

Arboricultural Method Statement

Yale Campus Redevelopment - Coleg Cambria, Wrexham

Prepared for:

WYNNE CONSTRUCTION

Our Ref: 17/AMS/WXM/201

Planning Ref: P/2018/0638

November 2018

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1.0 INSTRUCTION

- 1.1 Tree Solutions Ltd has been instructed by Wynne Construction to provide an Arboricultural Method Statement (AMS) to satisfy and discharge Planning Condition 6 & 8 of Planning Code No: P/2018/0638. Demolition of existing buildings and erection of new three storey building with associated works - Coleg Cambria, Yale Campus, Wrexham.
- 1.2 This Method Statement sets out the methodology and protection measures for all works within close proximity to trees located on and adjoining the site indicated on the Tree Protection Plan at **Appendix 1**. All tree surgery works have been specified within the approved Tree Solutions Arboricultural Impact Assessment Ref: 17/AIA/WXM/201. Compliance with this method statement will be a requirement of all relevant contracts associated with the approved development. Copies of this document will be made available for inspection on site.
- 1.4 Trees to be retained and details including the designated Root Protection Area (RPA) and location of tree protective fencing are clearly indicated on the Tree Protection Plan Ref: 17/AMS/WXM/201, Drawing No 3 which is at **Appendix 1** to this report.
- 1.5 The purpose of the AMS is to provide information on protection and control measures affecting the existing tree stock. The works, with applicable methodology, are divided into the sequence of operations at paragraph 4.0:

2.0 STATUTORY CONTROLS

- 2.1 A number of the more mature trees on site are subject to a Tree Preservation Order. Confirmation of what trees are included in the Order should be obtained through Wrexham County Borough Council.

3.0 SITE PLAN

- 3.1 The observations and recommendations contained in this document relate to approved plan Ref: 16082, Drawing No: YCR-TACP-PS-XX-DR-A-701 provided by TACP Architects.
- 3.2 The method statement should be read in conjunction with the enclosed Tree Protection Plan, which is based upon the above drawing.

4.0 SEQUENCE OF OPERATIONS

From commencement of the above development, the following methodology shall be implemented in the manner and sequence described:

1. Pre-contract site meeting
2. Tree surgery works
3. Erect temporary tree protective fencing
4. Main demolition phase
5. Install ground protection boards
6. Main construction phase
7. Removal of temporary fencing
8. Landscaping within RPA of trees
9. Arboricultural site supervision

1. Pre-Contract Site Meeting

To outline working methods in relation to trees prior to any construction activity on site, a site meeting of the following shall take place:

1. Client
2. Architect/Planning Consultant
3. Structural Engineer
4. Main Contractor
5. Arboricultural Consultant
6. Site Agent

2. Tree Surgery Works

1. Before the erection of the temporary protective fencing, all tree works shall be implemented in accordance with the approved Tree Survey Schedule within 17/AMS/WXM/201
2. All possible efforts must be made to prevent damage to retained trees including potential root incursion or compaction caused by vehicle access.
3. All arboricultural works shall conform to the recommendations of BS 3998 (2010) 'Recommendations for Tree Work'
4. All operatives shall be equipped with and use personal protective equipment (PPE) in accordance with current Health & Safety Executive current directives and industry codes of practice.
5. Performance of all arboricultural operations and use of equipment shall be in accordance with current Health & Safety Executive current directives and industry codes of practice

3. Erect Temporary Tree Protective Fencing

1. Prior to commencement of any demolition and subsequent construction, preparation, excavation or material deliveries the main contractor shall erect the temporary protective fencing as detailed in the 'Tree Protection Specification' and in the location indicated on the Tree Protection Plan.

