

# Arboricultural Report

In accordance with BS 5837:2012

For 18 St Catherines Road  
Ruislip  
HA4 7RU



June 2021

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Registered in England and Wales. Company No. 6188819

# **ARBORICULTURAL REPORT**

## **Location:**

18 St Catherines Road, Ruislip, HA4 7RU

## **Client:**

Ruislip 2<sup>nd</sup>/9<sup>th</sup> Scout Group, 18 St Catherines Road, HA4 7RU

## **Date of survey:**

22/06/21

## **Date of report:**

29/06/21

## **Report contents:**

1. Introduction
2. Relevant legislation
3. Survey findings
4. Arboricultural method statement and options
5. Site plan
6. Schedule of trees and impact assessment

## **1. Introduction**

### **Surveyor and survey date**

1.1 The surveyor and author of this report was Ralph Parks B.Sc., Arboricultural Consultant and Director of Ralph Parks Ltd. The survey was undertaken on 22<sup>nd</sup> June 2021.

### **Client**

1.2 Ruislip 2<sup>nd</sup>/9<sup>th</sup> Scout Group, 18 St Catherines Road, Ruislip

### **Site and nature of proposed works**

1.3 18 St Catherines Road, Ruislip. The proposed works are to demolish the existing buildings on site and build a new Scout Hut and storage buildings.

### **Survey Instructions**

1.4 This Arboricultural survey was commissioned to conform to BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations.

### **Methodology**

1.5 A standard Arboricultural survey was undertaken, noting tree species, stem diameter, height and spread and notes on general condition and age. Heights and distances were measured using surveyors tapes, a Leica Distometer and Suunto Clinometer.

Tree diameters were measured in accordance with Annex C of BS 5837:2012. Measurements were usually taken at 1.5m above ground level, using a diameter tape, where possible. Where trees have multiple stems, measurements were taken for all stems.

Trees were numbered from 152 – 167, a round metal tree tag nailed into each bole at approximately eye level.

Tree locations were measured against fixed points on the site and surrounding properties and locations plotted on a site plan.

Trees were assessed for quality in accordance with Table 1 from BS 5837:2012

|                                      |                                                                                                                              |
|--------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| Trees unsuitable for retention       |                                                                                                                              |
| Category U                           | Trees with serious faults                                                                                                    |
| Trees to be considered for retention |                                                                                                                              |
| Category A                           | Good examples of the species, life expectancy 40+ years                                                                      |
| Category B                           | Moderate quality trees, life expectancy at least 20 years                                                                    |
| Category C                           | Unremarkable trees of limited merit but life expectancy of at least 10 years or young trees with a stem diameter below 150mm |

Root Protection Areas (RPA) were calculated for each tree based on the diameters at breast height. The formulae in section 4.6.1 of BS 5837:2012 were used for trees with multiple stems.

### **Limitations**

1.6 Trees were subject to visual inspection only and specialist equipment such as resistographs were not employed, nor were core samples taken.

1.7 Tree conditions can change quickly, especially in extreme weather events. This report details the conditions of the trees as observed on the day of inspection, therefore the author cannot accept any liability for any changes in tree condition occurring subsequent to the date of inspection.

1.8 Soil sampling or ground investigations were not included in the remit of this survey.

1.9 Trees on the neighbouring property to the east were not accessed and are not included in the remit of this report. However the Leyland Cypress hedge has tree diameters too small to impact on the proposed works.

## **2 Relevant legislation**

2.1 None of the trees on site are currently subject to a Tree Preservation Order, nor does the site lie within a Conservation area

### **3 Survey results**

|                  |                              |
|------------------|------------------------------|
| <b>Tree</b>      | <b>152</b>                   |
| Location         | North west of site           |
| Species          | Elm                          |
| Number stems     | 1                            |
| DBH (cm)         | 18.5                         |
| Height (m)       | 11                           |
| Spread (m)       | 6                            |
| Age              | Early mature                 |
| Condition        | Poor                         |
| Observations     | Asymmetric crown, in decline |
| BS 5837 category | U                            |
| RPA radius (m)   | 2.22                         |



|                  |                                                      |
|------------------|------------------------------------------------------|
| <b>Tree</b>      | <b>153</b>                                           |
| Location         | North Western boundary                               |
| Species          | Hawthorn                                             |
| Number stems     | 2                                                    |
| DBH (cm)         | 10/4                                                 |
| Height (m)       | 6                                                    |
| Spread (m)       | 4                                                    |
| Age              | Young                                                |
| Condition        | Poor                                                 |
| Observations     | Young regrowth from decayed stool – hollow in ground |
| BS 5837 category | U                                                    |
| RPA radius (m)   | 1.08                                                 |

