

# TREE SOLUTIONS



## **Arboricultural Impact Assessment & Method Statement**

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### **St Johns CE (Thornham) Primary School**

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Prepared for:

**THE CRANMER TRUST**

Our Ref: 24/AIA/ROCH/13

April 2024

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## 1.0 INSTRUCTION

- 1.1 We have been instructed by The Cranmer Trust (the applicant) to carry out an Arboricultural Impact Assessment (AIA) to assess the development proposal in relation to trees in accordance with the principles of British Standard 5837 'Trees in Relation to Design, Demolition & Construction - Recommendations' 2012.
- 1.2 We are instructed to prepare a report to provide information to assist all parties involved in the planning process to make balanced judgements regarding arboricultural features in relation to the proposed development at St Johns CE (Thornham) Primary School, Middleton. As such, all trees within influencing distance to the development proposal both on and adjoining the site have been surveyed and are listed within a Tree Survey Schedule (**Appendix 1**) and plotted on all accompanying plans.
- 1.3 The stage 1 tree survey was carried out in March 2024 by Russell Pearce, Consultant to Tree Solutions Ltd. Our appraisal of the mechanical integrity of trees on the site is enough to inform the current project. The assessment of trees is carried out from ground level without invasive investigation and the disclosure of hidden defects cannot therefore be expected. Whilst the survey is not specifically commissioned to report on matters of tree safety, we report obvious defects that are significant in relation to the existing and proposed land use. We do not carry out detailed safety inspections unless specifically instructed to do so in writing and have not carried out such inspections of trees on the proposal site.
- 1.4 Twenty-eight individual trees (T1–T28), twelve groups (G1–G12) and four hedgerows (H1–H4) were surveyed and mapped on a Preliminary Tree Constraints & Impact Assessment Plan Ref: 24/AIA/ROCH/13, Drawing No. 1 & 2 at **Appendix 2**. All arboricultural information recorded during the survey is presented within a schedule at **Appendix 1**.
- 1.5 The Arboricultural Impact Assessment is based on the proposed layout plan, Drawing No: 5635-HMA-SJT-00-DR-A-00203 (Rev A) provided by Halliday Meecham Architects.

## 2.0 STATUTORY CONTROLS & PLANNING POLICY

- 2.1 We have been unable to ascertain if any trees are subject to a Tree Preservation Orders or Conservation Area designation as this information is unavailable online. You are advised to seek confirmation on this prior to undertaking any works to trees not granted consent under this planning application.

### 2.2 Protected Species

- 2.2.1 Mature trees often contain cavities, crevices and hollows that offer potential habitat for species such as bats and barn owls. Both are afforded protection under the Schedule 5 of the Wildlife and Countryside Act 1981 (as amended), as well as The Conservation (Natural Habitats, &c) (Amendment) Regulations 2007.

### 2.3 Wildlife Habitats

- 2.3.1 Trees and hedgerows of most species provide valuable nesting sites for a wide range of birds, and it is likely that nesting birds will be present on the site during the period March to September.

## 3.0 THE SITE

- 3.1 The application site contains a primary school with associated vehicular access and parking areas.

## 4.0 DEVELOPMENT PROPOSAL

- 4.1 Extension and alterations.

## 5.0 GENERAL CONSTRAINTS DATA - CONSTRUCTION EXCLUSION ZONES (CEZ's)

### 5.1 GENERAL

5.1.1 During the development process for retention trees, there may be three and even four constraints to consider: Construction Exclusion Zone (CEZ's):

- CEZ 1: Root Protection Area (see 5.2)
- CEZ 2: Tree Crown Protection (see 5.3)
- CEZ 3: Tree Dominance (see 5.4)
- CEZ 4: New Tree Planting Zone (see 5.5)

CEZ's are explained below:

### 5.2 CEZ 1: ROOT PROTECTION AREA (RPA)

5.2.1 The RPA, calculated in m<sup>2</sup>, should be protected before and during any demolition/construction works. This ensures the effective retention of trees by safeguarding a reliable quantum of functioning tree roots. The RPA is based on a radial measure from the centre of the tree stem, which is calculated by multiplying the stem diameter by a factor of twelve or by the (mean stem diameter<sup>2</sup>) x number of stems for multi-stemmed trees.

5.2.2 During the AIA 2, the derived radial measure is converted by the arboriculturalist into the actual area to be protected, having due regard to prevailing site conditions and how these may have affected the tree(s), particularly in relation to factors affecting their likely rooting disposition. The RPA for each tree should initially be plotted as a circle centred on the base of the stem. Where pre-existing site conditions or other factors indicate that rooting has occurred asymmetrically, a polygon of equivalent area should be produced. Modifications to the shape of the RPA should reflect a soundly based arboricultural assessment of likely root distribution.

5.2.3 The means of protecting the RPA will include the installation of tree protective fencing prior to the start of any demolition or construction work on site. The prohibition of various activities within the RPA must be adhered to (e.g. mechanical excavation, soil stripping, fire lighting, material storage, lowering levels and creating excessive sealed surfacing) and may include the use of temporary ground protection and/or special engineering solutions where construction is proposed near to retention trees or within the RPA.

### 5.3 CEZ 2: TREE CROWN PROTECTION ZONE

5.3.1 All development and associated construction work is clear of retained tree canopies such that access facilitation pruning is not required to undertake the proposed works. Tree protective fencing will be erected at the full extent of all canopies to ensure no contact and subsequent damage occurs.

