



Arboricultural Integration Report

**Burston Retirement Community
North Orbital Road
St. Albans
Hertfordshire
AL2 2DS**

10 December 2020



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ARBORICULTURAL INTEGRATION REPORT

LOCATION	Burston Garden Centre, North Orbital Road, St. Albans, Hertfordshire, AL2 2DS	REF: AR-3741
CLIENT	Castleoak Group, Raglan House, Malthouse Avenue, Cardiff Gate Business Park, Cardiff, CF23 8BA	DATE OF REPORT 10 December 2020
REPORT PREPARED BY	Ben Oates TechArborA	DATE OF INSPECTIONS 21 November 2017 and 19 July 2019
SURVEY INSPECTORS	Jim Quaife AARC, Dip Arb (RFS), F.ArborA CEnv and Ben Oates TechArborA	SHEET No. 1 of 10

PROPOSAL	Demolition of all existing buildings, structures and hardstanding and redevelopment of the site to provide a new retirement community comprising assisted living bungalows and apartments, with community facilities together with associated access, bridleway extension, landscaping, amenity space, car parking and other associated and ancillary works.
LOCAL AUTHORITY	St Albans City & District Council
CONTACT	Arboricultural Officer

INSTRUCTIONS

Issued by – Steve Rickard, Castleoak Group

TERMS OF REFERENCE

To survey the subject trees to assess their general condition and to provide a planning integration statement for the proposed development that safeguards the long-term wellbeing of the retained trees sustainably.

The content and format of this report as written are for the exclusive use of the client. It may not be sold, lent, hired out or divulged to any third party not directly involved in the subject matter without our written consent.

Summary

The proposal is to clear the subject site and to construct a retirement community. The trees are almost all peripheral and the existing buildings and structures which need to be demolished are of no architectural merit having been purely functional for the nursery. The few subject trees within the subject survey area comprise two linear groups of cypresses planted and maintained as screens. They could be removed with no detrimental effect upon the landscape.

The peripheral trees are all off-site and none of their root protection areas extends into an area of development. As such, none of them will be adversely affected by the proposed development.

The off-site trees growing within the grounds of Burston Manor and Burston Manor Farm that presently screen the site in views from Burston Manor are all in reasonable health and condition. They presently provide an effective screen and are likely to do so for some time to come.

Access and underground services routes will need to be installed into and out of the site and these have been designed to avoid any impact upon trees. The existing access track is to be upgraded and used for site access, and this can be done without affecting the trees along the eastern side of it. All that may be required is minor pruning to maintain headroom under the branch overhang to the average highway requirement of 5.5 metres.

The position of the site is screened on three sides by mature trees and on the western side by the nursery complex.

The protection of the retained trees can be effected following current standards and guidance but will be very straightforward. Given the site boundary separation, there will be no matters of post development pressure upon trees that could not be managed with routine maintenance.

The care home layout will incorporate tree planting within the landscape design to visual and psychological benefit, and there is no reason why the proposal should not be sustainable in arboricultural terms.

1. Documents supplied

- Clifton Surveys Ltd.: Topographical Survey Plan ref: 186/3493/1, Revision A, dated October 2020;
- PRP Architects LLP: Proposed Block Plan, drawing number 0653 - 00-SL-PL-A-G7-012, revision B, dated 9 December 2020;
- Intrado: Storm Water Drainage Strategy, ref: IR20077/001/D, dated 7 December 2020.

2. Scope of report

- 2.1 The purpose of my report is to provide Hertfordshire District Council with the arboricultural information necessary to approve the planning application to which this report and its appendices relate.
- 2.2 My report summarises the data Jim Quaife and I gathered from our tree surveys and with the appendices, my report demonstrates the proposed layout has taken full account of the above and below-ground tree constraints.
- 2.3 Compliance with my recommendations in this report will ensure the retained trees are protected from harm during demolition and construction and new landscaping will enhance the appearance of the site for the long-term.

