

Tree Survey and Report
BS 5837
Manor Farm, Harpham

JANUARY 2016

ADDENDUM MARCH 2022

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TREE REPORT

Manor Farm, Harpham

January 2016 with Addendum March 2022

1. Instructions

- To carry out a survey of the trees on and around the curtilage of Manor Farm, Harpham, as outlined on the attached plan, and to record information with reference to: *BS 5837: 2012: Trees in relation to design, demolition and construction*.
- To comment and advise on the development proposals in relation to the survey findings and to detail measures required for the protection of any trees to be retained.

2. Inspection Details

The site and trees were inspected in winter conditions on 19th January 2016.

There was no return site visit before this revised report as all trees are still in-situ and no significant changes to their condition and/or relationship with the development is anticipated.

3. Site Context

The development site comprises the land immediately surrounding the now empty Manor Farm, including existing properties, barns, outbuildings, yards and paddocks. There are no trees within the central farmyard but there are a few mature trees located around the perimeters.

Manor Farm is on the southern fringe of the village with some low density housing to the north side, but mainly the site is surrounded by open countryside. The village Churchyard abuts the western site boundary. Harpham is not a Conservation Area and it is assumed that the trees are *not* protected by a Tree Preservation Order; but this has not been clarified with ERYC.

The development proposal remains to convert the existing buildings to residential properties.

4. Condition of Trees

The condition of all trees inspected accompanies this report in schedule form, and locations are noted on the accompanying survey drawing. Information is detailed and described as follows:

- Tree type with reference number,
- Species in Latin, with English common name,
- Maximum height, and trunk diameter at 1.5m above ground level,
- Crown spread, and height from ground to lowest part of crown,
- Age Class,
- Physical and structural condition,
- Preliminary Management Recommendations,
- Estimated remaining contribution (RC); (or Safe useful life expectancy; SULE),
- Tree Quality Assessment in relation to BS 5837: 2012,
- Root protection areas calculated in accordance with BS 5837: 2012,
- In addition, photographs were taken and filed.

Recommendations have been made with regard to the development proposals and likely construction methods, and also in relation to the general management of the trees.

5. Wildlife and Countryside Act

Where birds and bats may be affected by work to trees and hedges, consideration should be given to the timing and scope of work. Bats are protected under the Wildlife & Countryside Act 1981 and subsequent legislation and it is an offence to deliberately or recklessly disturb them or damage their roosts. If the presence of bats is suspected when works commence then contact should be made with Natural England, or via the UK Bat Line and 'The Bat Conservation Trust'. It is also suggested that tree felling and major pruning should be avoided in the bird nesting season, generally specified as March 1st to July 31st, though often extending through August.

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6. Development Comments

6.1. General

The plan of proposals remains the same as in 2016, being conversion of the existing buildings into residential 6 units, without little or no change to the existing building footprints. There is potential for some impact to T2 in the churchyard; and to T4 to the east of plot 1 because of circulation and parking arrangements.

Access for construction and to the completed properties will be via the existing farm access, off Cross Gates, with no impact on any of the trees.

6.2. Tree Constraints Plan - Summary

The locations of the trees are shown on the attached survey drawing, along with allocated grades in relation to criteria in BS5837: 2012. Trees of grades 'A' and 'B' are normally considered as features to be retained in any proposed development, with grade 'C' trees retained only where they do not significantly affect proposals. Trees graded 'U' are those with recommendations to fell, and/or with only minimal amenity or conservation contribution.

There are very few trees on or close to this site and they are mostly graded A and B.

6.3. Root Protection Areas

Root protection areas (RPAs) for any retained trees are derived from area calculations based on stem diameter, overlapped to create a zone of root protection (Construction Exclusion Zones (CEZ)). Suggested construction details for these fences are included in BS5837:2012, and are shown on the tree protection plan (TPP).