### 5.4 CEZ 3: TREE DOMINANCE ZONE

5.4.1 N/A the site is an active primary school where the trees are seen as a significant asset.

### 5.5 CEZ 4: NEW PLANTING ZONE

5.5.1 Refer to landscape proposals.

## 6.0 SURVEY METHODOLOGY

6.1 The method used in the preparation of this report is based on the principles of BS 5837: 2012.

1. Tree heights were surveyed to the nearest 1m
2. Trunk diameters were measured by use of forestry girth tape
3. The category assessment (Table 1) on which the trees is based include current and long-term arboricultural, landscape, cultural and conservation values (BS5837: 2012). This table can be found at **Appendix 1**
4. For clarity, the grading system is summarised from **Table 2** of the BS as follows:

**U grade** – trees for removal, effective for less than 10 years

**A grade** – trees of high quality and value, effective for more than 40 years

**B grade** – trees of moderate quality and value, effective for more than 20 years

**C grade** – trees of low quality and value, effective for 10 years

*Note: We have indicated colour coding on the drawing and therefore a monochrome copy should not be relied on.*

## 6.2 SOIL ASSESSMENT

6.2.1 A soil assessment should be undertaken by a competent person to inform decisions relating to:

- the root protection area (RPA)
- tree protection
- new planting design; and
- foundation design to take account of retained, removed and new trees (potential soil subsidence/heave)

Tree Solutions do not undertake soil assessments and the client is advised to seek specialist advice in this respect.

## 7.0 JUXTAPOSITION OF TREES AND STRUCTURES

### 7.1 Below ground constraints

- 7.1.1 The below ground constraints are generally summarised as the root protection area (RPA). The shape of the RPA and its exact location will depend upon arboricultural considerations including likely tolerance of the tree to root disturbance; morphology and disposition of the roots when known influenced by past or existing site conditions; soil type and structure; and topography and drainage.
- 7.1.2 The purpose of the RPA is to prevent physical damage to tree roots and to prevent damage to the soil structure. Tree roots are damaged by soil compaction, changes in soil levels or soil contamination which could reduce tree health and/or stability.
- 7.1.3 Root patterns are affected by topography and characteristics of the soil or substrate. Where trees are located within proximity to existing hard standing or underground physical barriers, they are unlikely to have an even distribution of lateral roots due to restrictions in root growth created by compacted sub-grades beneath. RPA's have been modified around the buildings and run 2m within the road and extend further in the opposite direction where a more favourable rooting environment exists. All other trees have all been plotted unmodified as there were no significant underground barriers to prevent radial root spread.

### 7.2 Underground Services

- 7.2.1 There are no proposed service runs within the RPA of trees.

## 8.0 DEVELOPMENT IMPACT TO TREES

- 8.1 Tree Solutions carried out a stage one preliminary tree survey and provided the project architect with a report in which all existing trees and their respective Root Protection Areas (RPA) were identified and plotted on a tree constraints and indicative impact assessment plan. We are satisfied that the current layout followed our advice during the design phase and is in accordance with BS5837: 2012 and the National Planning Policy Framework (NPPF) 2023.
- 8.2 In order to accommodate the proposed new cycle track it will be necessary to remove tree numbers 21-23 and group 11. Tree numbers 21 & 22 are young Oaks that can be easily transplanted elsewhere within the grounds, group 11 are low quality Elms that have seen poor past management and as a result offer little if any amenity/landscape value to the school and tree number 23 is a small semi-mature specimen that can be easily replaced by new planting. The school grounds are heavily stocked with trees which makes for a pleasant environment. This significant tree cover mitigates the loss of trees as the landscape character and setting of the school grounds will remain unchanged.
- 8.3 A small hedge (H2) and the western canopy of G1 will be removed to provide adequate easement for the mini-football pitch.

## 9.0 PROPOSED REVISIONS TO THE SCHEME

9.1 We advise that all proposed revisions having implications for trees should be referred to us for review.

## 10.0 CONCLUSIONS

10.1 BS 5837: 2012 contains clear and current recommendations for a best practice approach to the assessment, retention, and protection of trees on development sites. The proposed development has followed this guidance by:

- Seeking arboricultural advice and undertaking a phase 1 preliminary tree survey to inform the layout and design of the proposed development
- Respecting the constraints posed to development of the site by high or moderate quality trees
- Acting upon arboricultural advice throughout the design process to obtain the best development proposal whilst considering the current and future tree requirements
- Taking the above into consideration, we can see no viable Arboricultural grounds for refusal.

## 11.0 LIMITING CONDITIONS

- Unless stated otherwise:
- Information contained in this report covers only those trees that were examined and reflects the condition of those trees at the time of the inspection.
- The inspection is limited to visual examination of the subject trees from ground level only and without dissection, excavation, probing or coring. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the subject trees may not arise in the future.
- This report has been prepared for the sole use and benefit of the client. Any liability of Tree Solutions shall not be extended to any third party.
- No part of this report can be reproduced without the authorisation of *Tree Solutions Ltd*.

**Appendix One**  
**Tree Survey Schedule**

## TREE SURVEY SCHEDULE (BS5837: 2012)

|        |                                       |                    |                |             |
|--------|---------------------------------------|--------------------|----------------|-------------|
| Site   | ST JOHNS CE PRIMARY SCHOOL, MIDDLETON | Surveyor           | RUSSELL REARCE | Page 1 of 3 |
| Client | THE CRANMER TRUST                     | Assessment Dates   | 30-Mar-24      |             |
| Brief  | ARBORICULTURAL IMPACT ASSESSMENT      | Viewing Conditions | CLEAR          |             |
|        |                                       | Job Reference      | 24/AIA/ROCH/13 |             |