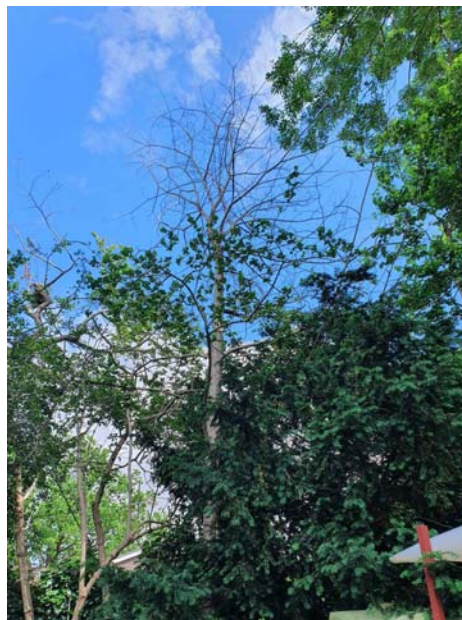




|                  |                                      |
|------------------|--------------------------------------|
| <b>Tree</b>      | <b>155</b>                           |
| Location         | Against north western Boundary fence |
| Species          | Elder                                |
| Number stems     | 1                                    |
| DBH (cm)         | 12.5                                 |
| Height (m)       | 7                                    |
| Spread (m)       | 5                                    |
| Age              | Early mature                         |
| Condition        | Poor                                 |
| Observations     | Moribund, against fence              |
| BS 5837 category | U                                    |
| RPA radius (m)   | 1.50                                 |



|                  |                           |
|------------------|---------------------------|
| <b>Tree</b>      | <b>156</b>                |
| Location         | North east corner of site |
| Species          | Elm                       |
| Number stems     | 1                         |
| DBH (cm)         | 17                        |
| Height (m)       | 12.0                      |
| Spread (m)       | 5.0                       |
| Age              | Early mature              |
| Condition        | Good                      |
| Observations     | Dead                      |
| BS 5837 category | U                         |
| RPA radius (m)   | 2.04                      |





|                  |                                            |
|------------------|--------------------------------------------|
| <b>Tree</b>      | <b>157</b>                                 |
| Location         | North east corner of site                  |
| Species          | Yew                                        |
| Number stems     | 1                                          |
| DBH (cm)         | 13                                         |
| Height (m)       | 6.0                                        |
| Spread (m)       | 5.0                                        |
| Age              | Early mature                               |
| Condition        | Good                                       |
| Observations     | Balanced with many laterals from near base |
| BS 5837 category | U                                          |
| RPA radius (m)   | 1.56                                       |



|                  |                       |
|------------------|-----------------------|
| <b>Tree</b>      | <b>158</b>            |
| Location         | Eastern boundary      |
| Species          | Elm                   |
| Number stems     | 1                     |
| DBH (cm)         | 10                    |
| Height (m)       | 10                    |
| Spread (m)       | 3                     |
| Age              | Young                 |
| Condition        | Fair                  |
| Observations     | Etiolated, in decline |
| BS 5837 category | U                     |
| RPA radius (m)   | 1.20                  |



|                  |                                 |
|------------------|---------------------------------|
| <b>Tree</b>      | <b>159</b>                      |
| Location         | Eastern boundary                |
| Species          | Ash                             |
| Number stems     | 1                               |
| DBH (cm)         | 45                              |
| Height (m)       | 22.0                            |
| Spread (m)       | 14.5                            |
| Age              | Semi mature                     |
| Condition        | Fair                            |
| Observations     | Forks @ 4m, co-dominant leaders |
| BS 5837 category | B                               |
| RPA radius (m)   | 5.40                            |





|                  |                                      |
|------------------|--------------------------------------|
| <b>Tree</b>      | <b>160</b>                           |
| Location         | Eastern boundary                     |
| Species          | Ash                                  |
| Number stems     | 1                                    |
| DBH (cm)         | 49                                   |
| Height (m)       | 22.0                                 |
| Spread (m)       | 14.0                                 |
| Age              | Semi mature                          |
| Condition        | Fair                                 |
| Observations     | Tight fork @ 6m, co-dominant leaders |
| BS 5837 category | B                                    |
| RPA radius (m)   | 5.88                                 |





