

**ST PETERS SCHOOL, TANKERSLEY
for Sheffield Diocese**

TREE SURVEY

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DRAWINGS: 2204/1 (EXISTING TREES ON SITE)
 2204/2 (TREE CONSTRAINTS PLAN)

1.0 GENERAL

- 1.1 This tree survey was undertaken by Martin Popplewell (Landscape Architect) and Georgina Tearne (Arboricultural Consultant) on 17 May 2010 on behalf of Sheffield Diocese in conjunction with proposals to develop the site for housing.
- 1.2 The survey should be read in conjunction with drawings 2204/1 (Existing Trees on Site) and 2204/2 (Tree Constraints Plan).
- 1.3 The area surveyed is located within the village of Tankersley, towards its northern edge. It is bounded to the north by New Road beyond which lies, in cutting, the M1 motorway just to the north of junction 36. To the east lies the existing school car park and, beyond this, Westwood New Road from which the car park gains access. The existing school buildings lie to the south and west of the survey area.
- 1.4 The area of ground covered by this survey comprises part of the grounds of St Peter's School, namely the play area associated with the Reception class together with a small wildlife area containing trees and a small pond. These two areas are separated by a substantial fence and the whole area is defined on its northern and eastern edges by a low stone wall. The ground level falls slightly from south to north.
- 1.5 It is not known at this stage whether trees on the site are protected by a local authority Tree Preservation Order.
- 1.6 Trees grow and can develop weaknesses, the climate is thought to be changing and the many other factors which affect trees are rarely static. It is advisable to have trees inspected by a qualified arboriculturalist regularly, and in this instance it is recommended that these inspections should be made every year.
- 1.7 The report is based upon a visual inspection. The consultant shall not be responsible for events which happen after this time due to factors which were not apparent at the time, and the acceptance of this report constitutes an agreement with the guidelines and the terms listed in this report.
- 1.8 Any defects seen by a contractor or the employer that were not apparent to the consultant must be brought to the consultant's attention immediately.
- 1.9 No liability can be accepted by the consultant in respect of the trees unless the recommendations (see Section 9) are carried out under their supervision and within the timescale indicated.
- 1.10 The report aims to consider both the aesthetic qualities of the trees as well as their health. The health of the trees is considered in relation to the proposed change of use to housing.
- 1.11 It must be noted that this tree report and accompanying drawing(s) do not constitute a Schedule of Works, and approval should be sought from the local authority prior to any works commencing.

2.0 SPECIES AND THEIR ARRANGEMENT IN THE LANDSCAPE

- 2.1 A number of mainly native tree and shrub species can be found within this relatively small site mostly within an area of dense mixed planting along the northern boundary.
- 2.2 Several mature hazel specimens are located towards each end of the northern boundary planting.
- 2.3 A group of recently-planted Field Maple and one more mature specimen are found within the central part of the northern boundary planting. A middle-aged Goat Willow lies next to this latter tree.
- 2.4 Three middle-aged Cherries can be found on site: one lies within the northern boundary planting; a second has been planted centrally within the children's playground and is surrounded by a timber seat; and a third can be found immediately adjacent to the school buildings on the southern edge of the area. A pair of Rowan trees lies next to this latter tree.
- 2.5 A pair of Osiers have been planted along the eastern boundary – it is understood that these were planted to commemorate the Dunblane tragedy.
- 2.6 Lastly several clumps of Japanese Knotweed have developed along the northern boundary, partly within the eastern edge of the area of dense perimeter planting.

3.0 HEIGHT AND SIGNIFICANCE IN THE LANDSCAPE

- 3.1 None of the trees on site are particularly tall – only two reach 9 metres in height these being Goat Willow T3 and Cherry T10.
- 3.2 Despite being only 4-8m in height, the dense planting along the northern boundary does however provide an effective visual screen (and to some extent an acoustic benefit although this is probably psychological rather than significant in measurable terms).
- 3.3 The trees within the playground are attractive local features but are only really significant in internal views.

4.0 AGE AND CONDITION

- 4.1 All trees on site are young to middle-aged and as a result area all in fair to good health with a reasonable life expectancy (estimated at 20-40 years).

5.0 ENVIRONMENTAL CONDITIONS

- 5.1 The site appears to be reasonably well sheltered from prevailing winds – there was no obvious adverse impact from this source.

- 5.2 Similarly, the ground water conditions appeared acceptable although it was not possible to assess this over the playground much of which was hard surfaced.

6.0 CODES USED WITHIN SCHEDULE

Column	Information
1	Tree reference number (recorded on tree survey drawing).
2	Species (common and scientific names, where possible).
3	Height of tree in metres.
4	Stem diameter in millimetres at 1.5m above adjacent ground level (on sloping ground taken on the upslope side of the tree base) or immediately above the root flare for multi-stemmed trees.
5	Branch spread in metres taken at the four cardinal points to derive an accurate representation of the crown (recorded on the tree survey drawing).
6	Age class (young, middle aged, mature, over mature, veteran).
7	Height in metres of crown clearance above adjacent ground level (to inform on ground clearance, crown stem ratio, and shading).
8	Psychological condition (e.g. good, fair, poor, dead).
9	Estimated remaining contribution in years (e.g. less than 10, 10-20, 20-40, more than 40).
10	Category grading. Trees are assessed in terms of quality in accordance with BS 5837:2005 into R or A to C categories (see Section 7.0) which are recorded on the tree survey drawing.
11	Notes on appearance and structural condition (e.g. collapsing, the presence of any decay, and physical defect).
12	Preliminary management recommendations, including further investigation of suspected defects that require more detailed assessment, and potential for wildlife habitats.