7. Arboricultural implications assessment

7.1. Tree constraints and design/proximity to structures – Discussion

The Yew T2 is considered grade A and overhangs the site, but its root spread will have been halted by the existing boundary wall, which is semi-retaining. The realignment of unit 5 further to the south will improve its northerly aspect, and some controlled crown reduction of T2 may be appropriate. Though engineering is beyond the scope of this report, it is suggested the retaining element of the brick boundary wall be maintained in-situ, with additional retaining construction as required, to maintain soil support and fully protect the existing root plate of T2.T1 is of limited value and in any case is unaffected.

Beech T3 is in decline but is far enough from the development to be unaffected. A CEZ fence is shown to delineate this and to protect valuable existing topsoil. The tree should continue to be regularly monitored due to its future location within a proposed garden space.

The Chestnut T4 requires careful thought for its continued retention in a safe condition. Two options for pruning work are indicated in the schedule for consideration. The outline plan shows garage and circulation spaces which could compromise the RPA of T3, but a revised layout is easily achievable with a recommended CEZ fence position as shown on the attached TPP.

Trees in the orchard G1 are not important enough to compromise development, though some will be retained with the layout indicated.

7.2. Tree Management and New Planting

The proposed scheme offers opportunity for a comprehensive and appropriate tree planting scheme to enhance the development, to improve local and surrounding amenity, and to soften the impact on open countryside to the east, south and west. Tree types and species should include a full range of suitable specimens to improve amenity and conservation and to contribute to microclimate improvement.

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Arboricultural Method Statements & Tree Protection Plan

1. General

The following arboricultural method statements and tree protection plan should be read in conjunction with the accompanying tree report. The report details and comments on all the significant trees present on site in relation to BS 5837 2012, and this statement includes general notes and advice relating to the relationship between trees, development and construction.

Site personnel, employees and contractors, will be made aware of these Arboricultural Method Statements (AMS) before development commences and will attend a site induction meeting, if required. A copy of the AMS and notes / plans will also be kept in the site office file so that it can be referred to or viewed at all times.

2. Tree protection plan

When trees are retained then the Root Protection Areas indicated on the accompanying drawings should be protected during development. The protected areas are the Construction Exclusion Zones. Fencing must be erected prior to any site works commencing, including demolition, preparatory excavations and materials delivery. These areas to be protected with secure fencing which will prevent access throughout the development and which will be installed prior to starting and not be removed until completion. Depending on the scale of the development and the trees to be protected, the protection fencing should be appropriate to the degree of protection required. The fencing must be clearly labeled "TREE PROTECTION: DO NOT MOVE". All fencing should be checked on site by a Tree Consultant to ensure it is placed in the correct locations and is adequate for the purpose.

3. 'No-dig' roads, paths and driveways:

Method statement for the Construction of 'No-dig' roads, paths and driveways

Not applicable at present.

4. Barriers and ground protection within the Root Protection Area

Not applicable at present.

5. Progress of development

Prior to the commencement of installation of access road, services and foundations, a predevelopment meeting should be held between the Local Authority Tree Officer, Tree Consultant, site manager/foreman, and Supervising Officer, to ensure that the Construction Exclusion Zone fencing is in place and preparatory tree works have been undertaken.

The site will be visited on a regular basis by a tree consultant once development has begun, if required, to ensure that all protection measures are being adhered to and any problems in relation to retained trees and vegetation are resolved.

6. Preparatory Tree works

All recommended preparatory tree works and shrub clearance should be carried out prior to development of the site including the erection of protection fencing. All tree pruning and felling is to be undertaken by professional tree contractors and in accordance with BS 3998: 2010: Recommendations for Tree Work.