3. Survey method

- 3.1 Both Jim Quaife's and my tree surveys were undertaken following British Standard BS 5837:2012 *Trees in relation to design, demolition and construction – Recommendations* (BS 5837). The details of the trees can be found in Appendix A.
- 3.2 The trees were inspected based on the visual tree assessment method expounded by Mattheck and Breloer (*The body language of trees, DoE booklet Research for Amenity Trees* No. 4, 1994).
- 3.3 The stem diameters of trees were measured in millimetres at 1.5 metres above ground level with a rounded down diameter tape or estimated visually where access was restricted or otherwise in accordance with Annex C of BS 5837.
- 3.4 The height of each tree was estimated with a laser hypsometer where line of sight was attainable or estimated visually where observation was restricted and rounded up to the nearest metre.

- 3.5 Four crown spread radii were measured in the direction of the cardinal compass points, either with a laser rangefinder or estimated by pacing or visually where access was restricted and rounded up to the nearest half metre.
- 3.6 I categorised the trees according to their size, age, physiological and structural condition, their overall arboricultural quality, their landscape value and future potential following the cascade chart for tree quality assessment (Table 1) of BS 5837. The details of the trees I surveyed are in Appendix A.
- 3.7 The appendices to my report set out the root protection areas (RPA) of the trees, described by their RPA radius derived from section 4.6 of BS 5837.
- 3.8 In Appendix C, I show the tree crowns and trunks of the trees in colours similar to those as proscribed by BS 5837.
- 3.9 I conducted my tree survey from ground level with the aid of a monocular.
- 3.10 I did not take any tissue samples and nor did I carry out an internal investigation of the subject trees.
- 3.11 I did not take any soil samples.
- 3.12 The positions of the subject trees are shown in Appendix C and D. The locations of which were derived from the supplied plans and my measurements taken during my survey. Please note that the plans are for indicative purposes only.

4. Ecology informative

- 4.1 Bats are protected under the Wildlife & Countryside Act 1981 (as amended) and The Conservation of Habitats and Species Regulations 2017 (as amended) and it is an offence to deliberately or recklessly disturb them or damage their roosts. Trees should be inspected before any works commence and if the presence of bats is suspected advice will need to be sought from the Natural England Bat Line on 0845 1300228. Further advice on bats is available from The Bat Conservation Trust (020 7627 2629).
- 4.2 Tree work should as far as is possible avoid the bird nesting season, which officially (natural England) is from February until August, although the busiest time is from 1st March until 31st July.

4.3 Please also be aware that ecology is governed principally by;

- the Wildlife and Countryside Act 1981 (as amended by the CROW Act 2000);
- the Conservation of Habitats and Species Regulations 2017 (as amended);
- the Wild Mammals (Protection) Act 1996, and;
- the Natural Environment and Rural Communities (NERC) Act 2006.

5. The site

- 5.1 The site is situated on the southern side of the North Orbital Road (A406) and is the Burston Garden Centre. This has a large multi-goods retail area, and outbuildings and open space used for horticulture. The subject site is the eastern part which is a roughly rectangular shape. To the north and excluded from the whole nursery site is private residential land. There is an existing concrete roadway from the main road running south past this residential land to the western side of the subject site.
- 5.2 The subject site is open apart for two barns and extensive polythene shelters of horticultural use. The land is level.
- 5.3 Concerning the British Geological Survey Geology of Britain viewer, the indicated soil parent material is Kesgrave Catchment Subgroup of sand and gravel, overlying Lewes Nodular Chalk Formation.
- 5.4 Concerning the relevance of this to trees, the nature of the soil appears to be free-draining and non-shrinkable. Compaction is detrimental to tree roots but this type of soil has some resistance to it.
- 5.5 I am not an expert on soils and although I have some working knowledge of them, if accurate soil analysis is required then a soil specialist should be contacted.

6. The trees

- 6.1 The subject trees are listed in the table in Appendix A and are ranged around the subject site periphery as shown in Appendix C.
- 6.2 Almost all of them are outside the subject site, and this includes a screen of cypresses along the road frontage verge north of the residential land.
- 6.3 Mature trees on the southern and eastern boundaries and the trees within the residential land to the north surround the subject site. The western boundary is with the nursery.

