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tree specialists

## ARBORICULTURAL REPORT

*BS 5837:2012*

# ARBORICULTURAL IMPACT ASSESSMENT

**SITE ADDRESS:**

23A Hampton Road, Teddington, TW11 0JN

**CLIENT:**

Mr Simon Kinsman

**REF NO:**

D3023.V1.0-AIA

**INSPECTION DATE:**

10th of July 2023

**PREPARED BY:**

Tom Butterfield BSc(HONS) DipArb L4

18th of July 2023

| REPORTS  | INCLUDED |
|--|----------|
| ~INITIAL TREE SURVEY~                                    | ✗        |
| ~TREE SURVEY SCHEDULE~                                   | ✗        |
| ~TREE CONSTRAINTS PLAN~                                  | ✗        |
| ~ARBORICULTURAL IMPACT ASSESSMENT~                       | ✓        |
| ~TREE SURVEY SCHEDULE + REQUIRED WORKS FOR THE PROPOSAL~ | ✓        |
| ~TREE PROTECTION PLAN~                                   | ✓        |
| ~ARBORICULTURAL METHOD STATEMENT~                        | ✗        |

| Issue No   | Author | Issue Date | Additions/alterations | Notes |
|------------|--------|------------|-----------------------|-------|
| D3023.V1.0 | TB     | 20/07/2023 | NA                    |       |
|            |        |            |                       |       |
|            |        |            |                       |       |
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## BIBLIOGRAPHY

- BS5837:2012. "Trees in relation to design, demolition and construction – Recommendations".
- Mattheck, C., Breloer, H. (2006). "The body language of trees a handbook for the failure analysis". London: TSO.
- [www.mapapps.bgs.ac.uk/geologyofbritain/home.html](http://www.mapapps.bgs.ac.uk/geologyofbritain/home.html)

## INTRODUCTION

|                         |  |
|-------------------------|--|
| <b>CLIENT</b>           | Mr Simon Kinsman                       |
| <b>INSPECTION DATE</b>  | 10th of July 2023                      |
| <b>SITE LOCATION /S</b> | 23A Hampton Road, Teddington, TW11 0JN |
| <b>INSPECTED BY</b>     | Tom Butterfield BSc (HONS) DipArb L4   |

### 1.0 Terms And Abbreviations

|   |        |
|---|--------|
| Tree Preservation Order   | TPO    |
| Conservation Area   | CA     |
| Arboricultural Impact Assessment  | AIA    |
| Arboricultural Method Statement   | AMS    |
| British Standard 5837:2012 – Trees in Relation to Design, Demolition and Construction - Recommendations | BS5837 |
| Root Protection Area  | RPA    |
| Root Protection Radius  | RPR    |
| Local Planning Authority  | LPA    |
| Tree Protective Fencing   | TPF    |
| Diameter of the stem at breast height (1.5 meters)  | DBH    |
| Tree Survey Schedule  | TSS    |
| Construction Exclusion Zone   | CEZ    |
| Sustainable Urban Drainage System   | SUDS   |
| Cellular Confinement System   | CCS    |
| Ground Protection   | GP     |

### 2.0 Contact Details

| Contact                   | Name                 | Company                    | Contact details  | Issued |
|---------------------------|----------------------|----------------------------|--|--------|
| Client                    | Mr Simon Kinsman     | NA                         | <a href="mailto:Simonkinsman1@gmail.com">Simonkinsman1@gmail.com</a>   | ✓      |
| Arboricultural Consultant | Mr Tom Butterfield   | Dryad Tree Specialists Ltd | <a href="mailto:tom@dryad-trees.co.uk">tom@dryad-trees.co.uk</a><br>01483 455555                             |        |
| LPA Tree Officer          | /                    | London Borough of Richmond | <a href="mailto:trees&amp;parks@richmond.gov.uk">trees&amp;parks@richmond.gov.uk</a>                         |        |
| Architect                 | Mr Harry Insall-Reid | Fletcher Crane Architects  | <a href="mailto:Harryinsallreid@fletchercranearchitects.com">Harryinsallreid@fletchercranearchitects.com</a> | ✓      |

### 3.0 Brief And Purpose

- 3.1 This Arboricultural report was commissioned by Mr Harry Insall-Reid on behalf of Mr Simon Kinsman on the 29<sup>th</sup> of June 2023.
- 3.2 To make recommendations for effective tree protection strategies for the duration of the development.
- 3.3 To produce an Arboricultural Impact Assessment and Tree Protection Plan for the proposal.
- 3.4 To provide the necessary Arboricultural information to satisfy the planning requirements of the LPA (London Borough of Richmond).

### 4.0 Background information

- 4.1 This AIA is to be read in conjunction with the Arboricultural Report Tree Survey Ref: "D3023.V1.0-TS(23aHamptonRdTW110JN)July2023".

## 5.0 Proposal

5.1 The proposal is to erect a new detached house following the demolition of the existing one.



Existing Layout



Proposed Layout

## 6.0 Planning Information

- 6.1 The site falls under the jurisdiction of London Borough of Richmond, the LPA for this area.
- 6.2 A planning application has not yet been submitted to London Borough of Richmond (LPA) as of the 18th of July 2023.
- 6.3 This report aims to address the Arboricultural aspect of the planning application so that planning permission may be granted by using appropriate Arboricultural methodologies.

