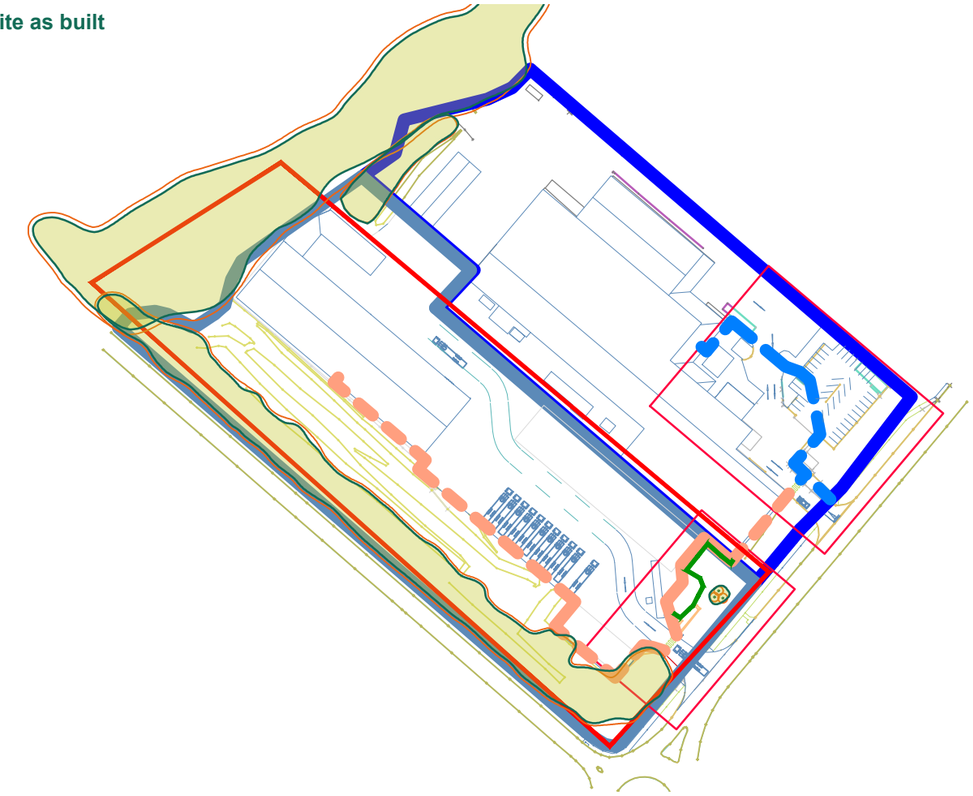
1.13. A copy of this document must be made available for inspection on site in colour and at A3 size, and introduced to all relevant contractors. It should be included in tender documents to identify and quantify the tree protection and management requirements at an early stage.

1.14. Satisfactory completion of all of the activities described by this document must be signed-off by the Arboricultural Clerk of Works, who will also provide progress reports to the LPA.

**Site as existing**



**Site as built**



| Rev | Description | Drawn | Approved | Date |
|---|---|---|---|---|
| | | | | |

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Project
Hydro Aluminium, Wrexham

Title
AMS - Scope

Drawing Number
D11549.700

| Drawn | Checked | Approved | Scale | Date |
|---|---|---|---|---|
| AAB | RMG | RMG | not to scale @ A3 | 10/02/2025 |

## 2.0 Compliance and monitoring

2.1. The implementation of the requirements of this document can only be successfully achieved via a partnership between the Site Manager and an appointed Arboricultural Clerk of Works (ACoW). The core roles of each of these key positions in relation to this AMS are:

### Site Manager

2.2. The core role of the Site Manager in relation to this AMS are:

2.2.1. Overall compliance (as a representative of the Principal Contractor)

2.2.2. Staff awareness of this AMS and general tree protection

2.2.3. Appointment of the relevant parties required to implement specific actions

2.2.4. Regular communication with the Arboricultural Clerk of Works

2.2.5. Remedial measures where accidental damage or breaches occur

2.2.6. Disciplinary measures where intentional damage or breaches occur

### Arboricultural Clerk of Works

2.3. The core role of the ACoW in relation to this AMS are:

2.3.1. Technical support and interpretation of this AMS

2.3.2. Oversee the implementation of this method statement

2.3.3. Liaison with the LPA regarding progress and compliance

2.3.4. Pre-commencement meetings and tool-box talks as required

2.3.5. Completion meetings and sign-off

2.4. The ACoW will also be the first point of contact for any arboricultural issues that may arise that are not detailed within this document. This could include but not limited to: additional tree works; incursion into Root Protection Areas (RPAs); damage to retained trees; or damage to tree protection measures.

### Site-wide rules for tree protection

2.5. The following general principles will apply to all the trees within the development boundary:

2.6. Unless specifically instructed otherwise in this document, all Root Protection Areas around trees should remain in their pre-development state, including vegetation, ground levels and any existing structures.