4. Demolition of Existing Buildings

The following procedures will be followed during all demolition works:

1. Tree protective fencing to be erected as indicated on the tree protection plan prior to any demolition plant or materials entering the site
2. All plant and vehicles engaged in demolition works shall operate from within the existing hard standing areas and building floor slabs
3. All material is to be removed inwards from within the footprint of the existing building i.e. top down, pull back
4. If there is a significant build-up of dust on the foliage of retained trees, they will be hosed down to clear all build up
5. There shall be no storage of material, site parking, site accommodation or equipment in any area designated as the RPA and Construction Exclusion Zone (CEZ) and enclosed by Temporary Protective Fencing
6. No materials that are likely to have an adverse effect on tree health such as oil, bitumen or cement will be stored or discharged within 10 metres of the trunk of a tree that is to be retained. No fires will be lit
7. The site agent shall supervise deliveries by self-loading crane, with vehicles positioned in such a manner that retained trees are not at risk of damage

5. Install Ground Protection Boards

1. The ground protection measures must be capable of supporting the expected loads and evenly distribute the carried weight over the track width of any vehicles that will use the access route in order to avoiding rutting, compaction and damage to the soil.
2. The method of protecting the ground for tracked construction traffic movements within the RPA will involve the use of a high density polyethylene track boards or bog mats laid across the RPA that extends beyond the protective fencing location butted together to form a continuous line as indicated on the Tree Protection Plan. The boards will be fixed in place by construction tie-rods to avoid any displacement details of which are to be approved for use by Tree Solutions and the LPA before installation commences.
3. Temporary ground protection materials shall be delivered and moved by low impact tracked machinery and installed by hand.
4. The ground beneath any protection boarding will be left undisturbed and will be protected with a porous geotextile fabric and side butting scaffold boards on a 100mm compressible layer such of sharp sand
5. Boards will remain in-situ until the construction of the building has been completed

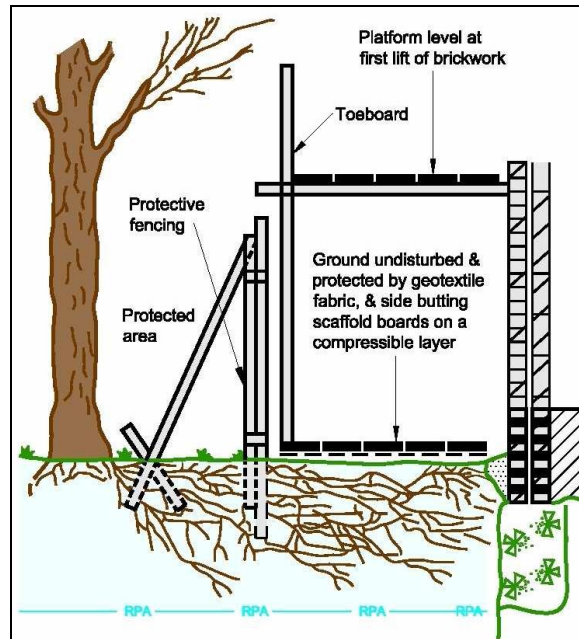


Plate 1 protective boards & scaffolding to be installed

6. Main Construction Phase

1. Tree protective fencing to be erected prior to any construction plant or materials entering the site
2. Tree protective barriers in accordance with BS 5837: 2012 will be erected to prevent damage to the tree stems and any movement of plant with the RPA
3. There shall be no storage of construction material, site parking, site accommodation or equipment in any area designated as the Root Protection Area (RPA) and Construction Exclusion Zone (CEZ) and enclosed by Temporary Protective Fencing
4. No materials that are likely to have an adverse effect on tree health such as oil, bitumen or cement will be stored or discharged within 10 metres of the trunk of a tree that is to be retained. No fires will be lit
5. The site agent shall supervise deliveries by self-loading crane, with vehicles positioned in such a manner that retained trees are not at risk of damage

Cement Mixing

- The cement mixer will be laid on top of plywood boards in a position located outside the RPA of any tree. The mixer will be kept in this position throughout the development work.