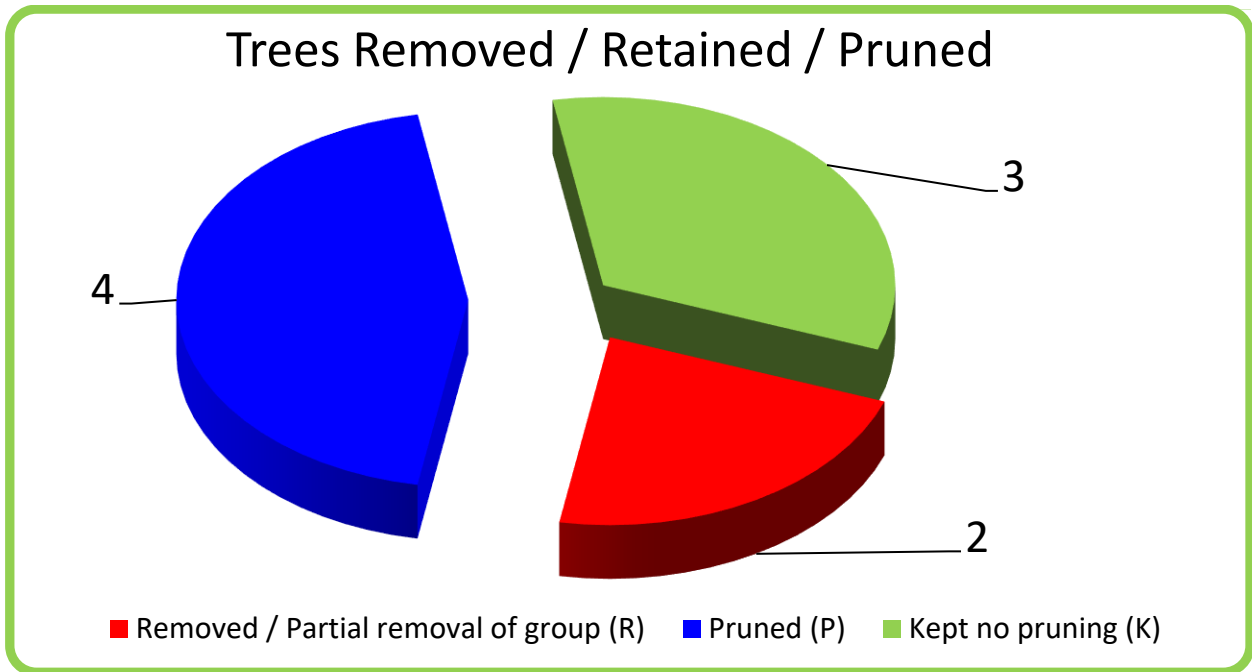
## 7.0 Document Source

| Document                  | Source                    | Format   |
|---------------------------|---------------------------|--|
| Site plan                 | Fletcher Crane Architects | DWG & PDF<br>TP(00)03 Existing Site Plan (topographic + trees) |
| Layout plans and proposal | Fletcher Crane Architects | DWG & PDF<br>TP(00)04 Proposed Site Plan                       |

# ARBORICULTURAL IMPACT ASSESSMENT

## 8.0 Overview

- 8.1 This section comprises of an assessment of the implications the proposed works detailed in Section 5.0 will have on the surrounding trees. It considers the Arboricultural implications and relevant mitigation measures.
- 8.2 Numbers and tree details below are only included where works are specified to facilitate the development, not where recommendations have been made on the grounds of Good Arboricultural Management. The preliminary recommendations made in the initial tree survey should also be implemented where a tree is to be retained.



## 9.0 Tree Retention (Includes Any Tree Pruning)

9.1 The following trees are deemed suitable for retention and protection during the development.

| Grade    | A | B | C                                   | U |
|----------|---|---|-------------------------------------|---|
| Tree No. | / | / | NT1, NT6, T7, NG3,<br>NG4, NT8, NT9 | / |

\*{} denotes partial removal of the group

## 10.0 Tree Removal

10.1 The following trees were deemed unsuitable for retention and require removal before the commencement of the development. The removal of these trees are unlikely to significantly detract from the character and amenities of the local area.

| Tree Removal |             |  |
|--------------|-------------|--|
| Grade        | Tree Number | Reason   |
| A            | /           | /  |
| B            | /           | /  |
| C            | T5          | <b><i>(Facilitate the development)</i></b> – Conflicts with proposed layout. |
| U            | G2          | <b><i>(Facilitate the development)</i></b> – Conflicts with proposed layout. |

\*{} denotes partial removal of the group

## 11.0 Tree Pruning Works

11.1 Tree pruning has been recommended to facilitate the development.

11.2 Trees require pruning works before the construction commences to allow sufficient clearance from the proposal. Some of these works would be required as part of general site maintenance.

11.3 Trees/groups that require pruning include:

| Tree Pruning |             |   |
|--------------|-------------|---|
| Grade        | Tree Number | Reason  |
| A            | /           | /   |
| B            | /           | /   |
| C            | NG3         | <b><i>(Facilitate the development)</i></b> – Cut back over the site to provide adequate clearance for the proposal. |
|              | NG4         | <b><i>(Facilitate the development)</i></b> – Cut back over the site to provide adequate clearance for the proposal. |
|              | NT8         | <b><i>(Facilitate the development)</i></b> – Cut back over the site to limit overhang.                              |
|              | NT9         | <b><i>(Facilitate the development)</i></b> – Cut back over the site to provide adequate clearance for the proposal. |
| U            | /           | /   |

The above pruning works are further detailed in the TSS with recommendations and will not adversely affect the health of the tree or significantly alter its amenity value.