2.7. All retained trees will be protected in accordance with the detail set out below:

2.7.1. There will be no demolition, excavation or change of levels within any Root Protection Area (RPA) of retained trees unless otherwise documented within this Method Statement. Any requirement for contractor activity within these areas must be discussed in advanced with the Arboricultural Clerk of Works.

2.7.2. Any storage, mixing or refueling stations will be located outside of a Root Protection Area in a place that minimises the risk of contaminated runoff and damaging the rooting environment. This may be achieved by using a non-permeable membrane on the ground, surrounded by sandbags to contain any spillage. Spill kits will be kept permanently available at the storage or fueling station.

2.7.3. There will be no fires within the site.

2.7.4. No tree works will take place without prior notification to the Arboricultural Clerk of Works.

2.7.5. No excavation, vegetation scraping, stockpiling of material, or changes to ground level will take place within any Root Protection Area without prior notification to the Arboricultural Clerk of Works.

## Project Directory

| Contact Details | | | | |
|---|---|---|---|---|
| **Name** | **Position** | **Company / Authority** | **Contact details** | **Principal Role in relation to this AMS** |
| TBC | Developer | Hydro Aluminium | | Client |
| Neil Campbell | Principal Contractor | Pace Architecture | | Overall responsibility for compliance |
| TBC | Site Manager | | | Responsibility for site operatives and day to day actions on site |
| TBC | Arboricultural Clerk of Works | | | Implementation support |
| TBC | Ecologist | | | Implementation support |
| TBC | Tree Surgeon | | | Tree works delivery |
| Jon Brewin | LPA Tree Officer | Wrexham CBC | | Quality control and technical scrutiny; advisory compliance |
| TBC | LPA Case Officer | Wrexham CBC | | Final condition discharge |

## Relevant Planning Documents

| Document name | Ref: | Relevance |
|---|---|---|
| Planning Decision Notice | P/2024/1554 | Contains the wording and reasoning for planning condition 9 |
| Arboricultural Impact Assessment | 9871.001 | Presents the approved tree removal and retention which compliance with this document would achieve |
| Development Layout | 2027 - P - Hydro Proposed Site Plan | Presents the development layout |

## Activity Tracker

| Arboricultural Activity | Who needs to communicate | Date Scheduled | Date Completed | ACoW Sign off |
|---|---|---|---|---|
| **Pre-commencement** | | | | |
| Pre-start site meetings | Site Manager / ACoW / Ecologist / Land Owner / Client | | | |
| **Tree Works** | | | | |
| Tree removal and pruning | Site Manager / Tree Surgeon / ACoW / Ecologist | | | |
| **Tree Protection Measures** | | | | |
| Installation of protection measures | Site Manager / ACoW | | | |

| Rev | Description | Drawn | Approved | Date |
|---|---|---|---|---|
| | | | | |

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Project
Hydro Aluminium, Wrexham

Title
AMS - Monitoring and Compliance

Drawing Number
D11549.701

| Drawn | Checked | Approved | Scale | Date |
|---|---|---|---|---|
| AAB | RMG | RMG | not applicable | 19/02/2026 |

## Arboricultural Method Statement

# 3.0 Tree and hedgerow works

*Tree works must be completed before commencement of the construction per phase, including the creation of compounds, access by vehicles or plant, delivery of materials, ground investigations or works, or any other construction works.*

*All tree removal and pruning works will be undertaken according to British Standard 3998:2010 by a suitably qualified, experienced and insured arboricultural contractor.*

*Where doubt exists over the appropriate treatment of trees, the ACoW will be contacted prior to acting on assumption.*

*The detail and requirements of this Method Statement must inform the production of all relevant tender documents and instructions to contractors.*

### Scope

3.1. All tree and hedgerow works will be completed in accordance with the drawing shown opposite and the detail below.

3.2. Trees indicated by a **red hatch** opposite will be removed.

3.3. Trees indicated by a **solid navy blue hatch** opposite will be pruned as per the description opposite and under direction of the ACoW.

#### *Nesting Bird Check*

3.4. If tree works are scheduled in period March to August inclusive, trees identified for removal and pruning will be checked by a suitably qualified ecologist for nesting birds 24hrs prior to any works.

3.5. Should any nesting birds be found or suspected during the course of the works, the advice for an ecologist will be required.

### Identification

3.6. The proposed layout will be set-out by the project engineer and topographical surveyor prior to the tree works to accurately define the proposal extents, including approved earthworks.

3.7. All tree works can then be marked-up by the ACoW based on the setting out, via the use of spray paint, tape, tags or a combination to assist with identification of trees if required. The method of marking out will be communicated to the Contractors prior to commencement.

3.8. Where partial removal of a tree group is shown, the area of trees to be retained is an indication of the canopy spread that will remain, not the location of tree stems.

3.9. The identification of trees that should be removed within a tree group may not be done by anyone other than the ACoW, except where removal of the entire group is approved.