7.0 TREE QUALITY ASSESSMENT

7.1 TREES FOR REMOVAL

Definition – Category R

(Shown in broken outline on drawing with cross at trunk location)

Those in such a condition that any existing value would be lost within 10 years and which showed, in the current context, be removed for reasons of sound arboricultural management.

Criteria – Category R

Trees that have a serious, irredeemable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other R category trees (i.e. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning).

Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline.

Trees infected with pathogens of significance to the health and/or safety of other trees nearby (e.g. Dutch elm disease) or very low quality trees suppressing the adjacent trees of better quality.

NOTE: Habitat reinstatement may be appropriate (e.g. R category tree used as bat roost: installation of bat box in nearby tree)

7.2 TREES TO BE CONSIDERED FOR RETENTION**Definition - Category A1, A2, A3**

(Shown in heavy outline on drawing with star at trunk location)

Those of high quality and value - in such a condition as to be able to make a substantial contribution (a minimum of 40 years is suggested).

Criteria - Category A**A1** *(Mainly arboricultural values)*

Trees that are particularly good examples of their species, especially if rare or unusual, or essential components of groups, or of formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue).

A2 *(Mainly landscape values)*

Trees, groups or woodlands which provide a definite screening or softening effect to the locality in relation to views into or out of the site, or those of particular visual importance (e.g. avenues of other arboricultural features assessed as groups).

A3 *(Mainly cultural values, including conservation)*

Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture).

Definition - Category B1, B2, B3

(Shown in medium outline on drawing with solid dot at trunk location)

Those of moderate quality and value – those in such a condition as to make a significant contribution (a minimum of 20 years is suggested).

Criteria - Category B

B1 *(Mainly arboricultural values)*

Trees that might be included in the high category, but are downgraded because of impaired condition (e.g. presence of remediable defects including sympathetic past management and minor storm damage).

B2 *(Mainly landscape values)*

Trees present in numbers, usually as groups or woodlands, such that they form distinct landscape features, thereby attracting a higher collective rating than they might as individuals, but which are not, individually, essential components of formal or semi-formal arboricultural features (e.g. trees of moderate quality within an avenue that includes better, A category specimens), or trees situated mainly internally to the site, therefore individually having little visual impact on the wider locality.

B3 *(Mainly cultural values, including conservation)*

Trees with clearly identifiable conservation or other cultural benefits.

Definition - Category C1, C2, C3

(Shown in light outline on drawing with open circle at trunk location)

Those of low quality and value – currently in adequate condition to remain until new planting could be established (a minimum of 10 years is suggested), or young trees with a stem diameter below 150mm.

Criteria - Category C

C1 *(Mainly arboricultural values)*

Trees not qualifying in higher categories.

C2 *(Mainly landscape values)*

Trees present in groups or woodlands, but without this conferring on them significantly greater landscape value, and/or trees offering low or only temporary screening benefit.

C3 *(Mainly cultural values, including conservation)*

Trees with very limited conservation or other cultural benefits.

NOTE: Whilst C category trees will usually not be retained where they would impose a significant constraint on development, young trees with a stem diameter of less than 150mm should be considered for relocation.

8.0 DETAILED SCHEDULE OF VEGETATION ON SITE

Tree number on dwg	Species	Height (m)	Stem diameter (mm)	Branch spread (m)	Age class	Crown clearance (m)	Physiological condition	Estimated remaining contribution (years)	Category grading	Notes / Structural condition	Preliminary management recommendations
G1	2Nr Hazel	4	<250b est	N 3 S 3 E 3 W 3	MA	0	Fair	20-40	C2	Pair of mature multi-stemmed specimens with shrubby form. Dense foliage to ground level. Typical crossing branches, minor stubs and deadwood. No major visual defects.	No action.
G2	8Nr Field Maple	<7	<130	N 3 S 3 E 2.5 W 3	Y	1+	Fair	20-40	C2	Group of recently planted trees. All have single stems and compact, relatively narrow crowns. Not pruned to any extent. Limited individual value due to overcrowded crowns. Reasonable shape and form. No major visual defects.	No action.
T3	Goat Willow	9	250b	N 3.5 S 4.5 E 3.5 W 2.5	MA	1.5	Fair	20-40	C2	Twin-stemmed tree with evenly balanced crown. Wound at base. Minor deadwood and stubs. Not pruned to any extent. No major visual defects.	No action at present.
T4	Field Maple	8	230b	N 2.5 S 4.5 E 3.5 W 4	MA	1+	Good	20-40	C2	Middle-aged tree with short stem that forks into 3 at 0.5m. Dense spreading crown. No major visual defects.	No action.
T5	Wild Cherry	8	200	N 4.5 S 3 E 3 W 3	MA	1+	Good	20-40	C1	Single stemmed tree with open spreading crown. Secondary limb branches off from stem near base. Minor stubs and deadwood. No major visual defects.	Formative prune.
T6	Hazel	5	250b est	3m radius	MA	0	Fair	20-40	C2	Mature multi-stemmed specimen with shrubby form and dense foliage to ground level. Several single stemmed cherry, Flowering Currant and Japanese Knotweed adjacent.	No action.