| Tree/Group/<br>Woodland<br>Number | Name         | Age | Height<br>(m) | Crown<br>clear | North | East | South | West | Diameter<br>(mm) | Vitality | Comments                                                                                                                                       | E.R.C | Management          | Category | RPA<br>(m) | RPA<br>(m²) |
|-----------------------------------|--------------|-----|---------------|----------------|-------|------|-------|------|------------------|----------|------------------------------------------------------------------------------------------------------------------------------------------------|-------|---------------------|----------|------------|-------------|
| T1                                | Silver Birch | SM  | 8             | 0              | 2.5   | 2.5  | 2.5   | 2.5  | 130              | Good     | Good structure. Single straight stem. Open balanced crown.                                                                                     | 20+   | No action required. | B1       | 1.5        | 7.6         |
| T2                                | Silver Birch | Y   | 5             | 0              | 2     | 2    | 2     | 2    | 60, 80           | Good     | Acute included primary union. Codominant bifurcation at 50mm. Open balanced crown.                                                             | 10+   | No action required. | C1       | 1.2        | 4.5         |
| T3                                | Silver Birch | Y   | 6             | 0              | 2     | 2    | 2     | 2    | 90               | Good     | Single straight stem. Open balanced crown                                                                                                      | 10+   | No action required. | C1       | 1          | 3.6         |
| T4                                | Rowan        | SM  | 5             | 0              | 2     | 2    | 2     | 2    | 110              | Good     | Good structure. Open balanced crown.                                                                                                           | 10+   | No action required. | C1       | 1.3        | 5.5         |
| T5                                | Silver Birch | Y   | 5             | 1              | 2     | 2    | 2     | 2    | 110, 70          | Good     | Bifurcated below 30mm with acute primary union.                                                                                                | 10+   | No action required. | C1       | 1.6        | 7.7         |
| T6                                | Silver Birch | SM  | 8             | 0              | 3     | 3    | 2     | 2    | 140              | Good     | Good structure. Single straight stem. Open balanced crown.                                                                                     | 20+   | No action required. | B1       | 1.7        | 9           |
| T7                                | Goat Willow  | SM  | 6             | 0              | 4     | 2    | 3     | 5    | 170              | Good     | Open balanced crown. Prolifically multi-stemmed at base - DBH estimated. No defects noted.                                                     | 10+   | No action required. | C1       | 2          | 13          |
| T8                                | Goat Willow  | SM  | 6             | 0              | 4     | 4    | 4     | 2    | 290              | Good     | Open balanced spreading crown. Multi-stemmed below 1.5 m - DBH estimated. Several acute included unions x1 with large split. Limited SULE.     | <10   | Remove              | U        | N/A        | N/A         |
| T10                               | Holly        | SM  | 55            | 0              | 3     | 3    | 5     | 3    | 140              | Good     | Suppressed asymmetric crown due to proximity of adjacent trees. Low aesthetic value. Suppressed adjacent under story trees x 2 Elder.          | 10+   | No action required. | C1       | 1.7        | 9           |
| T11                               | Beech        | EM  | 9             | 1              | 4     | 3    | 5     | 4    | 170, 120         | Good     | Twin stemmed codominant at base. Open balanced crown. Long end weighted hazard beam limbs in lower crown. Crossing branches throughout crown.  | 20+   | No action required. | B1       | 2.5        | 20          |
| T12                               | Cherry       | SM  | 6             | 3              | 1     | 1    | 1     | 1    | 110              | Good     | Upright cultivar. Open balanced crown. No defects noted.                                                                                       | 20+   | No action required. | B1       | 1.3        | 5.4         |
| T13                               | Silver Birch | EM  | 13            | 1.5            | 2.5   | 1    | 2.5   | 3    | 210              | Good     | Moderate structure. Single stem with minor dog leg at 3 m. Crown asymmetry due to proximity of adjacent tree. Minor deadwood throughout crown. | 20+   | No action required. | B1       | 2.5        | 20          |
| T14                               | Sycamore     | EM  | 13            | 2              | 6     | 4    | 6     | 5    | 290, 350         | Good     | Acute codominant bifurcation at base with cup union forming. Open balanced crown. Minor deadwood throughout crown.                             | 20+   | No action required. | B1       | 5.5        | 5.2         |
| T15                               | Sycamore     | SM  | 13            | 2              | 3     | 2    | 4     | 3    | 220, 140, 160    | Moderate | Acute trifurcation at base. Slightly suppressed by adjacent trees. Minor deadwood throughout crown.                                            | 10+   | No action required. | C1       | 4.3        | 58          |
| T16                               | Sycamore     | EM  | 14            | 2              | 6     | 5    | 6     | 3    | 310, 300         | Good     | Open balanced crown with minor asymmetry to west due to proximity adjacent tree. Acute bifurcation at base. Minor Deadwood throughout crown.   | 20+   | No action required. | B1       | 5.2        | 84          |
| T17                               | Maple        | EM  | 17            | 2              | 6     | 6    | 6     | 6    | 680              | Good     | No access. Observed from road. Dimensions estimated. Previously topped/reduced at approx 7m.                                                   | 20+   | No action required  | B1       | 8          | 209         |