- 6.4 The off-site trees growing within the grounds of Burston Manor and Burston Manor Farm that presently screen the site in views from Burston Manor are all in reasonable health and condition. They presently provide an effective screen and are likely to do so for some time to come.
- 6.5 The only trees within the subject site are two linear groups of cypresses planted and maintained as screens.
- 6.6 The trees are all in satisfactory condition and none presents an unacceptable level of risk.
- 6.7 I have categorised the trees following BS 5837 but as the only trees which might be removed have little landscape significance and all the others would be retained, the categorisation as no material significance.
- 6.8 According to the Multi-Agency Geographic Information for the Countryside (MAGIC) interactive mapping services (DEFRA, 2016) there are no ancient woodlands within or immediately adjacent to the site.

7. The proposal

- 7.1 The proposal as set out at Appendix D is to demolition of all existing buildings, structures and hardstanding and redevelopment of the site to provide a new retirement community comprising assisted living bungalows and apartments, with community facilities together with associated access, bridleway extension, landscaping, amenity space, car parking and other associated and ancillary works.

8. Arboricultural landscape integration

- 8.1 The primary arboricultural intention is to retain the trees that make the greatest positive contribution to the character and appearance of the site and the surrounding landscape so that the arboreal appearance of the site's character is conserved.
- 8.2 As the site is completely open, there are no arboricultural restrictions. The root protection areas of the trees to be retained do not encroach any areas of the proposed development and so none of the trees will be harmed by the proposal.
- 8.3 Accordingly, there are no arboricultural limitations to the development of the main subject site.

- 8.4 The access is along the existing concrete roadway from the main road. This has been used for heavy commercial traffic and although it will be upgraded, even if the entire surface were to be renewed, there would be no reason to excavate into the underlying soil and so provided that the correct working method was used no harm would be caused to the adjacent trees.
- 8.5 The installation of underground services within the site has no arboricultural repercussions, but connection into the main service runs may have to be routed up the entrance drive. If this requires a trench under the surface, this should be under the western edge to maximise the separation from the trees along the eastern boundary.
- 8.6 In summary, there are no arboricultural limitations to the development of the subject site.
- 8.7 The only trees to be removed are the two rows of cypresses within the subject site. The group in the south-western corner has some benefit for boundary screening, but the other group north of it is of no obvious value.
- 8.8 The landscape design includes new tree planting, which aside from aesthetic considerations, is known to be of significant psychological benefit to care home residents and staff alike.
- 8.9 There will be a requirement to maintain headroom under the crown overhang to the entrance drive, and this may as well match the average highway height of 5.2 metres. The pruning required to achieve this would be minor and only affects oak T0018. This tree will be crown lifted to 5.5 metres, which will only involve the removal of small pendulous branches. Consequently, the proposed pruning will not cause the tree any physiological harm nor detract from its landscape appearance.
- 8.10 In summary, the development of the subject site will not have a detrimental visual impact on the character and appearance of the area.
- 8.11 The development itself will have a distinct "sense of place" being a secluded and private "mini" community within naturally formed boundaries.

9. Post development pressure

- 9.1 The concept of post development pressure is not that routine maintenance work to maintain clearances and the proportionality of trees is unacceptable. The term should more accurately be one of irresistible post development pressure where the spatial or physical relationship of a retained tree to a structure or feature demands pruning or removal that is inappropriate, but to which the local planning authority could not reasonably refuse consent.
- 9.2 The spatial relationship of any proposed new buildings with the trees is sufficient to enable any such conflicts to be avoided.

- 9.3 Accordingly, there will be no appreciable post development pressure, and certainly, none that would oblige the Council to give consent to inappropriate tree works.
- 9.4 The size of the communal garden areas is such that in my assessment are likely to receive ample sunlight and daylight and are unlikely to be shaded to the extent that might lead to post development pressure.