Avoiding Damage to Stems and Branches

- Care shall be taken when planning site operations in proximity to trees to ensure that wide or tall loads or plant with booms, jibs and counterweights can operate without coming into contact with retained trees. Such contact can result in serious injury resulting in safe retention impossible

On Site Storage of Spoil and Building Materials

- Prior to and during all site construction works no spoil will be stored and no cement mixing will take place within the Root Protection Area of any tree on or adjacent to the site even if proposed site work is to be within the crown spread. Any encroachment within this protected area will only be with the prior agreement of the LPA Arboricultural Officer

7. Remove all Temporary Tree Protective Fencing

1. Tree Protective fencing will only be removed upon completion of all construction work and once all machinery associated with the works has left site.
2. The tree protection fencing shall not be removed until written confirmation has been received from the Local Planning Authority that it is acceptable to do so.

8. Landscaping within RPA of Trees

1. There shall be **no rotovation** of ground within any area designated as a Root Protection Area (RPA) and Construction Exclusion Zone (CEZ)
2. Any undulation of land within the RPA shall be filled with a 50-50 mix of sharp sand and imported topsoil in accordance with land BS 3882 (2015). Fill level must not exceed 75mm and must be spread by hand
3. Movement of material/soil shall be by hand using wheelbarrows. The use of any mechanical excavator or dumper within the RPA of trees is strictly prohibited
4. No hard landscaping works or excavation for cables or any other service should be installed within the Root Protection Area (RPA) and Construction Exclusion Zone (CEZ) without the written consent of the LPA

9. ARBORICULTURAL SITE SUPERVISION

- 1 The contract Arboricultural Consultant shall attend a pre-contract meeting and provide a tool-box talk on tree protective measures to be implemented in accordance with the approved method statement (AMS)
- 2 Prior to commencement of any site demolition and subsequent construction work, the contract Arboricultural Consultant shall inspect the erection of all tree protection measures outlined in this AMS and as indicated on the Tree Protection Plan. Photographic evidence of the location and specification of all protective fencing will be forwarded to the Wrexham County Borough Council Tree Officer upon completion.
- 3 All proposed work within any designated RPA will be overseen by the contract Arboricultural Consultant with photographic records taken and signed inspection report emailed direct to the LPA for approval

Useful Contacts

Arboricultural Consultant

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LPA Arboricultural Officer

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TREE PROTECTIVE FENCING

- 1 Before the commencement of any site excavations and subsequent construction works (other than those set out in the schedule of tree works contained in this document), protective fencing will be erected as detailed on the Tree Protection Plan and as specified below. The LPA Tree Officer will be given 5 days notice upon completion of the fencing in order to inspect and approve prior to the commencement of any site works.
- 2 The fencing will consist of a scaffold framework in accordance with Figure 2 of BS 5837 – 2012 (illustration below) comprising a metal framework, both vertical and horizontal, well braced to resist impacts. Vertical tubes will be spaced at a maximum interval of 3m. Onto this, weldmesh panels shall be securely fixed with wire or scaffold clamps. Weldmesh panels on rubber or concrete feet are not considered resistant to impact and for this reason will not be used. The site manager or other suitably qualified appointed person will be responsible for inspecting the protective fencing on a daily basis; any damage to the fencing or breaches of the fenced area will be rectified immediately.
- 3 Clearly legible weatherproof signage, stating “Protected Trees – Exclusion Zone” shall be attached to the fencing 1.5m from the ground, facing out of the Tree Protection Zone located at regular intervals along the fence line
- 4 The fencing will remain in place until completion of all site works and then only removed when all site traffic is removed from site
- 5 Other than works detailed within this method statement or approved in writing by the Local Planning Authority (LPA), no works including storage or dumping of materials shall take place within the exclusion zones defined by the protective fencing.