| HEADINGS & ABBREVIATIONS                   |                                                                                                                                                                                                         |
|--------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TREE NO.                                   | REFERENCE NUMBER. REFER TO PLAN OR NUMBERED TAGS WHERE APPLICABLE (T = TREE, G = GROUP, H = HEDGE)                                                                                                      |
| SPECIES:                                   | COMMON NAME (LATIN NAMES AVAILABLE ON REQUEST)                                                                                                                                                          |
| AGE RANGE/LIFE STAGE:                      | Y = YOUNG, SM = SEMI MATURE, EM = EARLY MATURE, M = MATURE, PM = POST MATURE                                                                                                                            |
| HEIGHT:                                    | ESTIMATED AND RECORDED IN METRES. APPROXIMATELY 1 IN 10 TREES ARE MEASURED USING A CLINOMETER AND THE REMAINDER ESTIMATED AGAINST THE MEASURED TREES                                                    |
| CROWN SPREAD:                              | MAXIMUM CROWN RADIUS MEASURED TO THE FOUR CARDINAL COMPASS POINTS FOR SINGLE SPECIMENS ONLY (MEASUREMENT FOR TREE GROUPS - MAXIMUM RADIUS OF THE GROUP)                                                 |
| CROWN CLEARANCE & DIRECTION OF GROWTH:     | HEIGHT IN METERS OF CROWN CLEARANCE ABOVE ADJACENT GROUND LEVEL (TO INFORM ON GROUND CLEARANCE, CROWN/STEM RATIO AND SHADING)                                                                           |
| STEM DIA/MULTI-STEM DIA:                   | STEM DIAMETER - MEASURED AT APPROXIMATELY 1.5 METRES ABOVE GROUND LEVEL OR A COMBINATION OF STEMS FOR MULTI-STEMMED TREES                                                                               |
| VITALITY:                                  | A MEASURE OF PHYSIOLOGICAL CONDITION. D = DEAD, MD = MORIBUND, P = POOR, M = MODERATE, G = GOOD                                                                                                         |
| E.R.C. = ESTIMATED REMAINING CONTRIBUTION: | RELATIVE USEFUL LIFE EXPECTANCY (YEARS)                                                                                                                                                                 |
| BS 5837 CATEGORY & SUB-CATEGORY GRADING    | A = HIGH QUALITY AND VALUE, B = MODERATE QUALITY AND VALUE, C = LOW QUALITY AND VALUE, U = UNSUITABLE FOR RETENTION (SUB-CATEGORY REFERS TO ARBORICULTURAL, LANDSCAPE AND CULTURAL/CONSERVATION VALUES) |
| BS 5837 RADIUS & BS 5837 RPA:              | AT 707 M <sup>2</sup> ) NOTE - ALL CALCULATIONS ROUNDED TO NEAREST DECIMAL                                                                                                                              |

# TREE SURVEY SCHEDULE (BS5837: 2012)

# TREE SOLUTIONS

| Site                              | ST JOHNS CE PRIMARY SCHOOL, MIDDLETON     |     |               |                |       |      |       |      |                  |          | Surveyor                                                                                                                                                                                                | RUSSELL REARCE |                                                      | Page 2 of 3 |            |             |
|-----------------------------------|-------------------------------------------|-----|---------------|----------------|-------|------|-------|------|------------------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|------------------------------------------------------|-------------|------------|-------------|
| Client                            | THE CRANMER TRUST                         |     |               |                |       |      |       |      |                  |          | Assessment Dates                                                                                                                                                                                        | 30-Mar-24      |                                                      |             |            |             |
| Brief                             | ARBORICULTURAL IMPACT ASSESSMENT          |     |               |                |       |      |       |      |                  |          | Viewing Conditions                                                                                                                                                                                      | CLEAR          |                                                      |             |            |             |
|                                   |                                           |     |               |                |       |      |       |      |                  |          | Job Reference                                                                                                                                                                                           | 24/AIA/ROCH/13 |                                                      |             |            |             |
| Tree/Group/<br>Woodland<br>Number | Name                                      | Age | Height<br>(m) | Crown<br>clear | North | East | South | West | Diameter<br>(mm) | Vitality | Comments                                                                                                                                                                                                | E.R.C          | Management                                           | Category    | RPA<br>(m) | RPA<br>(m²) |
| T18                               | Elm                                       | M   | 13            | 3              | 6     | 6    | 6     | 6    | 750              | Good     | No access to tree. Observed from road. Dimensions estimated. Previously pollarded at 5m. Open balanced crown. No significant defects visible.                                                           | 20+            | No action required                                   | B1          | 9          | 254         |
| T19                               | Silver Birch                              | Y   | 6             | 0              | 2     | 2    | 2     | 2    | 100              | Good     | Single straight stem open balanced crown. No defects noted.                                                                                                                                             | 10+            | No action required.                                  | C1          | 1.2        | 4.5         |
| T20                               | Silver Birch                              | Y   | 6             | 0              | 2     | 2    | 2     | 2    | 110              | Good     | Single straight stem open balanced crown. No defects noted.                                                                                                                                             | 10+            | No action required.                                  | C1          | 1.3        | 5.4         |
| T21                               | Silver Birch                              | Y   | 6             | 0              | 1.5   | 1.5  | 1.5   | 1.5  | 60, 70           | Good     | Acute included codominant bifurcation at base. Open balanced crown.                                                                                                                                     | 10+            | Transplant away from cycle track                     | C1          | 1          | 3.8         |