10. Tree protection measures

- 10.1 The British Standard BS 5837 gives a root protection area (RPA) for each retained tree by reference to section 4.6 of BS 5837. The RPA is an estimation of the area of the root system that would need to be retained to sustain the condition of the tree if all the other roots outside it were to be severed. The RPA represents a smaller proportion, on average only a third, of a tree's root system and consequently whilst the RPA is particularly important to ensure that there are no adverse effects upon stability, if an encroachment does not reduce the overall assimilative function of the root system significantly it is unlikely to cause harm. However, as with any factor relating to trees, each situation must be justified in site-specific terms.
- 10.2 The RPA is usually described as a circle with a radius of the prescribed distance within which no unspecified activity should occur, though the shape and position of the RPA can be modified by an arboriculturist to meet individual site conditions according to the probable distribution of the tree roots. Intrusion into the RPA can take place only where the ground is adequately protected following the requirements of section 6.2.3 of BS 5837 or where work is carried out to an agreed design and working method.
- 10.3 The combined RPA will be protected by a tree protection fence comprising steel mesh panels of at least 1.8 metres in height ('Heras'). These panels will be mounted in blocks with diagonal bracing at appropriate intervals as shown at Figure 3 of BS 5837 and in the side panels of the Tree Protection Plan at Appendix D. The alignment of the Figure 3 specification fencing is illustrated on the Tree Protection Plan by a bold magenta line.
- 10.4 The tree protection fencing will be erected before any construction-related work commences but immediately following the tree removals. The fencing will remain *in situ* undamaged for the duration of all work or each phase, and shall only to be removed once all work is completed. The only exception is the completion of soft landscaping, but if any excavations however minor, are to be carried out as part of soft landscaping within RPA, an arboricultural assessment must be carried out beforehand and any additional arboricultural protection measures incorporated. The tree protection fences are to carry waterproof warning notices denying access within.

11. General matters

- 11.1 The Intrado Storm Water Drainage Strategy is overlaid in Appendix D and no element of it impacts the trees to be retained. Due consideration has been given to the site topography and soil type, and I do not foresee any detrimental effects on the trees in hydrological terms as a result of this development.
- 11.2 The proposed underground service routes will connect to existing service runs in the main road and they will be routed out through the access road, thus avoiding the RPA of trees to be retained.
- 11.3 Where existing or proposed drains pass within the root system of a tree, not just its RPA, technical advice must be sought to assess the root-tightness of joints. Modern compression joints do not reliably prevent root ingress and it may be necessary to upgrade them.
- 11.4 The hard landscaping operations are part of the construction works and will be planned and carried out within the construction phase tree protection measures.
- 11.5 The protection of the trees will also include recognition of other types of potentially damaging activities, such as the storage of materials and other substances likely to be toxic to plants, site-building requirements, and the use and parking of plant. Particular care and planning are necessary to accommodate the operational arcs of excavation and lifting machinery, including their loads, especially large building components such as beams and roof trusses. Operations like these have the potential to cause incidental damage and logistical planning is essential to avoid conflicts.

12. Arboricultural responsibility

- 12.1 The site agent will be nominated to be responsible for all arboricultural matters on site. This person must:
 - a) be present on-site for the majority of the time;
 - b) be aware of the arboricultural responsibilities;
 - c) have the authority to stop any work that is causing, or has the potential to cause harm to any tree;
 - d) be responsible for ensuring that all site operatives are aware of their responsibilities toward trees on site and the consequences of any failure to observe those responsibilities;
 - e) make immediate contact with the local authority and/or the project arboriculturist in the event of any tree-related problems occurring, whether actual or potential.

12.2 The sequence of works should be as follows:

- a) initial tree removal and pruning;
- b) installation of tree protection fence;
- c) construction;
- d) removal of tree protection fence;
- e) soft landscaping.

13. Conclusions

13.1 Other than the two rows of cypresses, all the subject trees are outside the subject site. These two rows of cypresses to be removed will have no adverse impact on the landscape. The site is surrounded by trees on the sides and new tree planting is proposed to be incorporated within the landscape design. With these matters in consideration, the arboricultural landscape impact of the proposal would be positive.

13.2 The retained trees will not cause any significant conflicts in terms of construction activities, nor will any significant issues of post development pressure be likely to emerge that could not be managed with routine maintenance.

13.3 The retained trees will be protected following current standards and guidance.

13.4 For trees to be sustainable within a development proposal they must be compatible with their surroundings, not just in terms of long-term spatial relationship but also in respect of minimising any potential conflicts to matters of routine maintenance. This proposal would achieve this objective.

13.5 I have taken account of the information provided and my observations on site and I am satisfied that this scheme is arboriculturally sound and that the long-term wellbeing of the retained trees will be safeguarded sustainably.

14. Recommendations

14.1 The successful integration of the proposal with retained trees will need to take account of the implementation of the tree protection measures and methods set out in this report.