Protective Fencing Detail

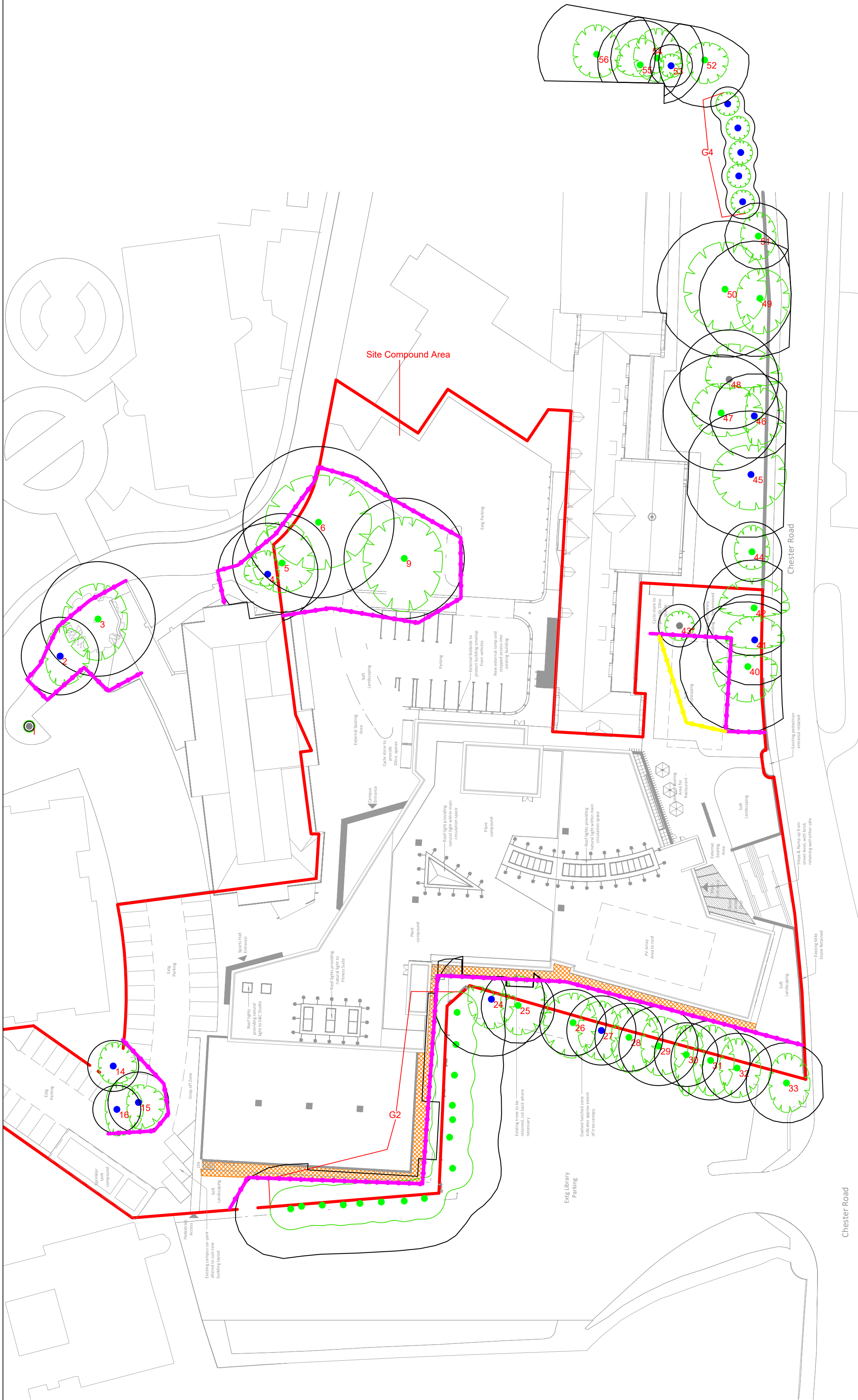
The fence types are shown on the Tree Protection Plan with the following colour key:-

1. **Magenta** - 2.0M high heavy duty rhino panels (with extra central support bar) mounted on scaffold poles (driven in to the ground) and secured with anti tamper bolts – as illustrated below.