### Particulars

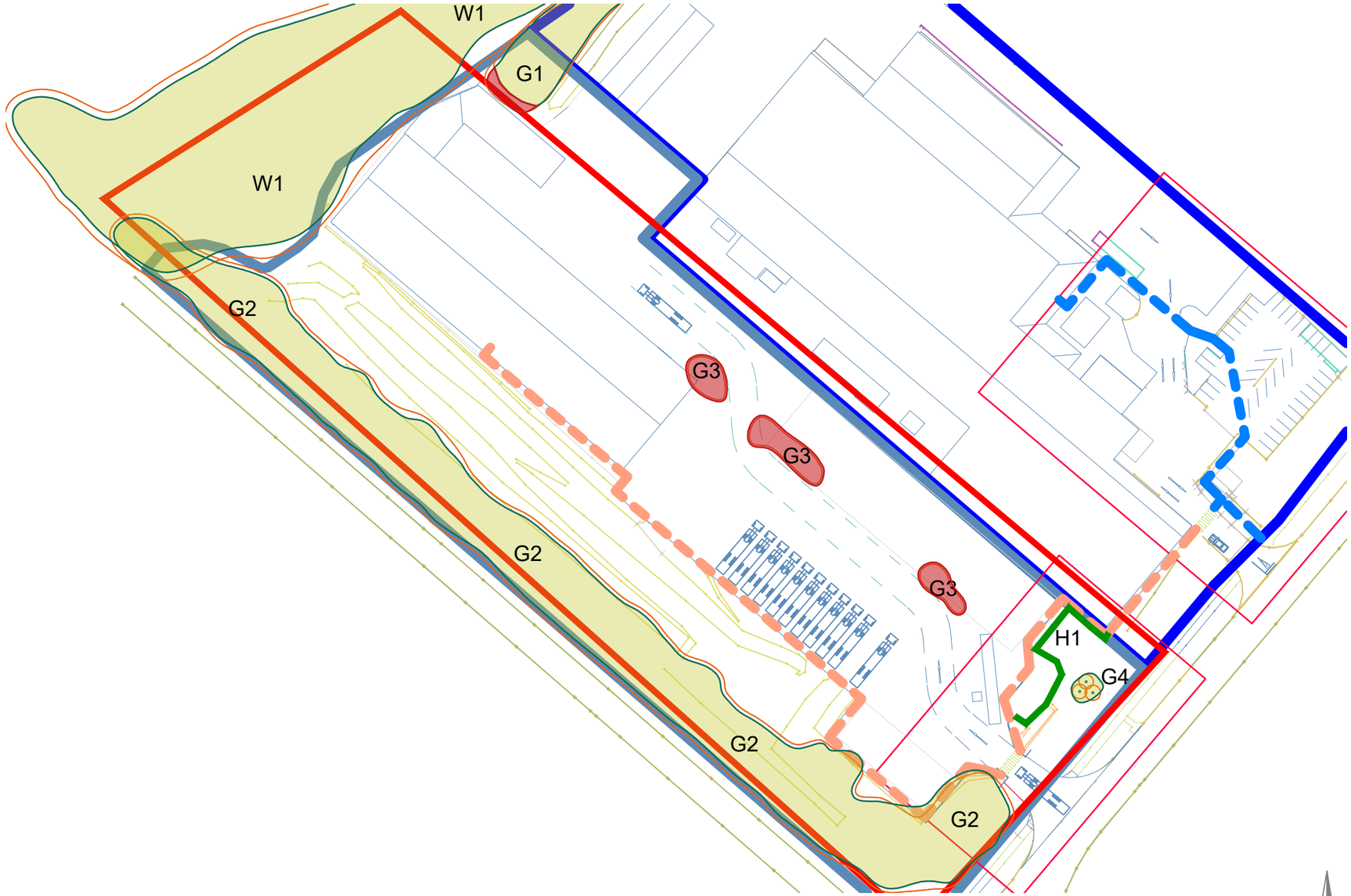
3.10. All arisings will be removed from the site unless directed otherwise by the ACoW.

3.11. Arisings awaiting disposal will not be stored beneath the canopy of retained trees.

3.12. Plant and vehicles used for the tree works and storage of fuels and oils will not be permitted beneath the canopy of any retained tree or within its Root Protection Area (calculated as a circle with a radius 12 times the stem diameter).

3.13. Stumps within the Root Protection Area of retained trees will be ground out or chemically treated and left in-situ (i.e. not excavated or pulled). The stumps of removed trees located beneath the canopies and within rooting areas of retained trees will be accessed by using temporary boards.

3.14. Upon completion, tree works will be verified and signed off by the appointed ACoW.




## KEY

*[This drawing must be reproduced in colour]*

T1/G1/W1 Trees

H1 Hedgerow

Root Protection Area (RPA)

Site Boundary

Tree works

Trees to be retained and protected

Hedgerow to be retained and protected

Trees to be removed

NOTES: This drawing should be read in conjunction with the respective Tree Survey Schedule (Appendix A).