The statements made in this report do not take account of the effects of extremes of climate, vandalism or accident, whether physical, chemical or fire. Quaife Woodlands cannot, therefore, accept any liability in connection with these factors, nor where prescribed work is not carried out correctly and professionally following current good practice. The authority of this report ceases at any stated time limit within it, or if none stated after two years from the date of the survey or when any site conditions change, or pruning or other works unspecified in the report are carried out to, or affecting, the subject trees, whichever is the sooner.

Tree Management Plan at Burston Garden Village – AL2 2DS

The purpose of this Tree Management Plan is to provide an outline of the reasonably foreseeable maintenance requirements for the existing screening provided by the off-site Leyland cypress hedge H0002 and the mixed group of broadleaved trees in group G0011 growing within the grounds of Burston Manor Farm, near the north-western boundary of the site.

1. Aims of the Tree Management Plan

- 1.1 The Tree Management Plan aims to maintain and enhance the existing screening for the garden village provided by the trees (G0011) and cypress hedge (H0002) growing within the grounds of Burston Manor.
- 1.2 The landowner will be responsible for the maintenance of the Leyland cypress hedge (H0002) and the group of mixed broadleaved trees in group G0011.
- 1.3 The landowner will passively monitor the health and condition of the trees (H0002 and G0011) for health, safety and general maintenance requirements.
- 1.4 If any of the trees become diseased, defective or die, an assessment will be made as to the appropriate form of maintenance to be specified to perpetuate the screening between Burston Manor and the site.
- 1.5 If any of the trees die, become dangerous or require removal an assessment will be made as to the appropriateness of replacing those trees with new trees of a similar species.
- 1.6 If any trees for whatever reason require removal and an assessment identifies that replacement planting is practical and sustainable then an appropriate sized replacement tree or trees will be planted as close to as practically possible the location of the removed tree(s).

2. Replacement tree planting

- 2.1 All tree planting operations should be carried out by a specialist landscape contractor who is a member of the British Association of Landscape Industries (BALI).
- 2.2 The replacement tree(s) will conform to BS 3936-1:1992 *Nursery stock. Specification for trees and shrubs* and be in accordance with the National Plant Specification. All replacement trees are to be grown, maintained and planted following BS 8545:2014 *Trees: from nursery to independence in the landscape*.
- 2.3 All trees will be packed and transported following the Code of Practice for Plant Handling as produced by the Committee for Plant Supply and Establishment (CPSE).

- 2.4 All planting operations are to be in accordance with the latest BS 4428:1989 Code of practice for general landscape operations (excluding hard surfaces).
- 2.5 It is recognised that there are seasonal variations in tree availability and so it may be necessary for tree specifications to be revised.
- 2.6 Tree planting will not be carried out when the ground is waterlogged, frost-bound or during periods of cold drying winds.
- 2.7 All bare-root stock will be kept covered until planted to minimise desiccation of the roots.
- 2.8 All bare-root stock will be root dipped in an approved water-retaining polymer.
- 2.9 If the formation level is compacted it will be ripped through before top soiling.
- 2.10 Where necessary existing weeds will be treated with a suitable herbicide and a suitable period allowed to elapse, as recommended by the manufacturer, for the herbicide to take effect.
- 2.11 Tree planting pits will be excavated to at least twice the diameter of the root-ball of the tree to be planted following BS 4428:1989. The bottom and sides will be forked to break up the subsoil. All extraneous matter such as plastic, wood, metal and stones greater than 50mm diameter in any dimension will be removed from the site.
- 2.12 The trees will be placed into the pits and backfilled with local topsoil previously stripped from the site. A general-purpose slow-release fertiliser (at the rate of 75 grams per metre squared) and tree planting and mulching compost (at the rate of 20 litres per metre squared) are to be incorporated into the top 150mm of topsoil during backfilling. Where tree pits are more than 300mm deep, backfilled material shall be consolidated and firmed-in in 150mm layers.
- 2.13 Trees shall be well firmed-in and secured with stakes, proprietary rubber tree ties and spaces as below.
- 2.14 All newly planted trees over 1.5m high will be held so that movement at the root collar is minimised until new roots have developed to anchor the tree. Therefore low staking (75mm diameter x 1.5m length) will be used and attached to the tree at approximately 600mm above ground level. Stakes will be driven 300mm into the undisturbed ground before planting the tree, taking care to avoid underground services and cables.
- 2.15 The trees will be staked using proprietary rubber ties and must be firmly fixed with a spacing device used to prevent chafing against the tree.
- 2.16 All trees up to and including selected standards are to be supported with single 75mm diameter stakes. Extra-heavy standard trees will be either double-staked, with multi-stem or semi-mature trees being underground guyed.
- 2.17 Composted bark mulch will be spread to a depth of 75mm across in a 1.0m diameter circle around all individual trees, ensuring that desirable groundcover plants (where present) are not buried.