| T22                               | English Oak                               | Y   | 6             | 0              | 2     | 1    | 1     | 2    | 90               | Good     | Good structure. Minor crown asymmetry due to proximity of adjacent trees.                                                                                                                               | 10+            | Transplant away from cycle track                     | C1          | 1          | 3.6         |
| T23                               | English oak                               | SM  | 4.5           | 1.5            | 4     | 3    | 3     | 3    | 210              | Good     | Suppressed asymmetric crown due to proximity of adjacent trees.                                                                                                                                         | 20+            | Remove for cycle track and replace elsewhere on site | B2          | 2.5        | 20          |
| T24                               | Alder                                     | SM  | 7             | 3              | 6     | 2    | 0     | 2    | 150              | Good     | Slender phototropic form due to proximity of adjacent trees- weight bias to North. Slender stem. Pruning wounds from previous crown lifts.                                                              | 10+            | No action required.                                  | C1          | 1.8        | 10          |
| T25                               | Alder                                     | SM  | 9             | 2              | 3     | 3    | 0.5   | 1    | 140              | Good     | Single straight stem with phototropic form. Minor crown imbalance due to proximity of adjacent trees - with weight bias to North. Multiple partially occluded pruning wounds from previous crown lifts. | 10+            | No action required.                                  | C1          | 1.6        | 9           |
| T26                               | Ash                                       | EM  | 13            | 2              | 4     | 5    | 6     | 6    | 450              | Moderate | Open balanced spreading crown. Good structure. ADB present - reduced vitality, poor extension growth, contorted peripheral growth and rachis retained in crown.                                         | 10+            | No action required                                   | C1          | 5.4        | 92          |
| T27                               | Rowan                                     | M   | 9             | 3              | 2.5   | 3    | 4     | 4    | 430              | Moderate | Moderate structure. Stem lesions. Suppressed by adjacent tree. Deadwood throughout crown - overhanging 3rd party land.                                                                                  | 10+            | No action required                                   | C1          | 5          | 83          |
| T28                               | Beech                                     | EM  | 16            | 5              | 6     | 9    | 10    | 8    | 710              | Good     | Good structure. Open balanced spreading crown. Multiple pruning wounds from previous crown lifts over Road. Acute codominant bifurcation at 3m with possible bark inclusions.                           | 20+            | No action required                                   | B1          | 8.5        | 230         |
| G1                                | Osier, Oak, Birch and Hawthorn            | Y   | 2 to 5        | 0              | 2     | 2    | 2     | 2    | 50               | Good     | Young densely planted group. All trees with DBH less than 75mm.                                                                                                                                         | 10+            | No action required.                                  | C2          | 1          | 1           |
| G2                                | Goat Willow                               | SM  | 5 to 6        | 0              | 3.5   | 3.5  | 3.5   | 3.5  | 150              | Good     | Group of x5 boundary line trees. Prolifically multistemmed below 1m - DBH estimated. No defects noted.                                                                                                  | 10+            | No action required.                                  | C2          | 1.8        | 10          |
| G3                                | Beech, Hawthorn, Bird Cherry, Goat Willow | Y   | 2 to 6        | 0              | 2.5   | 2.5  | 2.5   | 2.5  | 75               | Good     | Young linear dense boundary line group/hedgerow planting - hasn't been managed yet. Majority of stems below 75mm. No significant defects.                                                               | 10+            | No action required.                                  | C2          | 1          | 2.5         |
| G4                                | Holly                                     | EM  | 5             | 0              | 4     | 4    | 4     | 4    | 240              | Good     | Cluster of x 4 trees. Squat form due to exposure. Multiple partially occluded stem wounds. Slightly asymmetric crown due to proximity of adjacent trees.                                                | 20+            | No action required.                                  | B2          | 3          | 26          |
| G5                                | Alder                                     | SM  | 8 to 9        | 1              | 4.5   | 4.5  | 4.5   | 4.5  | 310              | Good     | Linear boundary line group of x 4 trees. Partially occluded pruning wounds from previous crown lifts. Minor Deadwood throughout canopy.                                                                 | 20+            | No action required.                                  | B1          | 3.7        | 43          |
| G6                                | Hawthorn                                  | EM  | 5             | 1              | 3     | 3    | 3     | 3    | 160              | Good     | Group of x 3 trees with open balanced crowns. Prolifically multi-stemmed below 1.5m DBH estimated. Dense crowns with multiple crossing branches. Dense scrubby understory of dogwood and brambles.      | 20+            | No action required.                                  | B2          | 1.9        | 11.5        |
| G7                                | Beech                                     | SM  | 14 to 16      | 2              | 4     | 4    | 4     | 4    | 210              | Good     | Moderate structure. Dense linear boundary line group/lapsed hedgerow. Phototropic form - slender upright form. Historically, topped at 1.5 m.                                                           | 10+            | No action required.                                  | C2          | 2.5        | 20          |
| G8                                | Beech                                     | EM  | 17            | 2              | 7     | 7    | 7     | 7    | 370              | Good     | x3 trees within linear hedgerow group. Open balanced crowns. Good aesthetic value.                                                                                                                      | 20+            | No action required.                                  | B2          | 4.4        | 62          |