**ALL TREES TO BE REMOVED MUST BE PHYSICALLY MARKED BY THE ARBORICULTURAL CLERK OF WORKS TO ENSURE CORRECT IDENTIFICATION**

**ALL TREE WORKS MUST BE COMPLETED TO ALLOW FOR THE INSTALLATION OF PROTECTION MEASURES, BEFORE ANY CONSTRUCTION BEGINS**

| Rev | Description | Drawn | Approved | Date |
|---|---|---|---|---|
| | | | | |


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Project
Hydro Aluminium, Wrexham

Title
AMS - Tree and hedgerow works Overview

Drawing Number
D11549.702

| Drawn | Checked | Approved | Scale | Date |
|---|---|---|---|---|
| AAB | RMG | RMG | 1:1,250 @ A3 | 10/02/2025 |

## Arboricultural Method Statement

# 4.0 Temporary tree protection

*The installation and maintenance of physical tree protection measures throughout construction is paramount to their healthy retention. Robust barrier fencing must be installed prior to the creation of compounds, access by vehicles or plant and the delivery of materials. All tree protection must be retained throughout construction and not modified in any way or removed except in strict compliance with this method statement.*

### Scope

4.1. Following the completion and sign-off of tree works, the Site Manager will arrange protection measures to be installed.

4.2. The alignment of temporary barrier fencing as shown opposite and must be set **accurately** out by a topographical surveyor using wooden pegs.

4.3. The fencing has been designed in 3.5m intervals to make installation as efficient as possible but where this isn't possible fencing panels may need to overlap to achieve the required design. The existing palisade fence along the north-western boundary of the site will form an effective tree protection fence, where tree roots are expected to extend beyond this fence an additional temporary fence will be installed that ties in.

4.4. Northings and Eastings can be provided by TEP for setting out. Please contact **angusblankenstein@tep.uk**.com.

4.5. A contractor will be engaged to install the tree protection.

4.6. Fencing will be installed according to the specification shown in **Appendix C**.

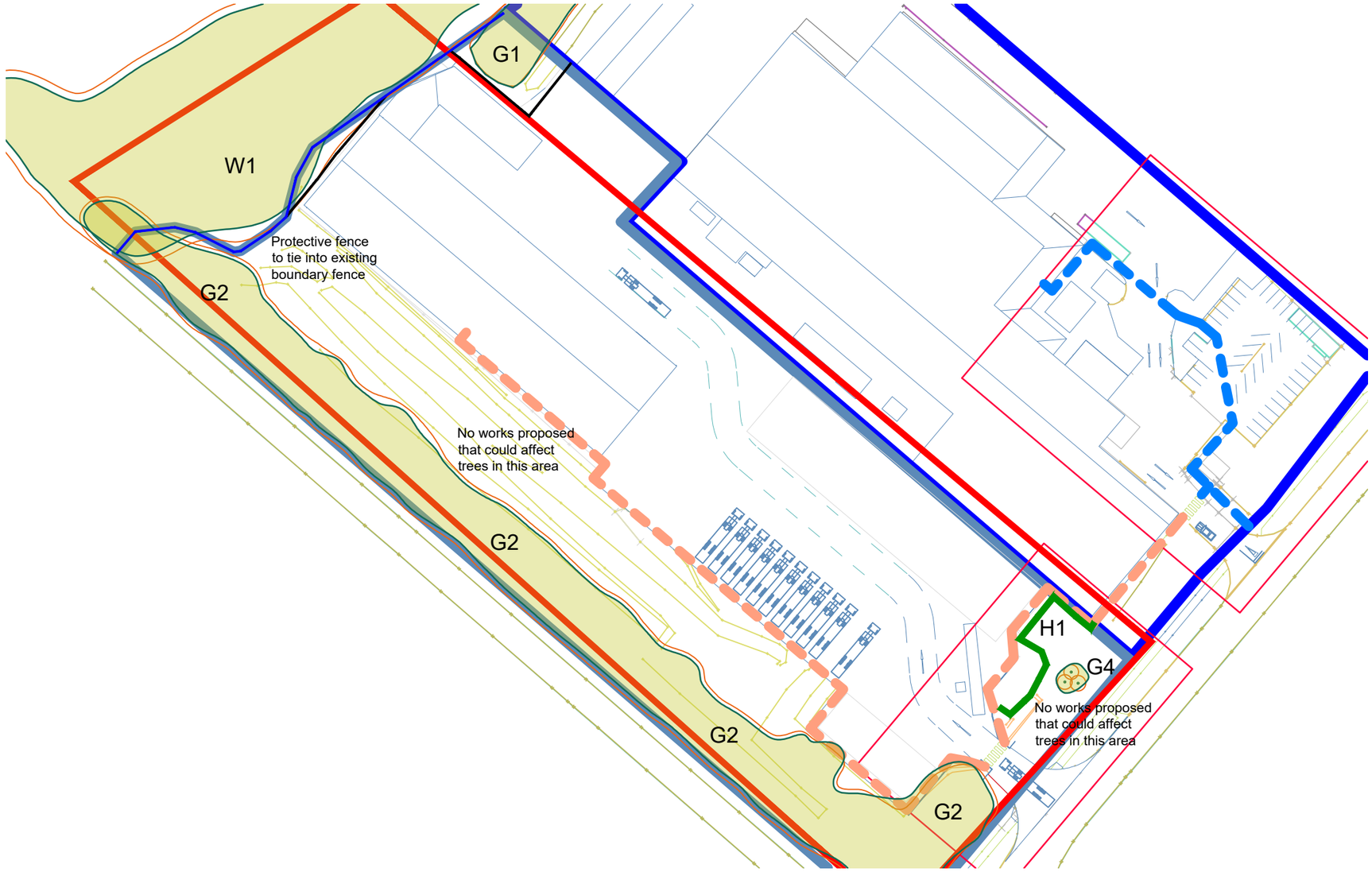
4.7. A large pdf of the sign to be laminated and affixed to alternate panels is appended to this document.