## 12.0 Encroachment into RPAs

- 12.1 Both the existing and proposed dwellings reside outside the RPAs of retained and neighbouring trees.
- 12.2 The RPAs of NG4 slightly encroach onto the site but grow underneath the existing hard surfacing side path. Removal of the existing hard surfacing will unlikely result in significant damage to the neighbouring trees.
- 12.3 No encroachments into the RPAs of any retained trees are seen to be necessary during the development.

| Works On Site  |                                    |                                     |   |                       |
|--|------------------------------------|-------------------------------------|---|-----------------------|
| Tree No.   | Type of Encroachment               | Total area of RPA (m <sup>2</sup> ) | Encroachment into RPA (m <sup>2</sup> ) | Encroachment % of RPA |
| NG4  | Removal of existing hard surfacing | 28.2                                | 1.7                                     | 6.2                   |
| Removal of the existing hard surfacing along the West boundary is required that may encounter roots.<br>Small percentage encroachment. |                                    |                                     |   |                       |
| <b>ACTION</b><br>The existing hard surfacing over the RPA of NT4 will be carried out under Arboricultural supervision.                 |                                    |                                     |   |                       |
| <span style="background-color: #90EE90; padding: 2px;">Acceptable</span>   |                                    |                                     |   |                       |

## 13.0 Access

- 13.1 There is access to the site from the North and to the East along the alleyway.
- 13.2 There is no parking to the North, so the majority of equipment will be bought onto the site along the alleyway to the East.
- 13.3 Access will pass over the edge of the RPA of NT8, a low-quality Cherry Laurel that does not warrant ground protection.

## 14.0 Proximity And Shading

- 14.1 Section 5.3 of BS5837 addresses the issue of structures in proximity to trees and recommends that buildings are erected adequate distances away from trees to allow for future growth and development. Issues that are addressed include shading of buildings and open spaces, direct damage, pressure for removal, seasonal nuisance and concerns over safety.
- 14.2 The proximity between the development and the trees to be retained is in accordance with section 5.3 of BS5837, with the majority of the shadowing presenting the same amount of shade to the proposed house as exists with the current house.
- 14.3 Pressures on surrounding trees should be of little consequence for the following reasons:
  - Low maintenance gutters are to be specified close to retained trees, negating the need to remove leaves and needles from gutters and downpipes.
  - Tree pruning has been recommended to allow sufficient separation and clearance between the proposed development and the trees.
  - Future pruning works are unlikely to be greater than that of general maintenance purposes.

## 15.0 Tree Protection

15.1 All trees that are to be retained would be protected to the recommendations of BS5837:2012. Tree protection would be provided in the form of physical barriers or ground protection to protect the RPAs of retained trees. All barriers would be installed before the development commences and maintained for the duration of the development or to a specific stage.

### Tree Protection Fencing (Protective Barrier)

15.2 Tree Protection Fencing would be set out at the distances from the trees as noted in the Tree Survey Schedule under the RPA column or as illustrated on the Tree Protection Plan (Appendix 3).

15.3 The protected area would be designated as the 'Construction Exclusion Zone' (CEZ).

15.4 Only approved operations would be permitted to proceed within the CEZ.

15.5 The protective barrier to be used:

- **Secondary Specification:**

*The barrier is to consist of 2m tall welded mesh panels (Heras fencing) secured on pinned rubber or concrete feet. The weldmesh panels shall be securely fixed and joined together using a minimum of two anti-tamper couplers, installed so that they can only be removed from inside the fence. The distance between the fence couplers shall be at least 1m and shall be uniform throughout the fence. The panels shall be supported on the inner side by stabilizer struts, attached to a base plate secured with ground pins. (Appendix 4).*

15.6 Weatherproof signs (Appendix 5) to be placed on the fencing at regular intervals of no less than every 8m.

### Ground Protection

15.7 No ground protection is required for the project.

### Materials Storage

15.8 The storage and mixing of materials are to be located outside of the RPAs of retained trees.

15.9 No contaminating runoff is to be allowed to enter the RPAs of retained trees.

### Services

15.10 Looking at the proposal, it is anticipated that no services are to be installed within the RPAs of retained trees and the existing services can be utilised.



## 16.0 Mitigation & Summary

- 16.1 One C grade tree and one U grade group of trees are to be removed to facilitate the development.
- 16.2 Before the development commences, two groups and two trees require pruning back to near the boundary.
- 16.3 The Arboricultural implications of the proposed development are seen as acceptable, with the majority of the tree surveyed being retained.
- 16.4 All tree work, as recommended, is to be completed before the development begins.
- 16.5 Adequate Tree Protection Fencing is to be in place before the development begins.
- 16.6 During the development, the Construction Exclusion Zones are to be acknowledged and strictly seen as sacrosanct. Access is to be restricted over all RPAs without adequate ground protection or a CCS hard surfacing, being installed beforehand.
- 16.7 The removal of a section of hard standing within the RPA of NG4 will be carried out under Arboricultural supervision to limit potential damage to tree roots.
- 16.8 Any operations within the Construction Exclusion Zone/RPAs are to be carried out under Arboricultural supervision.
- 16.9 Landscaping - Ground within the RPAs shall not be mechanically scraped at any time. The clearance of any vegetation and ground within the RPAs shall be carefully carried out by hand. Vehicles shall not be allowed to track over the RPAs of retained trees.
- 16.10 Existing services are to be used; no additional excavations within RPAs will be required.
- 16.11 Low maintenance gutters using items like physical guards are to be specified where the roof is close to retained trees.
- 16.12 All retained trees are to be protected in accordance with BS5837.
- 16.13 The Arboricultural implications of the proposed development are deemed acceptable, subject to full compliance with these tree protection recommendations.