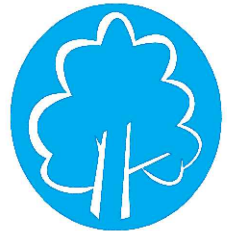


Tree Protective Fencing Specification

Appendix One
Tree Protection Plan



Tree Protective Fencing Specification



PROTECTIVE FENCING. THIS FENCING MUST BE MAINTAINED IN ACCORDANCE WITH THE APPROVED PLANS AND DRAWINGS FOR THIS DEVELOPMENT.



TREE PROTECTION AREA
KEEP OUT!
TOWN & COUNTRY PLANNING ACT 1990
TREES INCLUDED IN THIS FENCING ARE PROTECTED BY PLANNING CONDITIONS AND ARE THE SUBJECTS OF A TREE PRESERVATION ORDER.
CONTRIBUTION OF A TREE PRESERVATION ORDER MAY LEAD TO CRIMINAL PROSECUTION
ANY INCLUSION INTO THE PROTECTED AREA MUST BE WITH THE WRITTEN PERMISSION OF THE LOCAL PLANNING AUTHORITY.

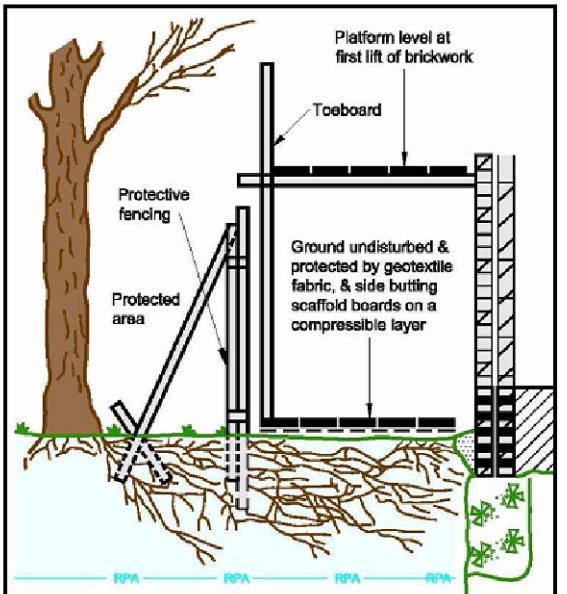
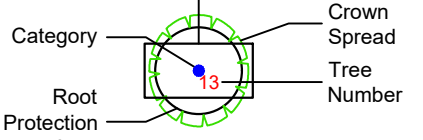


Figure 1 - protective boards & scaffolding to be installed within RPA

Legend

Root Protection Area
Modified to Account for
Site Features



NOTE: Tree/group numbers marked with an * have approximate locations

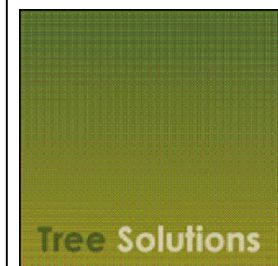
- Category A (High Quality)
- Category B (Moderate Quality)
- Category C (Low Quality)
- Category U (Dead/Dying/In Decline)

2.0M high heavy duty rhino panels (with extra central support bar) mounted on scaffold poles (driven in to the ground) and secured with anti tamper bolts – as illustrated.

Tree protective fencing realigned to secondary position post removal of temporary building

Ground Protection

Client: Coleg Cambria	
Project: Yale Campus Redevelopment	
Title: Tree Protection Plan	
Scale: 1:500 @ A2	Date: July 2018
Drawn By: NB	Revision: A
Job Ref: 17/AIA/WXM/201	Drawing No: 03
Do not scale from this drawing all dimensions to be checked on site.	
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