7. Pile foundations within the Root Protection Area:

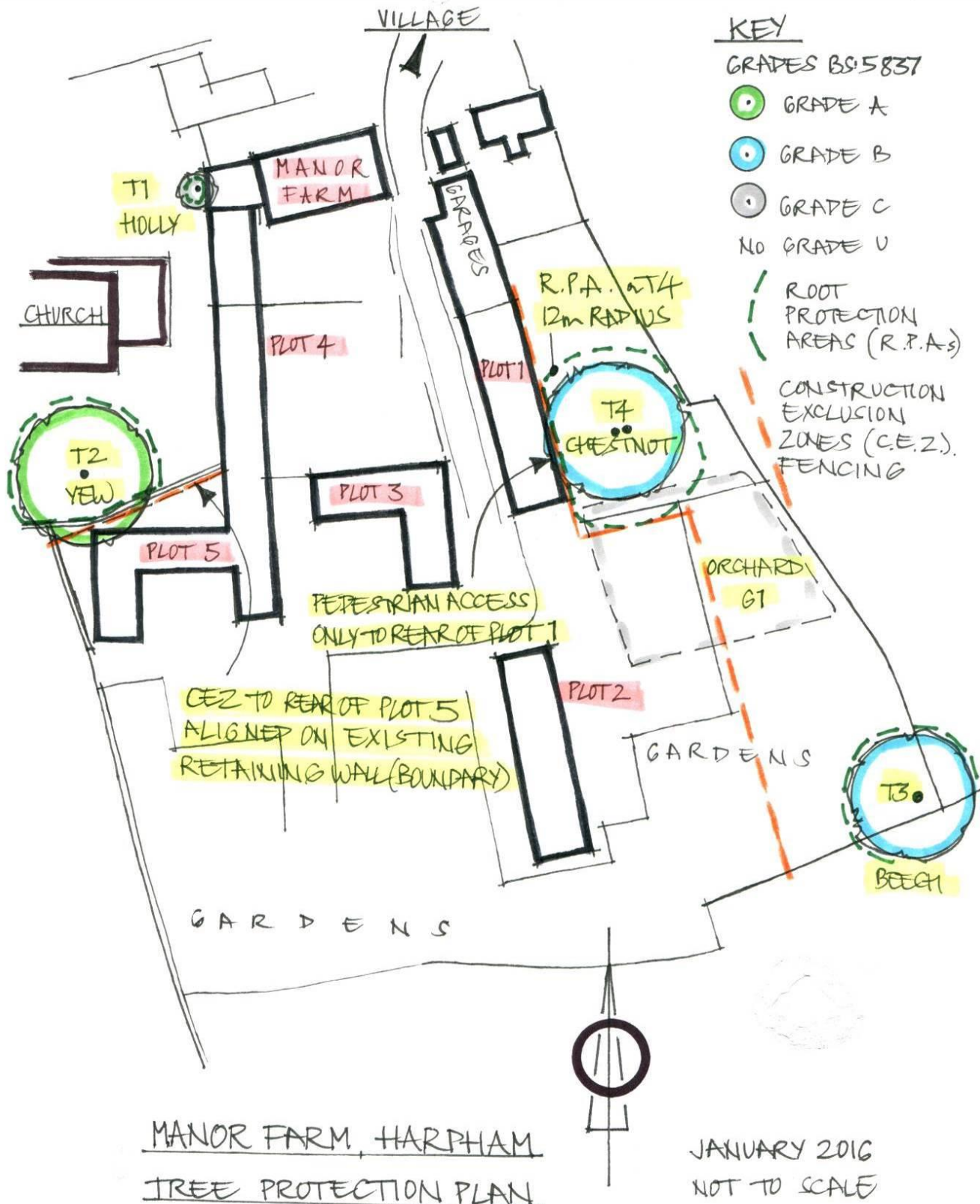
Not applicable at present.