- 2.18 All trees and shrubs shall be watered in at the end of each day of planting.
- 2.19 All dead, dying or diseased trees will be replaced with trees of similar size and species. If the failure of the tree is due to disease and the disease is considered likely to re-occur then an alternative species may be used as a replacement if agreed with the LPA.
- 2.20 The site will be monitored by the landowner as required throughout the year and will undertake the following operations as necessary:
- 2.21 **Weed clearance:** All tree planting areas will be kept weed-free by hand weeding or herbicide treatment.
- 2.22 **Checking trees:** All tree ties and stakes will be checked and adjusted if too loose, too tight or if chafing is occurring. Any broken stakes will be replaced.
- 2.23 **Formative pruning:** Any damaged shoots/branches will be pruned back to healthy wood. Plants will be pruned following good horticultural practice to maintain healthy well-shaped specimens.

3. Watering during the first growing season

- 3.1 The requirement for watering of newly planted trees will generally be dependent on weather conditions during the first growing season following planting. In a dry season, watering may be required on a fortnightly basis from immediately after planting until the end of the growing season, but in a wet season, watering may not be required at all. Therefore trees shall be monitored regularly by test digging down to root level to assess the water content of the soil, with watering undertaken as required to ensure that the soil is at field capacity 2-3 days after watering.