# TREE SURVEY SCHEDULE (BS5837: 2012)

# TREE SOLUTIONS

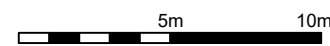
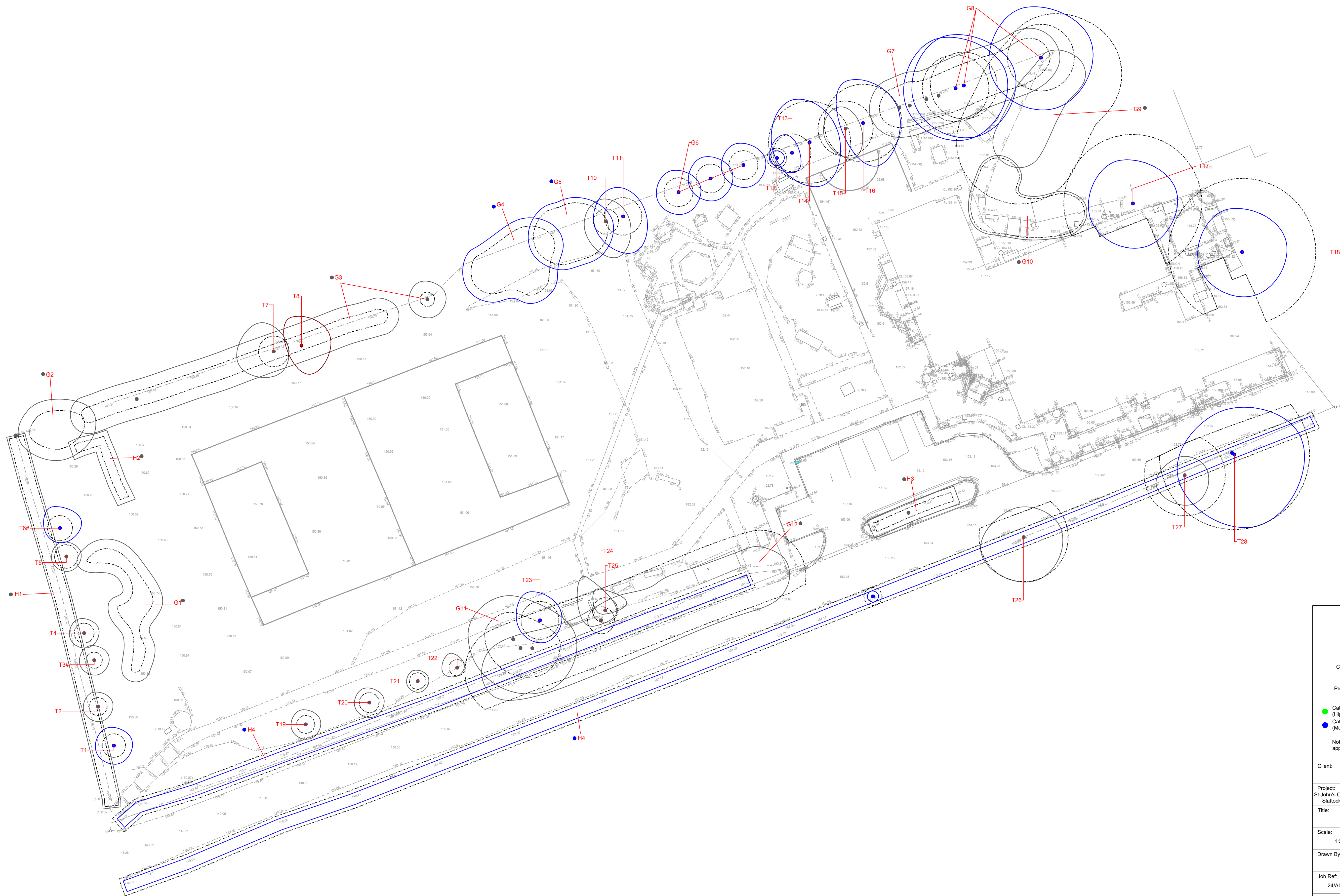
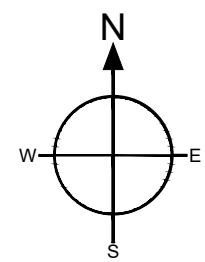
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|-----------------------------------|-------------------------------|-----|---------------|----------------|-------|------|-------|------|------------------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|------------------------------------------------------|----------|------------|-------------|--|--|
| Site                              |                               |     |               |                |       |      |       |      |                  |          | Surveyor                                                                                                                                                                                                                                              |       |                                                      |          |            | Page 3 of 3 |  |  |
| Client                            |                               |     |               |                |       |      |       |      |                  |          | Assessment Dates                                                                                                                                                                                                                                      |       |                                                      |          |            |             |  |  |
| Brief                             |                               |     |               |                |       |      |       |      |                  |          | Viewing Conditions                                                                                                                                                                                                                                    |       |                                                      |          |            |             |  |  |
|                                   |                               |     |               |                |       |      |       |      |                  |          | Job Reference                                                                                                                                                                                                                                         |       |                                                      |          |            |             |  |  |
|                                   |                               |     |               |                |       |      |       |      |                  |          |                                                                                                                                                                                                                                                       |       |                                                      |          |            |             |  |  |
| Tree/Group/<br>Woodland<br>Number | Name                          | Age | Height<br>(m) | Crown<br>clear | North | East | South | West | Diameter<br>(mm) | Vitality | Comments                                                                                                                                                                                                                                              | E.R.C | Management                                           | Category | RPA<br>(m) | RPA<br>(m²) |  |  |
| G9                                | Lawson's Cypress              | EM  | 12            | 2              | 3.5   | 3.5  | 3.5   | 3.5  | 680              | Good     | Third party trees with dimensions estimated. Located behind fencing. Historically topped at 3m with poor regenerative growth. Canopy overhangs site.                                                                                                  | 10+   | No action required.                                  | C2       | 8          | 209         |  |  |
| G10                               | Beech                         | SM  | 8             | 0              | 3     | 3    | 3     | 3    | 210              | Good     | Third party group behind fencing. Previously topped at 2.5 m with slender regenerative growth.                                                                                                                                                        | 10+   | No action required.                                  | C2       | 2.5        | 20          |  |  |
| G11                               | Elm                           | SM  | 11 to 16      | 2              | 6     | 6    | 6     | 6    | 320              | Good     | Compacted rooting area. Multiple partially occluded pruning wounds from previous husbandry. Pruned back from adjacent power utility lines - asymmetric imbalanced crowns as a result. Reduced aesthetic value.                                        | 10+   | Remove for cycle track and replace elsewhere on site | C2       | 3.8        | 46          |  |  |
| G12                               | Elder, Beech, Sycamore, Birch | EM  | 8             | 2              | 4     | 4    | 4     | 4    | 460              | Moderate | Linear boundaryland group of x 7 trees. All trees topped at approximately 5m to maintain distance from UKPN lines. Low aesthetic value. Some decay at multiple topping points. Located on grass verge adjacent to Road but outside fencing at school. | 10+   | No action required                                   | C2       | 5.5        | 95          |  |  |
| H1                                | Hawthorn                      | EM  | 1.5           | 0              | 1.25  | 1.25 | 1.25  | 1.25 | 75               | Good     | Layed hedgerow. Primarily Hawthorn with Elder interspersed.                                                                                                                                                                                           | 10+   | No action required.                                  | C2       | 1          | 2.5         |  |  |
| H2                                | Hawthorn                      | Y   | 2 to 4        | 0              | 1.25  | 1.25 | 1.25  | 1.25 | 50               | Good     | Young recently planted trees. Predominantly hawthorn with osier interspersed.                                                                                                                                                                         | 10+   | No action required.                                  | C2       | 0.5        | 1           |  |  |
| H3                                | Hawthorn                      | Y   | 2             | 0              | 1.25  | 1.25 | 1.25  | 1.25 | 50               | Good     | Young recently planted trees. Predominantly hawthorn with osier interspersed.                                                                                                                                                                         | 10+   | No action required.                                  | C2       | 0.5        | 1           |  |  |
| H4                                | Hawthorn                      | M   | 2             | 0              | 0.75  | 0.75 | 0.75  | 0.75 | 100              | Good     | Mature boundary line layed hedgerow. Previously topped at 1m - maintained at current dimensions. Holly and Elder interspersed.                                                                                                                        | 20+   | No action required                                   | B2       | 1.2        | 4.5         |  |  |