## 17.0 Appendices

# **Appendix 1 – Tree Survey Schedule BS5837:2012**

**Site:** 23A Hampton Road, Teddington, TW11 0JN  
**Client:** Mr Simon Kinsman  
**Survey Date:** 10th of July 2023  
**Ref No:** D3023.V1.0-AIA  
**LPA:** London Borough of Richmond  
**Weather:** Sunny  
**Inspector:** Tom Butterfield BSc (HONS) DipArb L4

## Tree Survey Schedule With Required Works



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[branchline@dryad-trees.co.uk](mailto:branchline@dryad-trees.co.uk)

| Prefix | ID | Species | No. Trees | No. Stem | HT (m) | Crown Spread (m) |     |     |     | LB/Bear | LB/Ht(m) | DBH (mm) | Age | Landscape | RPR (m) | RPA (m <sup>2</sup> ) | Vitality | Structure | BS Cat | Life (yrs) | Notes and Observations  | Preliminary Management Recommendations              | Required Works             | Reason                 |
|--------|----|---------|-----------|----------|--------|------------------|-----|-----|-----|---------|----------|----------|-----|-----------|---------|-----------------------|----------|-----------|--------|------------|---|---|----------------------------|------------------------|
|        |    |         |           |          |        | N                | E   | S   | W   |         |          |          |     |           |         |                       |          |           |        |            |   |   |                            |                        |
| NT     | 1  | Ash     | 1         | 2        | 5.5    | 3                | 2.5 | 2   | 2.5 | W       | 1.5      | 110      | SM  | L         | 1.3     | 5.5                   | Good     | Fair      | C3     | 10+        | Off-site tree growing against the boundary fence. Twin-stem from near ground level. The canopy overhangs the ground to the front of the site. Currently not showing symptoms of Ash Die Back Disease  | /   | /                          | /                      |
| G      | 2  | Mixed   | /         | /        | 5      | 1.5              | 0.5 | 1.5 | 1.5 | W       | 0        | 80       | SM  | L         | 1.0     | 2.9                   | Fair     | Fair      | U      | <10        | Group of one small Golden Cypress, small Sycamore that has been topped at 1m and a Sweet Chestnut that has sprouted from a previously cut down stump. Poor quality. Encroaching onto neighbouring property                                  | Cut back from neighbouring property to the boundary | Remove                     | Facilitate development |
| NG     | 3  | Mixed   | 2         | /        | 6.5    | 2.5              | 2.5 | 2   | 2   | E       | 3        | 250?     | SM  | L         | 3.0     | 28.3                  | Good     | Fair      | C2     | 10+        | Off-site trees, including a Himalayan Birch and one Cherry grow near the boundary. The Cherry overhangs the boundary by 1.5m  | /   | Cut back to the boundary   | Facilitate development |
| NG     | 4  | Mixed   | /         | /        | 8      | 2                | 2   | 2   | 2   | E       | 2        | 200?     | EM  | L         | 2.4     | 18.1                  | Fair     | Fair      | C3     | 10+        | Off-site group of shrubs and trees, including one Bhutan Pine, Elder, Magnolia and Yew. Some sections overhang the boundary, particularly the Elder resting on the property's flat roof. The Yews is in poor health and appears to be dying | Prune back to the boundary                          | Prune back to the boundary | Facilitate development |

| Prefix | ID | Species        | No. Trees | No. Stem | HT (m) | Crown Spread (m) |     |     |     | LB/Bear | LB/Ht(m) | DBH (mm) | Age | Landscape | RPR (m) | RPA (m <sup>2</sup> ) | Vitality | Structure | BS Cat | Life (yrs) | Notes and Observations   | Preliminary Management Recommendations | Required Works           | Reason                 |
|--------|----|----------------|-----------|----------|--------|------------------|-----|-----|-----|---------|----------|----------|-----|-----------|---------|-----------------------|----------|-----------|--------|------------|--|--|--------------------------|------------------------|
|        |    |                |           |          |        | N                | E   | S   | W   |         |          |          |     |           |         |                       |          |           |        |            |  |  |                          |                        |
| T      | 5  | Hazel          | 1         | MS       | 4      | 2                | 1.5 | 2   | 0.5 | E       | 1        | 90       | SM  | L         | 1.1     | 3.7                   | Good     | Fair      | C3     | 10+        | Multi-stem from ground level. Crown bias towards the East over the garden                                    | /                                      | Remove                   | Facilitate development |
| NT     | 6  | Sycamore       | 1         | 1        | 10     | 3                | 4   | 3   | 3   | E       | 3.5      | 220?     | SM  | L         | 2.6     | 21.9                  | Good     | Fair      | C2     | 10+        | Off-site tree. Stem bifurcates at 2m. Canopy overhangs the garden  | /                                      | /                        | /                      |
| T      | 7  | Photinia       | 1         | 1        | 3      | 2.5              | 1   | 2   | 2   | W       | 1.5      | 90       | SM  | L         | 1.1     | 3.7                   | Fair     | Fair      | C3     | 10+        | Stem bifurcates at 1m. Crown bias towards the West   | /                                      | /                        | /                      |
| NT     | 8  | Cherry Laurel  | 1         | 1        | 6.5    | 2                | 1.5 | 3   | 2.5 | W       | 2.5      | 200?     | EM  | L         | 2.4     | 18.1                  | Good     | Fair      | C3     | 10+        | Off-site tree. Stem divides into three stems from around 1.5m. Overhangs the garden                          | Cut back to the boundary               | Cut back to the boundary | Facilitate development |
| NT     | 9  | Sweet Chestnut | 1         | 1        | 3      | 1.5              | 1.5 | 1.5 | 1.5 | W       | 2        | 100?     | SM  | L         | 1.2     | 4.5                   | Fair     | Fair      | C3     | 10+        | Off-site tree. It appears to be re-growth from a previously cut-down stump. Multiple stems. Base not visible | Cut back to the boundary               | Cut back to the boundary | Facilitate development |