4.8. The existing concrete slab forms an effective barrier to root spread and operates as functional ground protection where roots may have extended beneath. Construction of the new building will utilise a metal frame bolted to the concrete slab and therefore no ground penetration is necessary.

4.9. The installation and maintenance of tree protection measures according to this Method Statement will be verified by the appointed ACoW.

4.10. The protection measures will be subject to inspection by the ACoW . It will be the responsibility of the ACoW to report their findings to the site manager and local planning authority.

4.11. Tree protection measures will remain in situ for the duration of the construction or until otherwise directed by the ACoW. Individual fencing panels may need to be removed to implement specific construction activities in accordance with the Method Statement, this will only be done in agreement with the ACoW.




## KEY

*[This drawing must be reproduced in colour]*

- Retained Trees
- Retained Hedgerow
- Root Protection Area (RPA)
- Site Boundary

Tree Protection

- Tree Protection Fencing (See Appendix C for specification details)
- Existing Palisade Fence

NOTES: This drawing should be read in conjunction with the respective Tree Survey Schedule (Appendix A).

**TREE PROTECTION MEASURES MUST BE INSTALLED AS SHOWN PRIOR TO COMMENCEMENT OF CONSTRUCTION**

| Rev | Description | Drawn | Approved | Date |
|---|---|---|---|---|
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Project
Hydro Aluminium, Wrexham

Title
AMS - Temporary tree protection

Drawing Number
D11549.703

| Drawn | Checked | Approved | Scale | Date |
|---|---|---|---|---|
| AAB | RMG | RMG | 1:1,250 @ A3 | 19/02/22026 |

# APPENDIX A: Tree Survey Schedule

# APPENDIX A: Arboricultural Survey Data Sheets

**Surveyor** Angus Blankenstein
**Survey Date** 21.02.2023
**Site** Hydro Aluminium, Wrexham
**Drawing Ref** D9871.001

*Italicised Feature Ref: Inspection of this feature was restricted*
*Italicised Values: Feature value was estimated*

| Ref | Species | Height | Canopy Ground Clearance | Stem Diameter (or range) | No. of stems/ individuals | Crown Spread North | Crown Spread South | Crown Spread East | Crown Spread West | Lowest Branch Height | Lowest Branch Direction | Maturity | Condition | Comments on form, condition, health and significant defects | Management recommendations in current context | BS 5837 Quality Category | Estimated Remaining Contribution |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | (m) | (m) | (mm) | arising below 1.5m | (m) | (m) | (m) | (m) | (m) | (N,S,E,W) | Young, Middle Age, Mature | Good, Fair, Poor, Veteran | | | A,B,C,U (1,2,3) | Long, Medium, Short, Very Short |
| **Groups** | | | | | | | | | | | | | | | | | |
| G1 | Common hawthorn, Common ash, Goat willow | *2 to 5* | 0.5 | *50 to 160* | *60* | | | | | | | Young to Middle Age | Fair | Scrub and small trees on bund next to balancing pond. Dense undergrowth and close spacing prevents access. Some multistemmed forms | | C ,2 | Long |
| G2 | Field maple, Silver birch, Common hawthorn, Scots pine, Blackthorn, Crack willow | *4 to 11* | 0.5 | 75 to 270 | *150* | | | | | | | Middle Age | Fair | Mixed species screening group on top of bund. Tall narrow forms. Some multistemmed. Occasional failed trees. Signs of stakes and ties in places. Dead wood throughout | | B ,2 | Long |
| G3 | Common hawthorn, Blackthorn, Pedunculate oak | *2 to 5* | 0.5 | 75 to 160 | *25* | | | | | | | Young to Middle Age | Good | Small trees and scrub on low bund. Some new planting. Dense undergrowth in places. | | C ,2 | Long |
| G4 | Himalayan birch | *6 to 6.5* | 1.5 | 160 to 170 | 3 | | | | | | | Middle Age | Good | Group of 3 amenity trees at front of plant. Some pruning wounds and small stubs. Typical forms | | B ,2 | Long |
| **Woodlands** | | | | | | | | | | | | | | | | | |
| *W1* | Sycamore, Common hawthorn, Common ash, Scots pine, Pedunculate oak, Goat willow | *3 to 14* | 2.5 | *75 to 800* | *150* | | | | | | | Mixed Age | Fair | Strip of ancient woodland. Few large trees. Variable age and size structure. Some multistemmed forms. Dead wood in large oaks. Recent construction to North. Security fence and hardstanding to south. | | A ,2, 3 | Long |
| **Hedges** | | | | | | | | | | | | | | | | | |
| H1 | Leyland cypress | 3 to 3.5 | | n/a | n/a | | | | | | | Middle Age | Fair | Typical cypress hedge. Dense crowns. Overpruned in some areas | | n/a | n/a |