|                  |                                     |
|------------------|-------------------------------------|
| <b>Tree</b>      | <b>161</b>                          |
| Location         | Eastern boundary, adjacent to fence |
| Species          | Elm                                 |
| Number stems     | 1                                   |
| DBH (cm)         | 20                                  |
| Height (m)       | 11.0                                |
| Spread (m)       | 7.0                                 |
| Age              | Early mature                        |
| Condition        | Poor                                |
| Observations     | Dead                                |
| BS 5837 category | U                                   |
| RPA radius (m)   | 2.40                                |



|                  |                                       |
|------------------|---------------------------------------|
| <b>Tree</b>      | <b>162</b>                            |
| Location         | Eastern boundary                      |
| Species          | Ash                                   |
| Number stems     | 3 becoming 6                          |
| DBH (cm)         | 30 / 30 / 24                          |
| Height (m)       | 13.0                                  |
| Spread (m)       | 11.0                                  |
| Age              | Early mature                          |
| Condition        | Fair                                  |
| Observations     | On boundary, three stems forking @ 1m |
| BS 5837 category | C                                     |
| RPA radius (m)   | 4.87                                  |



|                  |                   |
|------------------|-------------------|
| <b>Tree</b>      | <b>163</b>        |
| Location         | Southern boundary |
| Species          | Elm               |
| Number stems     | 1                 |
| DBH (cm)         | 14                |
| Height (m)       | 7                 |
| Spread (m)       | 4                 |
| Age              | Early mature      |
| Condition        | Poor              |
| Observations     | Moribund          |
| BS 5837 category | U                 |
| RPA radius (m)   | 1.68              |





|                  |                   |
|------------------|-------------------|
| <b>Tree</b>      | <b>164</b>        |
| Location         | Southern boundary |
| Species          | Elm               |
| Number stems     | 1                 |
| DBH (cm)         | 22                |
| Height (m)       | 12.5              |
| Spread (m)       | 6                 |
| Age              | Early mature      |
| Condition        | Poor              |
| Observations     | Moribund          |
| BS 5837 category | U                 |
| RPA radius (m)   | 2.64              |

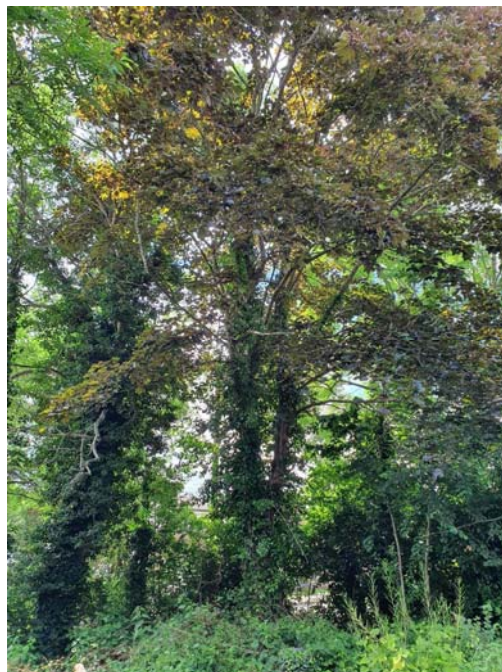
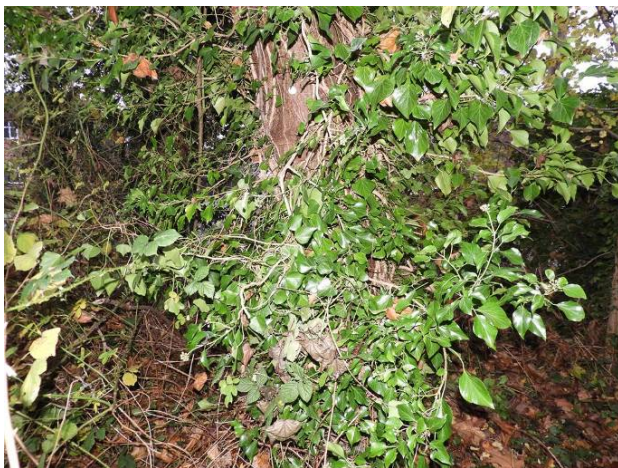




|                  |                                       |
|------------------|---------------------------------------|
| <b>Tree</b>      | <b>165</b>                            |
| Location         | Southern boundary                     |
| Species          | Ash                                   |
| Number stems     | 1                                     |
| DBH (cm)         | 35                                    |
| Height (m)       | 14.5                                  |
| Spread (m)       | 10                                    |
| Age              | Semi mature                           |
| Condition        | Fair                                  |
| Observations     | Against fence with some wire included |
| BS 5837 category | B                                     |
| RPA radius (m)   | 4.20                                  |