## Tree Survey Schedule Key

# Tree Survey Schedule Key and Notes

|                     |   |                    |   |   |
|---------------------|---|--------------------|---|---|
| <b>Prefix</b>       |   | Refers to:         | <b>ID</b>   | Refers to a unique identification number or tag number for the given tree or group. Corresponds to the Tree Constraints Plan and Tree Survey Schedule |
|                     | T   | Tree               |   |   |
|                     | NT  | Neighbouring Tree  |   |   |
|                     | G   | Group              |   |   |
|                     | NG  | Neighbouring Group |   |   |
|                     | W   | Woodland           |   |   |
|                     | H   | Hedge              |   |   |
| <b>No. Trees</b>    | Refers to the number of trees in a group  |                    |   |   |
| <b>No. Stem</b>     | Refers to the number of stems per individual tree   |                    |   |   |
| <b>Height</b>       | Describes the approximate height of the tree from ground level or buttress flare in meters  |                    |   |   |
| <b>Crown Spread</b> | Refers to the radius of the canopy in meters from the stem of the tree in the directions of North, East, South and West   |                    |   |   |
| <b>LB/Bear</b>      | Lowest Branch Bearing: Refers to the directions of the lowest point of the canopy in meters   |                    |   |   |
| <b>LB/Ht(m)</b>     | Lowest Branch Height: Refers to the ground clearance from the ground level to the height of the lowest point of the canopy in meters  |                    |   |   |
| <b>DBH</b>          | Diameter at Breast Height. Stem diameter of the tree trunk measured in millimetres. If the tree is multi-stemmed, each diameter is recorded in the survey and a final DBH is calculated in accordance with BS5837 |                    |   |   |
| <b>Age</b>          | Y   | Young              | Refers to the age class of the tree:<br>Young = Usually less than 10 years old  |   |
|                     | SM  | Semi-Mature        | Semi-Mature = Significant future growth to be expected, both in height and crown spread (typically below 30% of life expectancy)  |   |
|                     | EM  | Early Mature       | Early Mature = Full height almost attained. Significant growth may be expected in terms of crown spread (typically 30-60% of life expectancy)   |   |
|                     | M   | Mature             | Mature = Full height attained. Crown spread will increase but growth increments will be slight (typically 60% or more of life expectancy)   |   |
|                     | OM  | Over Mature        | Over Mature = A level of maturity whereby significant management may be required to keep the tree in a safe condition   |   |
|                     | V   | Veteran            | Veteran = A level of maturity whereby the crown has undergone natural or aided regression (veteranisation), significant management may be required to keep the tree in a safe condition. Typically contributes richly to ecological diversity |   |
| <b>RPR</b>          | The radius of the <b>Root Protection Radius</b> given in meters. The minimum area of ground requiring protection thorough developments  |                    |   |   |
| <b>RPA</b>          | The radius of the <b>Root Protection Area</b> given in meters. The minimum area of ground requiring protection thorough developments  |                    |   |   |
| <b>Vitality</b>     | G   | Good               | Refers to the vitality of the tree:   |   |
|                     | F   | Fair               | Having above average vitality   |   |
|                     | P   | Poor               | Having average vitality   |   |
|                     | D   | Dead               | Having well below average vitality is struggling to survive and may be dying<br>Tree is dead  |   |
| <b>Structure</b>    | G   | Good               | Refers to the structure of the tree:  |   |
|                     | F   | Fair               | Tree presents no significant structural defects   |   |
|                     | P   | Poor               | Tree presents some structural defects, unlikely to lead to high priority works  |   |
|                     | D   | Dead               | Tree presents significant structural defects that may lead to high priority works<br>Tree is dead   |   |
| <b>Landscape</b>    | H   | High               | Refers to the Landscape contribution value of the tree:   |   |
|                     | M   | Medium             | Exceptional or very attractive specimen, observable by a significant number of people and locations   |   |
|                     | L   | Low                | Attractive specimen, Medium potential to be observable by many people or vice versa<br>Unattractive specimen or largely hidden from view  |   |
| <b>BS CAT</b>       | Retention category refers to the BS5837, (See Appendix 2) list quality and value.   |                    |   |   |
|                     | "A"-high, "B"-moderate, "C"-Low and "U"-Remove.<br><br>List retentions criteria. "1"- Arboricultural, "2"-Landscape and "3"- Cultural / Conservational  |                    |   |   |
| <b>Life Exp</b>     | Life Expectancy: An estimated useful remaining contribution in years before the tree requires removal. Classed as (<10), (>10), (20+), (40+)  |                    |   |   |
| <b>Reasons</b>      | Refers to the reason a recommendation is made. Typically to facilitate the development, access, good Arboricultural practice or Health and Safety   |                    |   |   |