Tree No.	Species	Hgt (m)	Diam (mm)	Spread N, E, S, W	Hgt 1 st brch	Hgt to crown	Age Class	Physiological and Structural Condition. Preliminary Management Recommendations	Est RC years	Grade BS5837	RPA (rad) (m2)	Photo
T1	Holly <i>Ilex aquifolium</i>	6	225	2, 2, 2, 3	2	2	EM	Off site, in adjacent Churchyard Fair form and health, thinning crown, growing against boundary wall. Minor decay at 1.5m. Off site: no works required. Minor pruning of overhanging growth possible.	10-20	C	To wall	1
T2	Yew <i>Taxus baccata</i>	14	1400 ~	8, 8, 7, 9	1	1	M	Off site, in adjacent Churchyard Large, healthy, high quality tree. Some deadwood and pruning stubs at lower level. On elevated ground, above site (retaining wall). Off site: No major works possible. Some minor reduction of overhanging growth possible, but do not create misshapen tree.	30+	A	To wall	2
T3	Beech <i>Fagus sylvatica</i>	18	1200 ~	7, 8, 8, 7	5	3	OM	Good form for pollarded tree, fair canopy health. Multiple junction at 5m - small pockets & cavity. Very large stem, bark deteriorating. Ganoderma fungal brackets indicate internal stem decay. <i>In low risk area - no works recommended</i>	20-30	B	14 620	3
T4	Horse Chestnut <i>Aesculus hippocastanum</i>	22	1150 x3 500+	8, 9, 8, 10	3	5	OM	Twin trees from ground level, forming one crown. Main tree x2 at 3m, junction appears sound. Secondary x3 at 1m, some decay and softening in junction. Secondary tree has numerous lost and broken limbs, with decay and cavities, and possible linear split at 9m SE side. Poor form. Main tree less immediate problems, some deadwood from lost branches. Crown healthy. Minimum recommendation: crown clean throughout and crown reduction/lift on all sides to rebalance and remove growth over building. Considered recommendation: as gardens will be below T4, remove secondary tree completely, and clean & reduce the main tree throughout.	20-30	B	12 450	4
G1	Orchard Apple Pear Hazelnut	2-4	100+	As plan	-	-	M OM	Generally poor trees and bushes, decay and deadwood. Minimal amenity value. Some limited conservation interest. <i>To be felled/replaced for development</i>	10-20	C	N/A	4

KEY

Dimensions	Life St: Life Stage (or age class)	Other Headings & Notes	Grade: Tree Quality based on BS5837:2012
Ht: Maximum height of tree, in metres.	Y – Young	Ref: Reference number (which <i>may</i> refer to a tag fixed to a tree). T – Tree, H – Hedge, G – Group	U – Trees in such a condition where any existing value would be lost in 10 years.
Diam: Stem diameter at ~ 1.5m above ground level (AGL), in mm.	SM – Semi-Mature	Species: Common name, plus Latin name where appropriate. Species in brackets () indicate shrub or subsidiary species, in hedges and in groups.	A – Trees of high quality and value.
Spread: Minimum spread of branches to the 4 cardinal points, in metres.	EM – Early-Mature	Est RC: Estimated remaining contribution, in years.	B – Trees of moderate quality and value.
Ht 1st branch: Height AGL of first significant branch, and growth direction where applicable, in metres.	M – Mature	RPA: Root Protection Area, in m ² , calculated from stem diameter, in accordance with BS5837.	C – Trees of low quality and value. <i>Trees in this category should not be retained where they impose significant constraints on development.</i>
Ht to Crown: Height AGL to lowest significant section of canopy, and direction where applicable, in metres.	OM – Over-Mature	Photo: Photograph reference number, where applicable.	
~ – indicates estimated dimension.	V – Veteran	Other Abbreviations: AGL – Above Ground level CEZ – Construction Exclusion Zone TPP – Tree Protection Plan	

Tree Protection Plan: January 2016: Assumed to remain applicable: March 2022



Photographs:



Photo 1: T1 Holly, in Churchyard



Photo 2: T2 Yew, in Churchyard



Photo 3: T3 Beech, off development site



Photo 4: T4 Chestnut, G1 Orchard beyond



Photo 5: Horse Chestnut T4, in March 2022, with protective fencing.