|                  |                                                                                 |
|------------------|---------------------------------------------------------------------------------|
| <b>Tree</b>      | <b>166</b>                                                                      |
| Location         | South west corner                                                               |
| Species          | Norway Maple                                                                    |
| Number stems     | 1                                                                               |
| DBH (cm)         | 41                                                                              |
| Height (m)       | 14.5                                                                            |
| Spread (m)       | 10                                                                              |
| Age              | Semi mature                                                                     |
| Condition        | Fair                                                                            |
| Observations     | Heavy Ivy obscuring inspection. Asymmetric crown with bias to north due to T165 |
| BS 5837 category | B                                                                               |
| RPA radius (m)   | 4.92                                                                            |





|                  |                                                    |
|------------------|----------------------------------------------------|
| <b>Tree</b>      | <b>167</b>                                         |
| Location         | South west corner                                  |
| Species          | Birch                                              |
| Number stems     | 1                                                  |
| DBH (cm)         | 15                                                 |
| Height (m)       | 11.5                                               |
| Spread (m)       | 4                                                  |
| Age              | Early mature                                       |
| Condition        | Poor                                               |
| Observations     | Etiolated with significant lean to NNE due to T166 |
| BS 5837 category | U                                                  |
| RPA radius (m)   | 1.80                                               |



## **4 Arboricultural Method statement and options**

### **Implications of disease to the tree classifications**

4.1 Dutch Elm disease is present in all elms, which are dead or moribund. Elms account for 7 of the trees numbered on the site.

There are four Ash trees on the site. Ash die back (*Hymenoscyphus fraxineus*) is known to be present within the 10 km radius of this site, however symptoms were not observed in either the established trees or the regeneration on the western boundary. The author of this report is a Forestry Commission Plant health inspector and has observed what is almost certainly Ash Die back within 5km of the site at Moor Park.

Therefore, whilst the possibility of Ash die back has not been factored in to the BS5837 classifications, the potential for this disease should be taken into account. Given that the proposed development is for a Scout Hut, children and young adults will be the potential targets should any trees on the site subsequently become diseased and dangerous.

### **Existing footprints and topography**

4.2 There are several existing buildings on the site and a concrete roadway running parallel to the eastern boundary for 66% of its length. The existing footprints will have an affect on root development and therefore the locations of the root protection areas.

There is a man made mound of soil along the northern border of the site. Trees 152 to 158 are growing on or adjacent to this mound.

### **Trees on the north east boundary – T152 to T158**

4.3 Whilst T157 the Yew is in good condition, it has been classified as U since its DBH is below 15cm. The remaining trees are of poor quality or are Elms which are likely to be infected with Dutch Elm disease within the next 10 years.

### **Trees on the eastern boundary T159 – T162**

4.4 The two most significant trees on this boundary are T159 and T160, both semi mature Ash. The trees are of similar dimensions and age and should be considered as a pair. Whilst both trees have been given a B classification, neither is considered to be suitable for retention given their proximity to the proposed new building and the potential targets once the



building is in use. It is likely that the proposed new footprint will impinge on the Root protection areas of both trees, though the southernmost RPA could be amended due to the proximity to the existing roadway. Both trees fork at 4 and 6 metres respectively and the southernmost has a tight fork. Reducing these trees as a pair may be a possibility; however the pollard regrowth will be a potential hazard within 20 years.

T163 is a dead Elm against the fence.

T164 is a multi-stemmed Ash growing on the boundary just over two metres from the access gate. This tree could be retained, however the existing access road sits over most of the root protection area and construction traffic will need to use this access.

### **Trees on the south western boundary T163 – T167**

4.5 The trees on this boundary provide some screening for the site from the road, which is desirable to maintain and improve. However, T163 and T164 are Elms, which are moribund due to Dutch Elm Disease.

T165 is an Ash and T166 a Norway Maple, both with B classifications. It is intended to retain both these trees and to protect the root protection areas as detailed in section 4.7 of this report.

Parking and the storage of materials will be prohibited in the root protection areas of these trees.

T167 is a poor quality Birch with a significant lean as it is suppressed by T166. It is proposed to fell this tree.