Tree number on dwg	Species	Height (m)	Stem diameter (mm)	Branch spread (m)	Age class	Crown clearance (m)	Physiological condition	Estimated remaining contribution (years)	Category grading	Notes / Structural condition	Preliminary management recommendations
T7	Cherry	7	170	N 4 S 4 E 4 W 3	MA	1.5	Fair	20-40	C2	Single stemmed tree with evenly balanced rounded crown. Some stubs where crown lifted in past. Dense canopy with minor crossing branches. No major visual defects.	No action at present.
G8	2Nr Osier	5	<250b est	N 5 S 1 E 4.5 W 3	MA	0	Fair	20-40	C2	Pair of multi-stemmed specimens, both have shrubby form and lean to the north. Open canopies biased to north. Minor deadwood throughout rather sparse crowns. Limited long-term value. No major visual defects.	No action.
G9	2Nr Rowan	<6	80 130	N 2 S 2.5 E 3.5 W 1	Y	1+	Fair	20-40	C2	Pair of single stemmed trees with narrow compact crowns. Reasonable shape and form but suppressed by Flowering Currant and Cherry T10. Limited individual value. Relatively easy to replace if lost to development. No major visual defects.	No action at present.
T10	Wild Cherry	9	250	N 5 S 3.5 E 2 W 4.5	MA	2	Fair	20-40	C1	Single straight tem that forks in 2 at 2.5m. Original leader stubbed with decay; open rounded crown biased to east as a result. Very close to building. Surface root lifting concrete path.	No action.

9.0 GENERAL RECOMMENDATIONS

9.1 **Generally**

Any recommended tree works should only be carried out with the consent of the local authority.

9.2 **Trees in relation to Development**

Consider the depth of foundations with reference to NHBC recommendations.

9.3 **Tree Work before Development**

Remove all 'R' category trees including those approved for removal in relation to approved development. Erect a robust fence to protect not only the retained trees themselves, but also the rooting zones at limit of canopy spread or in accordance with BS 5837:2005.

9.4 **Care of Trees during Development**

It is recommended that the precautions below be issued to the site manager for display on site.

GENERAL PRECAUTIONS DURING DEVELOPMENT:

- Section 5.2.2 of British Standard 5837:2005 "Trees in Relation to Construction" gives details of the method for calculating the root protection area (RPA - based on stem diameter) which should be left undisturbed around each retained tree. This is to prevent soil compaction, stacking etc. during demolition/construction. The RPA is included on the Tree Constraints Plan together with an indication of Above Ground Constraints.
- Based on the above calculation, and taking into account site specific issues, fencing in accordance with BS 5837:2005 should be erected around trees to be retained. This shall comprise a framework of scaffold poles driven vertically into the ground with diagonal bracing for support and welded mesh panels wired to uprights. This must be erected before any site access for demolition or construction. The above details and distances of tree protection will normally be set as a condition of any planning approval.
- British Standard 5837:2005 provides guidance for methods of working on development sites in proximity to retained trees and the principles set down in Section 11 of the document should be strictly adhered to. The following principles are particularly important:
 - Traffic must not enter tree root protection areas.
 - Stacking of construction materials should not occur beneath any tree canopies or within tree root protection areas.
 - Cement mixing or flushing should not occur inside minimum tree protective zones or within 10m of any tree (including trees on adjacent properties).
 - Fires should not be lit within 10m of any tree/canopy (this distance should be increased if conditions are windy).
 - Toxic materials (cements, oils, etc) should not be stored beneath canopies or within tree root protection areas.

9.5 **Towards Conclusion of Development**

Surgery is best carried out at this stage so that any known root damage can be corrected by the appropriate crown thinning to restore root/shoot balance. Similarly, trees now seen in relation to garden situations can be shaped as required. Planting to augment existing trees as part of the landscape works can now be appropriately undertaken at this stage.

mp/POPPELWELL ASSOCIATES

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APPENDIX

PHOTOGRAPHS



Photo 1:

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View north toward planting along northern site boundary. On right is Hazel group G1 with Field Maple group G2 centre right, Goat Willow T3 centre left and Field Maple T4 on left

Photo 2:

View north showing western end of planting along northern site boundary: Hazel T6 on left, Cherry T5 in centre and Field Maple T4 on right. ▶



Photo 3:

◀ View east showing planting within playground: Cherries T7 and T10 on left and right respectively with Osier group G8 in centre. The two Rowans (G9) are contiguous with the crown of T10.

Photo 4:

▶ View towards northern boundary showing part of the infestation of Japanese Knotweed. This plant is growing elsewhere along the northern boundary.