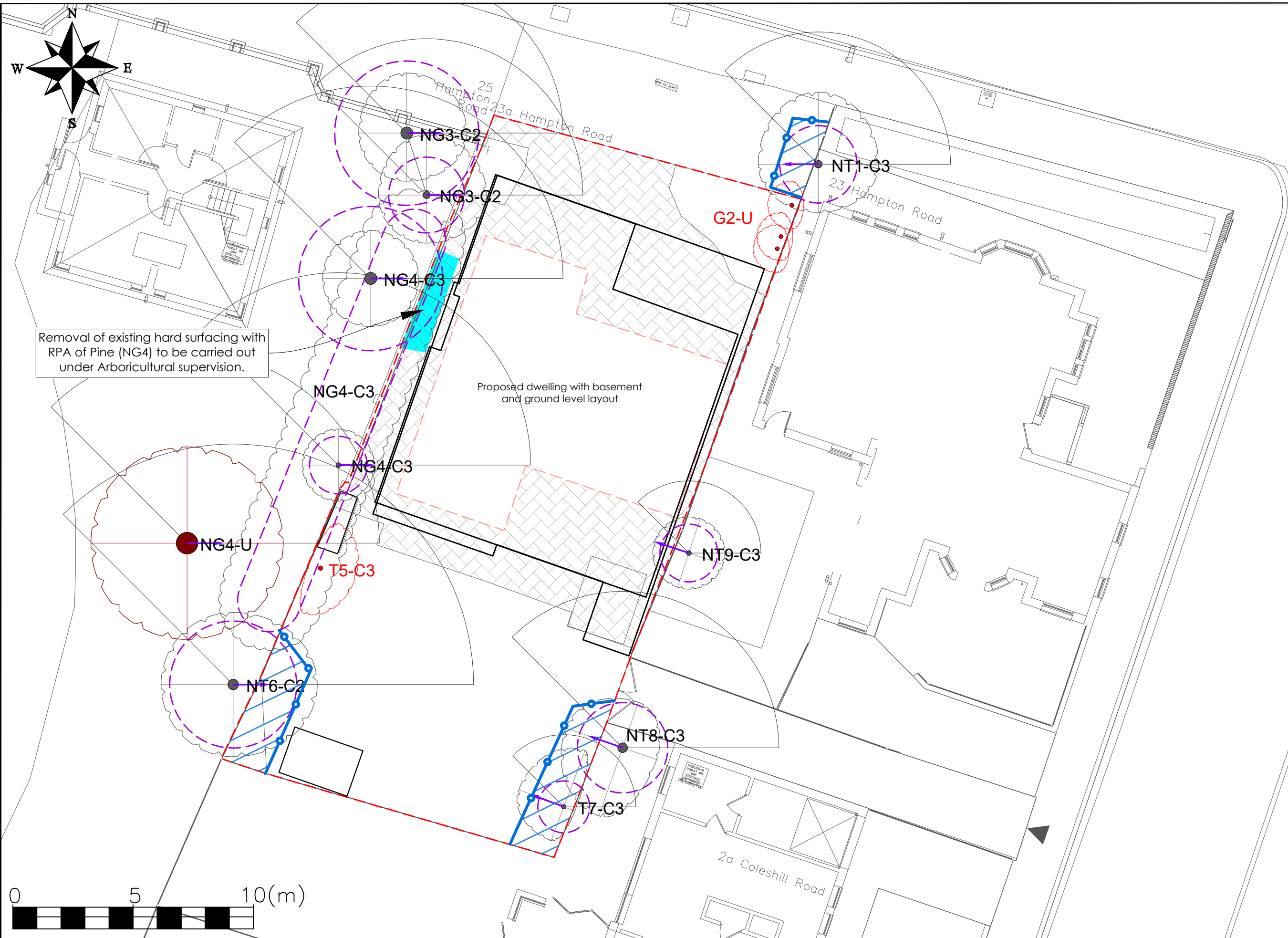
## **Appendix 2 –Cascade chart for tree quality assessment**