# APPENDIX B: Survey Methodology

**Limitation**
Trees are dynamic living organisms with a constantly changing structure; even healthy trees can change or decline. Survey information is presented as being correct at the time of survey. Limitations to the reliability of the survey data are noted within Appendix A and the main report text.

**Scope**
All woody vegetation with a stem diameter exceeding 75mm is recorded. Below this threshold, vegetation may also be recorded at the discretion of the surveyor. The survey includes woody vegetation within a defined boundary, and on adjacent land where the characteristics, location or context of the tree mean that activity within the boundary could affect the tree, or be influenced by it. This is typically up to 15m outside the boundary.

**Resolution**
Vegetation is recorded as either an individual *Tree*, *Group* of trees, *Woodland*, or *Hedgerow*. This is done at the discretion of the surveyor to provide a useful resolution to the survey data, to differentiate between features with varying attributes and group those with common attributes, and collective value or function.

Typically, *Trees* are recorded where they are arranged separately; different from adjacent trees; or where the assessment would benefit from greater detail. *Groups* are coherent arboricultural features comprising trees with a collective form, function, history or management opportunities. *Woodland* is recorded where areas of tree cover have the qualities of a woodland habitat, including age and species structure, natural regeneration, and associated non-arboreal features. *Hedgerow* describes linear features largely comprising woody vegetation that are under, or could be returned to, regular hedgerow management. It should be noted that these terms are also used in other assessment types, sometimes with different definitions.

**Tree locations**
The location of trees is based on stem locations and canopy spreads taken from a topographical survey, where available. Where this information is not available, this is noted in Appendix A and locations should be regarded as approximate. Approximate locations are based on one or more of: GPS data captured during the survey; aerial photographs; and measurement from known points of reference. Approximate stem locations are typically accurate to within a few metres. Stem locations are shown for all *Trees*.

*Groups*, *Woodland* and *Hedges* are principally described in terms of their canopy outline, although stem locations may also be shown. Individual tree canopy outlines are projected on Drawings based on measurements taken as described below (see Crown Spread). *Groups*, *Woodland* and *Hedges* canopy outlines are projected based on the same hierarchy of source data as stem locations.

**Tree survey**
The survey is conducted from ground level by an arboriculturist, taking account of the tree, and its context. The nature of the soil is not assessed. Non-invasive assessment tools may be used as appropriate, including hypsometer, measuring tape, probe and nylon mallet.

The following attributes are recorded for each feature (see Arboricultural Survey Data Sheets at Appendix A):

**Reference Number** A unique code per feature, typically but not necessarily a chronological sequence, in the form T*n* for *Trees*; G*n* for *Groups*; W*n* for *Woodlands*; and H*n* for *Hedgerows*

**Species** The common name is given. All species are listed for *Groups*, *Woodland* and *Hedgerows*. The Latin name may also be given if further clarification is required.