### **Mitigation**

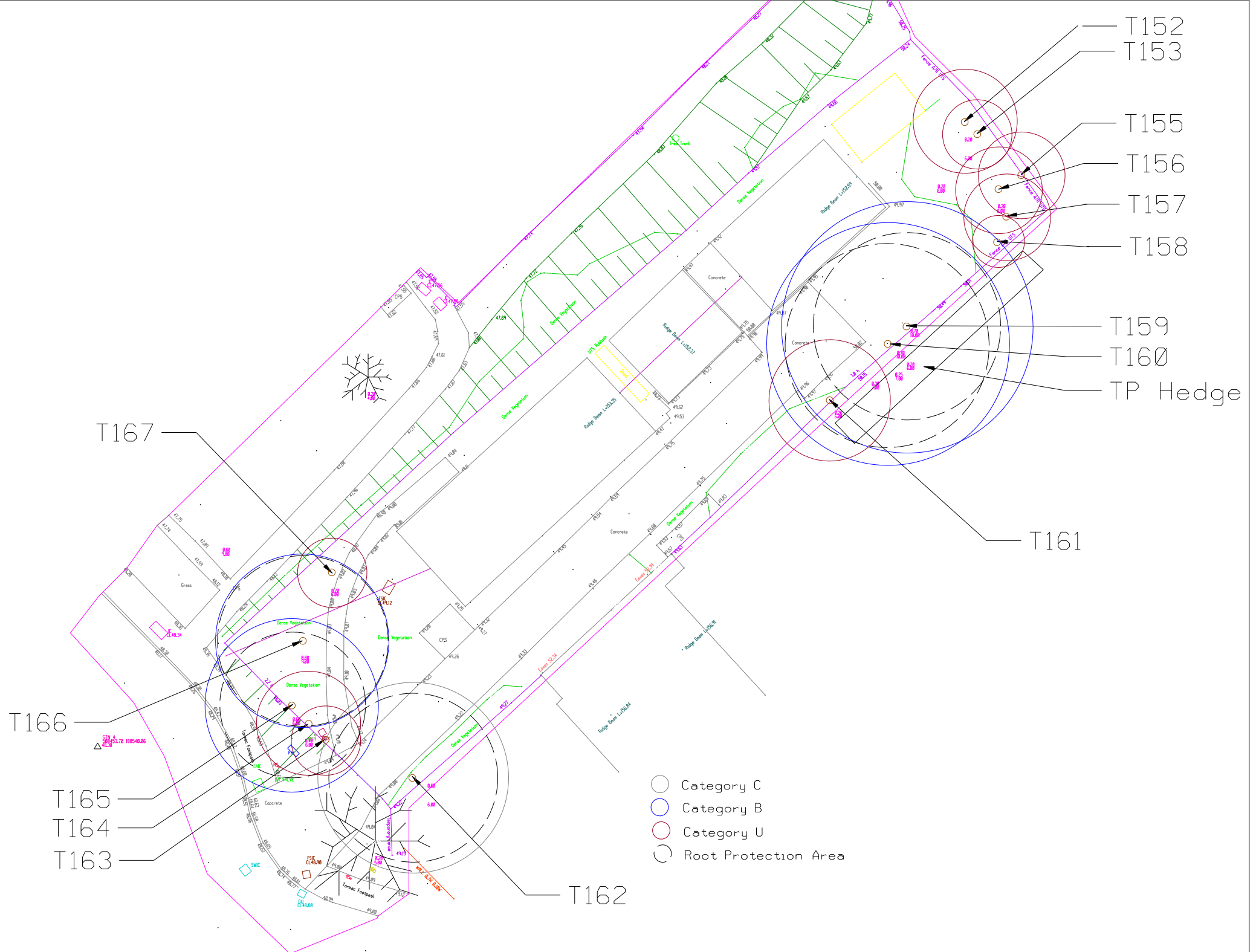
4.6 It is proposed to mitigate the felling on this site by planting new trees in accordance with the attached landscaping plan.

### **Materials for protecting the root protection areas and RPA demarcation**

4.7 Rigid boundaries will be created using standard scaffold poles (48.3 mm O/D) driven into the ground to a minimum depth of 0.6m and spaced at maximum three metre centres. The uprights will support weld mesh infill panels such as Heras fencing. Where possible, stabiliser struts will be attached to the uprights using scaffold Swivel couplers (to BS EN74-1). All weather signage stating “construction exclusion zone – no access” will be attached to the infill panels.

The root protection areas will be measured on the ground as a radius from the centre of each tree that requires protection. Where possible, a buffer of one metre will be added to the RPA.