| <b>BS 5837:2012. Trees in relation to design, demolition and construction - Recommendations</b>   |   |   |  |
|---|---|---|--|
| <b>Cascade Chart for tree quality assessment</b>  |   |   |  |
| Trees to be considered for retention (see Note)   |   |   | Identification on Plan   |
| <p><b>Category U</b><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</p> | <ul style="list-style-type: none"> <li>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]</li> <li>Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline</li> <li>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</li> </ul> <p>NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.</p> |   | Dark Red<br>RGB Code: 127-000-000  |
|   | <b>1 Mainly Arboricultural qualities</b>  | <b>2 Mainly landscape qualities</b>   | <b>3 Mainly cultural values, including conservation</b>  |
| Trees to be considered for retention  |   |   |  |
| <p><b>Category A</b><br/>Trees of high quality with an estimated remaining life expectancy of at least 40 years</p>   | Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal Arboricultural features [e.g. the dominant and/or principal trees within an avenue]  | Trees, groups or woodlands of particular visual importance as Arboricultural and/or landscape features  | Trees, groups or woodlands of significant conservation, historical, commemorative or other value [e.g. veteran trees or wood- pasture] |
|   |   |   | Light green<br>RGB Code: 000-255-000   |
| <p><b>Category B</b><br/>Trees of moderate quality with an estimated remaining life expectancy of at least 20 years</p>   | 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 cate or A destination  | 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   |
|   |   |   | Mild Blue<br>RGB Code: 000-000-255   |
| <p><b>Category C</b><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</p>              | 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  |
|   |   |   | Grey<br>RGB code: 091-091-019  |

# Appendix 3 - Tree Protection Plan

D3023.V1.0.A3.TPP(AIA)





Removal of existing hard surfacing with RPA of Pine (NG4) to be carried out under Arboricultural supervision.

Proposed dwelling with basement and ground level layout

Notes:

BS5837 Tree Retention Categories

|   |  |
|---|--|
| <b>CATEGORY A</b><br>Trees of a high quality with an estimated remaining life expectancy of at least 40 years | <b>CATEGORY B</b><br>Trees of a moderate quality with an estimated remaining life expectancy of at least 20 years  |
| <b>CATEGORY C</b><br>Trees of a low quality with an estimated remaining life expectancy of at least 10 years  | <b>CATEGORY U</b><br>Trees of poor condition that cannot be realistically retained as living trees in the context of the current land use for longer than 10 years |
| <b>ROOT PROTECTION AREA</b><br>Precautionary areas - soil structure must be protected.                        | <b>TREES / GROUPS TO REMOVE PRIOR TO DEVELOPMENT COMMENCING</b>  |
| <b>SUPERVISED EXCAVATION</b>  | <b>EXISTING DRIVEWAY (PATH) / HARD STANDING</b>  |
|   | <b>CONSTRUCTION EXCLUSION ZONE</b>   |
|   | <b>TREE PROTECTION FENCING</b>   |
|   | <b>TREE SHADOW</b>   |

The Warning sign below is to be attached to the Tree protective fencing once erected

**TREE PROTECTION AREA**

TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY PLANNING CONDITIONS AND ARE SUBJECTS OF A TREE PROTECTION ORDER (TPO) & COUNTY PLANNING ACT 1990.

CONTRAVENTION OF THIS PROTECTION ORDER MAY LEAD TO CRIMINAL PROSECUTION

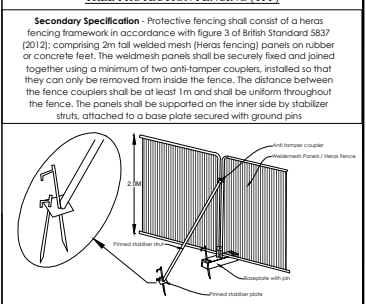
THE FOLLOWING MUST BE OBSERVED BY ALL PERSONS:

- THE PROTECTIVE FENCING MUST NOT BE REMOVED
- NO PERSON SHALL ENTER THE PROTECTED AREA
- NO MACHINERY OR PLANT SHALL ENTER THE PROTECTED AREA
- NO MATERIALS SHALL BE STORED IN THE PROTECTED AREA
- NO SPILL SHALL BE DEPOSITED IN THE PROTECTED AREA
- NO EXCAVATION SHALL OCCUR IN THE PROTECTED AREA

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

**KEEP OUT!**

TREE PROTECTION FENCING (TPF)



- General Site precautions**
- The following points will be observed at all times:
- No mechanical digging or scraping is allowed within defined RPAs.
  - No fires to be lit on site.
  - No access permitted inside the CEZ or TPE.
  - No materials, equipment or debris to be stored within the CEZ or RPAs of retained trees.
  - Notice boards, telephone cables or other services will not be attached to retained trees.
  - Materials that may contaminate the soil (e.g. vehicle washings) will not be permitted to operate or allow run off into the RPAs of retained trees or soils.
  - Site operations will avoid damage to the aerial part of the tree.

**Dryad Tree Specialists**  
Oak Hill  
Wood Street Village  
Guildford  
GU3 3ET  
(01483) 455 555  
www.dryad-trees.co.uk

CLIENT:  
Mr Simon Kinsman

SITE:  
23A Hampton Road, Teddington, TW11 0JN

TITLE:  
**Tree Protection Plan (AIA)**

|                           |                                       |                  |
|---------------------------|---------------------------------------|------------------|
| SCALE AT A3:<br>1:150     | DATE:<br>20/07/2023                   | DRAWN:<br>Tom B  |
| PROJECT NO:<br>D3023.V1.0 | DRAWING NO:<br>D3023.V1.0-A3-TPP(AIA) | REVISION:<br>1.0 |