| | |
|---|---|
| **Height** | Top height recorded in metres, or the range for *Groups*, *Woodland* and *Hedgerows* |
| **Canopy Ground Clearance** | The height of the canopy above ground level in metres |
| **Stem Diameter** | A measurement taken at 1.5 metres above ground level, or the nearest representative point below, in millimetres. For multi-stemmed trees a single figure is calculated according to BS5837 4.6. For *Groups*, *Woodland* and *Hedgerows,* the range of diameters |
| **No. of Stems / Individuals** | The number of stems arising below a height of 1.5 metres, or for *Groups*, *Woodland* and *Hedgerows* an estimate or count of the number of trees |
| **Crown Spread** | Radial branch spread in metres at cardinal points (N, S, E, W) from the location of the *Tree* stem at ground level (for *Groups*, *Woodland* and *Hedgerows*, see *Tree Locations*) |
| **Lowest Branch Height** | The height of the first significant branch at the point of attachment (*Trees* only) |
| **Lowest Branch Direction** | The direction of growth of the first significant branch from the point of attachment (*Trees* only) |
| **Maturity** | Classification describing age relative to the species, and size and growth potential, in order to inform management decisions<br>• ***Young*** means small and/or recently planted and could be relocated, or replaced on a like for like basis<br>• ***Middle Age*** means established and independent, within the growth stage of life, and with potential to continue increasing in height and/or spread<br>• ***Mature*** means having reached ultimate height and/or spread, given the location and surroundings; further increases will be slow or limited<br>• ***Mixed Age*** (*Groups*, *Woodland* and *Hedgerows* only) means comprising all three maturity classes |
| **Condition** | An overall assessment of a feature's physiological and structural state, informing longevity and quality categorisation, and supported by *Comments*<br>• ***Good*** condition means with vitality and resilience commensurate with species and age, and without significant defects or pathogens<br>• ***Fair*** condition means with tolerable reduction of vitality and resilience, and/or remediable or tolerable defects and/or pathogens<br>• ***Poor*** condition means with declining or significant loss of vitality and resilience, and/or significant and irremediable defects and/or pathogens<br>• ***Dead*** condition means without photosynthetic or metabolic capacity, or moribund and in imminent terminal decline<br>• ***Mixed*** (*Groups* and *Woodland*) means comprising more than one condition class<br>• ***Veteran*** means trees of exceptional value, meeting recognised criteria including age, size and characteristics. Classification is partly informed by the sustained presence of structural defects, physiological decline, and pathogens, and their contribution to biodiversity. Undesirable characteristics in ordinary trees may be desirable in veteran trees, therefore *Veteran* can be understood as a superlative *Condition* that supersedes other categories (excluding *Dead*). |

| | |
|---|---|
| **Comments** | A description of all significant characteristics of the feature and its context that are not described by other attribute fields; including observations to support the classification of *Condition*, *Quality Category* and *Estimated Remaining Contribution* as appropriate |
| **Management Recommendations** | Recommendations for arboricultural works based on the current land use, in the interests of good arboricultural practice. These are incidental to the primary survey purpose, and not a comprehensive schedule in pursuit of any particular objective. |
| **BS 5837 Quality Category** | Tree quality assessment based on Table 1 of BS 5837:2012 (see below) comprising quality categories **A**, **B**, **C** and **U** and sub-categories **1**, **2** and **3** |
| **Estimated Remaining Contribution** | A forecast of the durability of the feature in its current form and context, and therefore the reliance that can be placed on any benefits or functions it provides. This is influenced by *Species* and *Condition*, and is not necessarily a forecast of life expectancy.<br>• **Long** means more than 40 years<br>• **Medium** means 20 to 40 years<br>• **Short** means 10 to 20 years<br>• **Very Short** means less than 10 years |

**Table 1:** Extract from **British Standards Institution (2012)** *BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations*, page 9

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**<br>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)<br>• Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline<br>• 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<br>*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**<br>**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**<br>**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**<br>**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 |

***Note on Root Protection Areas:***

Data is captured during the survey to inform the design of Root Protection Areas (RPA). These are a design tool, representing the area around a tree in which restrictions to some activities may be required to avoid significant harm, particularly to roots and soil. The RPA is a function of *Stem Diameter*, and additional considerations including management history, barriers to root growth, topography, ground conditions and tree characteristics. These factors are combined by an arboriculturist to produce a buffer zone for each feature from which the exclusion of construction activities would ensure the continued reliability of the survey data at Appendix A, including *Condition*, BS 5837 *Quality Category* and *Estimated Remaining Contribution*.

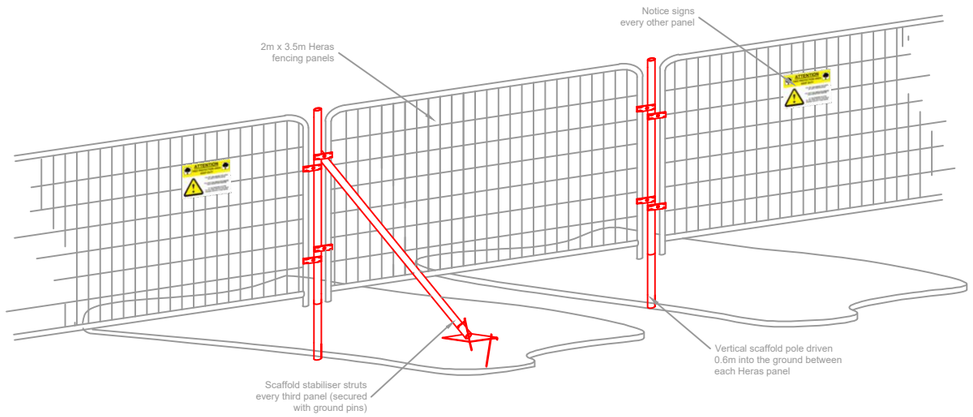
For *Trees*, RPA is defined as a circle with a radius 12 times the *Stem Diameter*, which may be modified to reflect the considerations above.