Table 1 Cascade chart for tree quality assessment

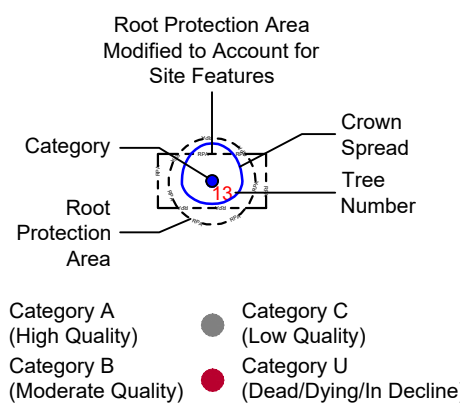
| Category and definition                                                                                                                                                   | Criteria (including subcategories where appropriate)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                   |                                                                                                                                       | Identification on plan |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| Trees unsuitable for retention (see Note)                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                   |                                                                                                                                       |                        |
| <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 | <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><i>NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.</i></p> |                                                                                                                                                                                                                                                                   |                                                                                                                                       | See Table 2            |
|                                                                                                                                                                           | 1 Mainly arboricultural qualities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 2 Mainly landscape qualities                                                                                                                                                                                                                                      | 3 Mainly cultural values, including conservation                                                                                      |                        |
| Trees to be considered for retention                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                   |                                                                                                                                       |                        |
| <b>Category A</b><br><b>Trees of high quality</b> 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            |
| <b>Category B</b><br><b>Trees of moderate quality</b> 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            |
| <b>Category C</b><br><b>Trees of low quality</b> 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            |

## **Appendix Two**

### **Preliminary Tree Constraints Plan**



### Legend

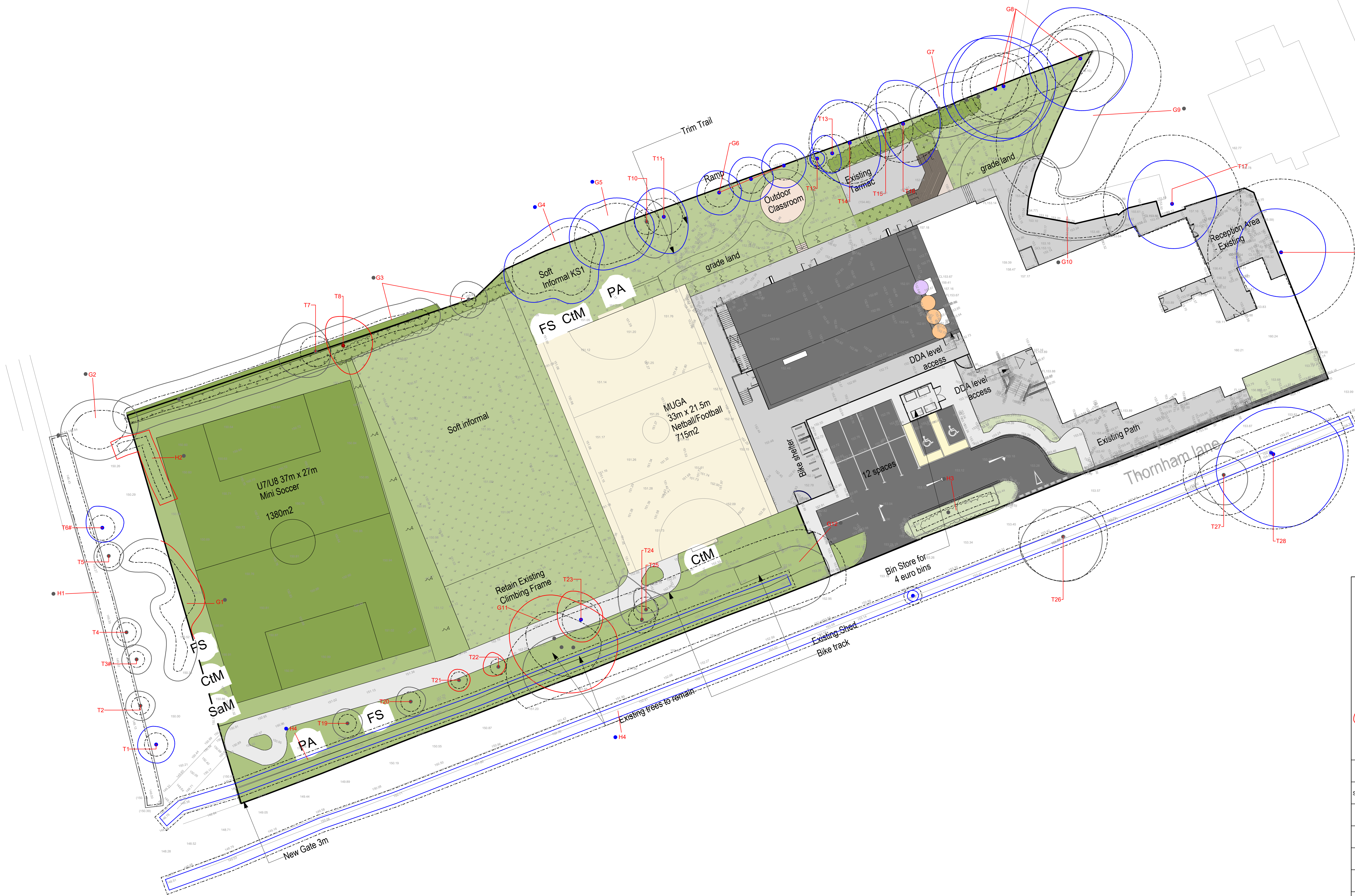
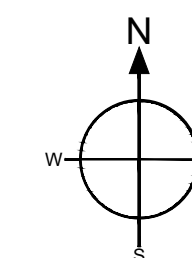