## **5 Site plans**





## 6 Schedule of trees and impact assessment

| Tree     | Species                  | DBH (cm)   | Stems  | Ht (m) | Spr (m) | Age | Cond | First branch (m) | Cat A/B/C/U | Ivy | Fence (m) | Fence (m) | Notes                                                                                                     |
|----------|--------------------------|------------|--------|--------|---------|-----|------|------------------|-------------|-----|-----------|-----------|-----------------------------------------------------------------------------------------------------------|
| 152      | Elm                      | 18.5       | 1      | 11.0   | 6       | EM  | Poor | 4                | U           | Y   | 0.95      | 7.00      | Asymmetric, in decline                                                                                    |
| 153      | Hawthorn                 | 10 / 4     | 2      | 6.0    | 4       | EM  | Poor | 0.6              | U           | Y   | 0.73      | 6.00      | Young regrowth, twin from near base with poor shape                                                       |
| 155      | Elder                    | 12.5       | 1      | 7.0    | 5       | EM  | Poor | 2                | U           | Y   | 0.05      | 2.50      | Dead                                                                                                      |
| 156      | Elm                      | 17         | 1      | 12.0   | 5       | EM  | Good | 2.5              | U           | N   | 1.60      | 2.60      | Moribund                                                                                                  |
| 157      | Yew                      | 13         | 1      | 6.0    | 5       | EM  | Good | 0.4              | U           | Y   | 0.50      | 1.30      | Many laterals from base, balanced                                                                         |
| 158      | Elm                      | 10         | 1      | 10.0   | 3       | EM  | Fair | 2                | U           | Y   | 3.40      | 0.50      | In decline                                                                                                |
| 159      | Ash                      | 45         | 1      | 22.0   | 15      | SM  | Fair | 5                | B           | Y   | 10.50     | 0.30      | Forks @ 4m with co-dominant leaders. Bias to north and west due to T160, with lean to west. Some deadwood |
| 160      | Ash                      | 49         | 1      | 22.0   | 14      | SM  | Fair | 3                | B           | Y   | 11.90     | 0.10      | Tight fork @ 6m with co-dominant leaders. Bias to south due to T159. Some deadwood.                       |
| TP hedge | Cherry Laurel, Leylandii | N/A        |        | 15.0   | 20      | EM  | Fair |                  |             |     |           |           | Third party; not accessed or measured. Three Leyland Cypress. Suppressed by T159/T160                     |
| 161      | Elm                      | 20         | 1      | 11.0   | 7       | EM  | Fair | 1.5              | U           | Y   | 16.70     | 0.10      | Dead                                                                                                      |
| 162      | Ash                      | 30 /30 /24 | 3 to 6 | 13.0   | 11      | EM  | Fair | 3                | C           | Y   | 2.10      | 0.50      | Three stems to 1.5m, each then forking to make total of six stems. On boundary                            |

| Tree     | Species       | DBH (cm) | Stems | Ht (m) | Spr (m) | Age | Cond | First branch (m) | Cat A/B/C/U | Ivy | Fence (m) | Fence (m) | Notes                                                                                               |
|----------|---------------|----------|-------|--------|---------|-----|------|------------------|-------------|-----|-----------|-----------|-----------------------------------------------------------------------------------------------------|
| 163      | Elm           | 14       | 1     | 7.0    | 4       | EM  | Fair | 2.5              | U           | Y   | 0.05      | 8.00      | Single stem against chainlink fence, moribund                                                       |
| 164      | Elm           | 22       | 1     | 12.5   | 6       | Y   | Fair | 3                | U           | Y   | 0.05      | 6.70      | Single stem against fence with some chainlink wire included. Partially suppressed by T165, moribund |
| 165      | Ash           | 35       | 1     | 14.5   | 10      | EM  | Fair | 4                | B           | Y   | 0.05      | 5.30      | Heavy Ivy preventing accurate DBH measurement and obscuring inspection. Some wire included in stem. |
| 166      | Norway Maple  | 41       | 1     | 14.5   | 10      | EM  | Fair | 4                | B           | Y   | 3.30      | 2.90      | Heavy Ivy. Crown asymmetric with bias to east and north due to crown of T165                        |
| 167      | Birch         | 15       | 1     | 11.5   | 4       | EM  | Poor | 4                | U           | Y   | 6.90      | 0.93      | Significant lean to NNE due to T166. Etiolated with (redundant) cable through crown.                |
| NW hedge | Ash/Elm regen |          |       |        |         | Y   |      |                  |             |     |           |           | Line of Ash and Elm regeneration on the western boundary fence                                      |