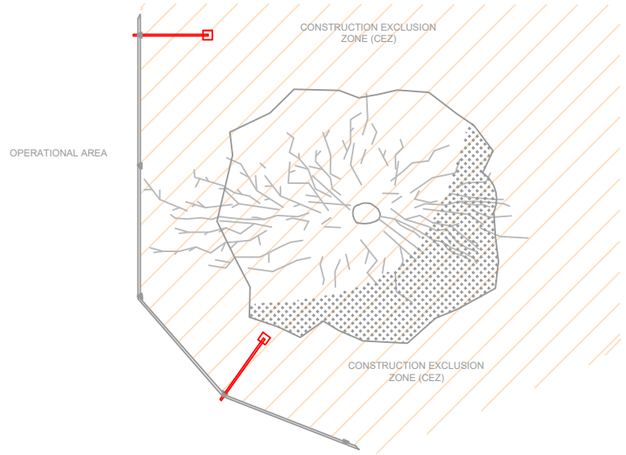
For *Groups* and *Woodland* RPA is based on the size and location of peripheral constituent trees, and presented as an offset from the canopy edge giving equivalent or greater protection to all trees of any size, or modified to reflect significant variation in constituent tree sizes and/or the considerations above.

For Hedgerow, no RPA is shown. Typically, hedgerow requires a smaller stand-off than trees due to reduced crown dimensions. Any stand-off should include sufficient space for access and ongoing management and should therefore normally be based on the canopy spread rather than root spread.

# APPENDIX C: Specification Drawings

Tree Protection Fencing for use on soft surfaces

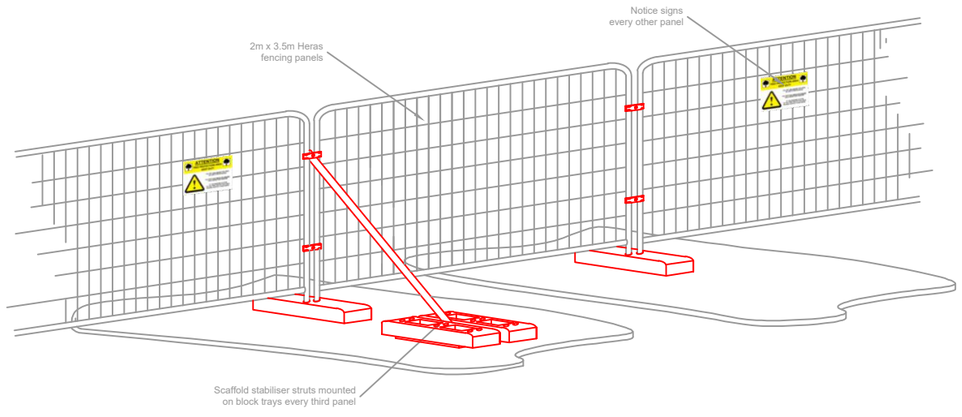


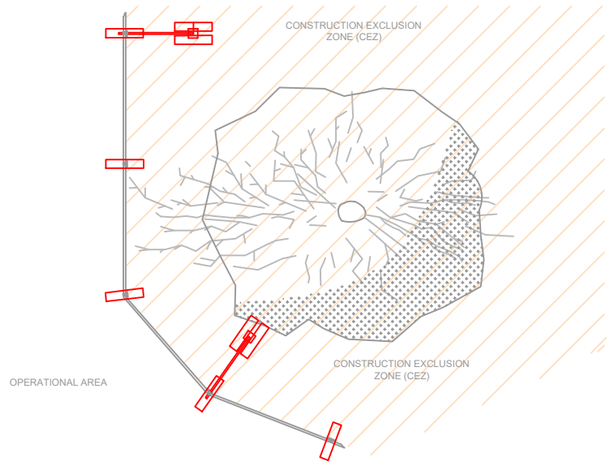




| Per 3No. Heras panels (10.5m) | |
|---|---|
| Component | Quantity |
| 2m x 3.5m Standard Heras panels | 3 |
| 3m Galvenised steel scaffold pole | 3 |
| Heras fecurity fence clip | 12 |
| Heras stabilising support bar | 1 |
| Stabilising pin | 2 |
| Tree protection notice | 2 |

**Notes:**

Tree Protection Fencing for use on hard surfaces




| Per 3No. Heras panels (10.5m) | |
|---|---|
| Component | Quantity |
| 2m x 3.5m Standard Heras panels | 3 |
| Rubber fencing block tray (footing) | 5 |
| Scaffold clamp double coupler | 6 |
| Heras stabilising strut support bar | 3 |
| Tree protection notice | 2 |
| | |

**Notes:**

| Rev | Description | Drawn | Approved | Date |
|---|---|---|---|---|
| | | | | |

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Project

Title
Temporary tree protection fencing specifications

Drawing Number
TEP.ARB.FEN.003

| Drawn | Checked | Approved | Scale | Date |
|---|---|---|---|---|
| TDP | RMG | JGS | (not to scale) @ A3 | 09/07/2019 |

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