Note: Trees/Groups marked with # have approximate locations.

|                                                                                                                                 |                |                                                                                                          |            |
|---------------------------------------------------------------------------------------------------------------------------------|----------------|----------------------------------------------------------------------------------------------------------|------------|
| Client:                                                                                                                         |                | The Cranmer Trust                                                                                        |            |
| Project:                                                                                                                        |                | St John's CE (Thornham) Primary School, Thornham Lane, Slattocks, Middleton, Greater Manchester, M24 2SB |            |
| Title:                                                                                                                          |                | Preliminary Tree Constraints Plan                                                                        |            |
| Scale:                                                                                                                          | 1:250 at A1    | Date:                                                                                                    | April 2024 |
| Drawn By:                                                                                                                       | SD             | Revision:                                                                                                | -          |
| Job Ref:                                                                                                                        | 24/AIA/ROCH/13 | Drawing No:                                                                                              | 01         |
| Do not scale from this drawing all dimensions to be checked on site.                                                            |                |                                                                                                          |            |
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## **Appendix Three**

### **Impact Assessment Plan**



### Legend

Root Protection Area  
Modified to Account for  
Site Features

Category

Root Protection Area

Crown Spread

Tree Number

Category A (High Quality)

Category B (Moderate Quality)

Category C (Low Quality)

Category U (Dead/Dying/In Decline)

Tree Proposed for Removal

Note: Trees/Groups marked with # have approximate locations.

|                                                                                                          |             |
|----------------------------------------------------------------------------------------------------------|-------------|
| Client:                                                                                                  |             |
| The Cranmer Trust                                                                                        |             |
| Project:                                                                                                 |             |
| St John's CE (Thornham) Primary School, Thornham Lane, Slattocks, Middleton, Greater Manchester, M24 2SB |             |
| Title:                                                                                                   |             |
| Arboricultural Impact Assessment                                                                         |             |
| Scale:                                                                                                   | Date:       |
| 1:250 at A1                                                                                              | April 2024  |
| Drawn By:                                                                                                | Revision:   |
| SD                                                                                                       | -           |
| Job Ref:                                                                                                 | Drawing No: |
| 24/AIA/ROCH/13                                                                                           | 02          |

Do not scale from this drawing all dimensions to be checked on site.

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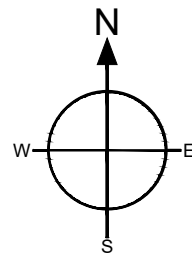
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Tree Solutions Ltd Company No: 50548501

## **Appendix Four**

### **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!**  
TREES INCLUDED BY THIS FENCE ARE PROTECTED BY PLANNING CONDITIONS UNDER 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.



Legend

Root Protection Area  
Modified to Account for  
Site Features

Category

Root Protection Area

Crown Spread

Tree Number

Category A (High Quality)

Category B (Moderate Quality)

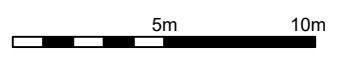
Category C (Low Quality)

Category U (Dead/Dying/In Decline)

2.0m High Heras (with extra central support bar) mounted on scaffold poles (driven in to the ground) and secured with anti tamper bolts – as illustrated.

Note: Trees/Groups marked with # have approximate locations.

|                                                                                                          |             |
|----------------------------------------------------------------------------------------------------------|-------------|
| Client:                                                                                                  |             |
| The Cranmer Trust                                                                                        |             |
| Project:                                                                                                 |             |
| St John's CE (Thornham) Primary School, Thornham Lane, Slattocks, Middleton, Greater Manchester, M24 2SB |             |
| Title:                                                                                                   |             |
| Tree Protection Plan                                                                                     |             |
| Scale:                                                                                                   | Date:       |
| 1:250 at A1                                                                                              | April 2024  |
| Drawn By:                                                                                                | Revision:   |
| SD                                                                                                       | -           |
| Job Ref:                                                                                                 | Drawing No: |
| 24/AIA/ROCH/13                                                                                           | 03          |
| Do not scale from this drawing all dimensions to be checked on site.                                     |             |
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**Appendix Five**

**Tree Protective Measures/Method Statement**

## SEQUENCE OF OPERATIONS

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

1. Tree surgery works
2. Erect temporary protective fencing
3. Main construction phase
4. Removal of temporary fencing
5. Landscaping within RPA
6. Arboricultural site supervision

### 1. Tree Surgery Works

1. Before the erection of the temporary protective fencing, all tree removal shall be implemented in accordance with the Tree Survey Schedule at **Appendix 1**
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
6. Any additional access facilitation pruning required shall be undertaken by qualified tree contractors and conform to the recommendations of BS 3998 (2010) 'Recommendations for Tree Work'

### 2. Erect Temporary Tree Protective Fencing

1. Prior to commencement of any 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.

### 3. Main Construction Phase

1. 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
2. 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
3. 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 outside the RPA of any trees. The mixer will be kept in this position throughout all 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 encountering 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 WCBC Arboricultural Officer

#### **4. 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.

#### **5. Landscaping within RPA of Trees**

1. There shall be **no rotovating** of ground within any area designated as a Root Protection Area (RPA) and Construction Exclusion Zone (CEZ) and enclosed by Temporary Protective Fencing.
2. 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

#### **6. Arboricultural Site Supervision**

- 1 The contract Arboricultural Consultant shall make visits to site to inspect all tree protection measures prior to and during all key development work within proximity to retained trees and when requested by the contractor.

## TREE PROTECTIVE FENCING

- 1 Before the commencement of any demolition and subsequent construction works on site (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.
- 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 daily; 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 Heras panels (with extra central support bar) mounted on scaffold poles (driven into the ground) and secured with anti-tamper bolts – as illustrated below.



**Tree Protective Fencing Specification**

#### Arboricultural Consultant

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