## **Appendix 4 – Tree Protection**

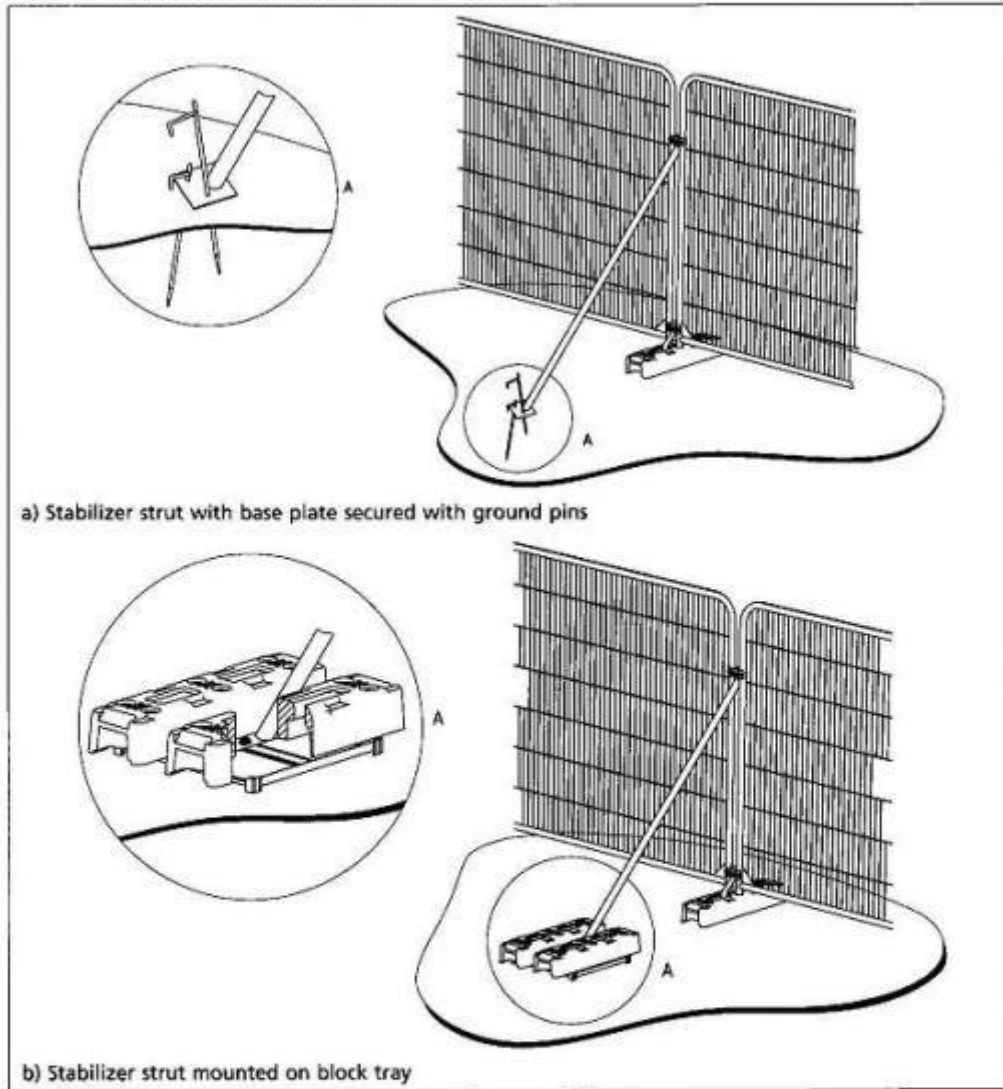
**Tree Protection Fencing**

SECONDARY SPECIFICATION - HERAS FENCING ON PINNED BASEPLATE

**BRITISH STANDARD**

**BS 5837:2012**

Figure 3 Examples of above-ground stabilizing systems



**6.2.3 Ground protection during demolition and construction**

6.2.3.1 Where construction working space or temporary construction access is justified within the RPA, this should be facilitated by a set-back in the alignment of the tree protection barrier. In such areas, suitable existing hard surfacing that is not proposed for re-use as part of the finished design should be retained to act as temporary ground protection during construction, rather than being removed during demolition. The suitability of such surfacing for this purpose should be evaluated by the project arboriculturist and an engineer as appropriate.

## **Appendix 5 - Exclusion sign for CEZ**

# TREE PROTECTION AREA

TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY PLANNING CONDITIONS AND ARE SUBJECTS OF  
A TREE PRESERVATION ORDER  
(TOWN & COUNTRY PLANNING ACT 1990)

**CONTRAVENTION OF TREE PRESERVATION ORDERS MAY LEAD TO CRIMINAL PROSECUTION**

THE FOLLOWING **MUST** BE OBSERVED BY ALL PERSONS:-

- THE PROTECTIVE FENCING MUST NOT BE REMOVED
- NO PERSON SHALL ENTER THE PROTECTED AREA
- NO MACHINE OR PLANT SHALL ENTER THE PROTECTED AREA
- NO MATERIALS SHALL BE STORED IN THE PROTECTED AREA
- NO SPOIL SHALL BE DEPOSITED IN THE PROTECTED AREA
- NO EXCAVATION SHALL OCCUR IN THE PROTECTED AREA

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

# KEEP OUT!



**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 ENCLOSED BY THIS FENCE ARE PROTECTED BY  
PLANNING CONDITIONS AND/OR ARE THE SUBJECTS OF A  
TREE PRESERVATION ORDER.**  
**CONTRAVENTION OF A TREE PRESERVATION ORDER MAY  
LEAD TO CRIMINAL PROSECUTION**  
**ANY INCURSION INTO THE PROTECTED AREA MUST BE  
WITH THE WRITTEN PERMISSION OF THE LOCAL  
PLANNING AUTHORITY**