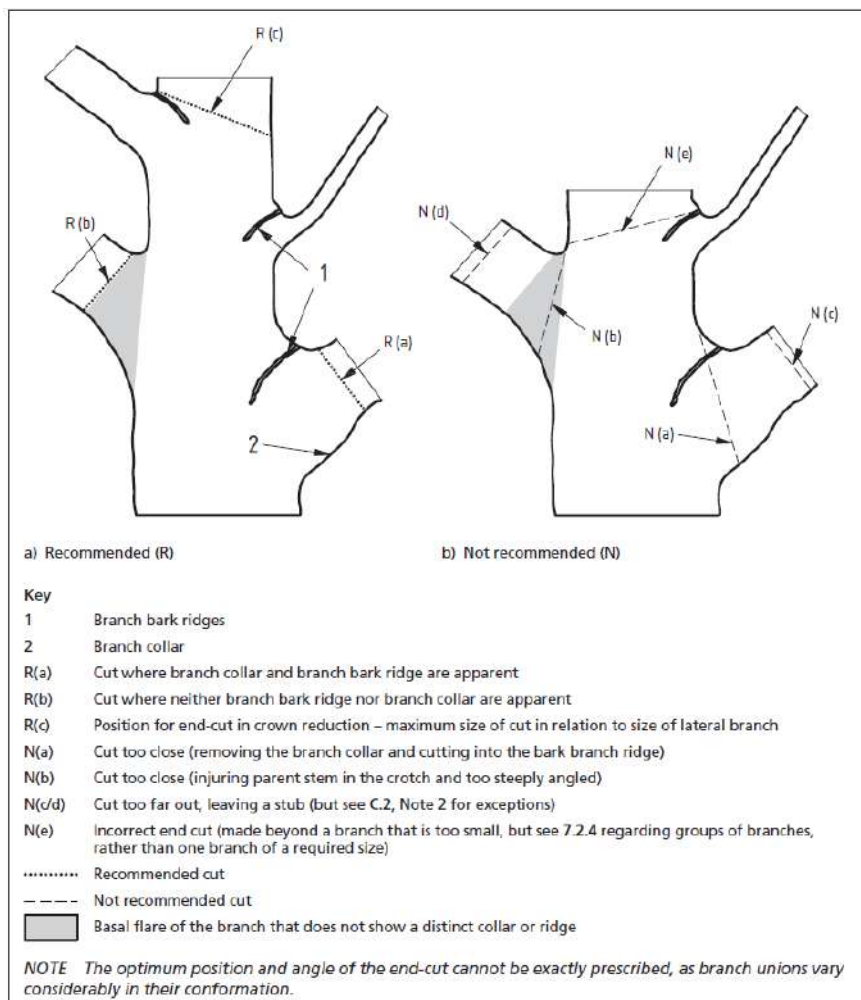
4. Long-term tree management

- 4.1 For at least the first three years after planting, weeding should be undertaken to maintain a weed-free area of at least 1m diameter around each tree from April to August; using either an approved broad-spectrum herbicide (such as glyphosate) or by strimming, taking care not to damage the new trees.
- 4.2 From year four the new trees should be formatively pruned to remove crossing branches and branches with tight forks. The optimum times to prune are mid-summer or mid-winter.
- 4.3 All tree works will be carried out following BS 3998:2010 *Tree work – Recommendations*.
- 4.4 Climbing irons or spikes are not to be used whilst pruning trees; they may only be used for the sectional removal of trees.
- 4.5 All arisings are to be removed from the site, which is to be left neat and tidy as found.

- 4.6 Care must be taken that the ground next to existing trees to be retained does not become compacted as a result of tree surgery operations. No vehicles or equipment such as tractors, timber lorries, cranes or excavators shall be driven or parked beneath the crowns of any trees to be retained, as this could cause soil compaction and consequent root death.

5. Tree pruning

- 5.1 Pruning shall be undertaken following the principles of good arboricultural practice as stated in British Standard BS 3998: 2010. The positions of final pruning cuts will comply with Figure 2 'Positions of final cuts' at p23 of this document, as shown below.
- 5.2 Where aerial growth is to be removed, great care shall be taken not to leave a stub which may provide a food base for both fresh wound parasites and decay fungi and not cut back into or beyond the branch collar. Injury of the wood and bark of the parent stem or branch above the cut will also be avoided.



6. Dead-wooding

- 6.1 Dead wood will not be indiscriminately removed. Dead wood will only be removed where it poses an unacceptable risk to the health and safety of persons or property. Dead wood that does not pose a threat of harm will be retained for ecological reasons.
- 6.2 If dead wood does pose an unacceptable risk of harm then when pruning it out, care will be taken to avoid injury to living bark or sapwood, which could lead to the development of further dysfunction and colonization by decay fungi or pathogens.

7. Tree felling

- 7.1 The trees that become diseased, dead or dangerous will be felled.
- 7.2 Tree felling is defined as the cutting down of a tree to a point as close to ground level as is reasonably practicable, but no higher than 100mm above surrounding ground level (unless a tree has pronounced buttress roots which makes this impractical, in which case it should be cut to as close to 100mm as possible).
- 7.3 Tree felling shall be carried out in a controlled manner, using guide ropes where appropriate to ensure that trees or branches fall away from buildings, equipment, and other trees and understorey shrubs.
- 7.4 Where necessary, trees should be dismantled and removed in sections rather than felled from the ground to prevent them from falling onto buildings, equipment, vehicles or the crowns of other trees.
- 7.5 No part of any tree shall fall outside the boundaries of the premises unless a prior agreement has been reached with the adjacent landowner, and the client has been informed in advance.
- 7.6 To allow time for bats to re-locate, trees that are covered with dense ivy will be left for 48 hours before cutting up or removal.

8. Removal of arisings

- 8.1 The working area is to be left clean and tidy when the contractor goes off-site at the end of the working day. The contractor shall keep all highways, drives and footpaths clear of obstructions.
- 8.2 The contractor shall be responsible for the disposal of all arisings from the works at his own expense. All charges, fees, transport and other expenses arising from tipping shall be borne by the contractor.

- 8.3 The contractor shall remove arisings from the site as soon as is reasonably practicable after they are produced. Removal of arisings shall not be undertaken on Saturdays, Sundays or Public Holidays without the prior written agreement of the client.
- 8.4 The contractor shall be responsible for the provision of an authorised tipping facility, and for ensuring that all arisings from the works are removed thereto. Such a facility shall be off-site, and no unauthorised tipping shall be carried out within the contract area or in any other place.

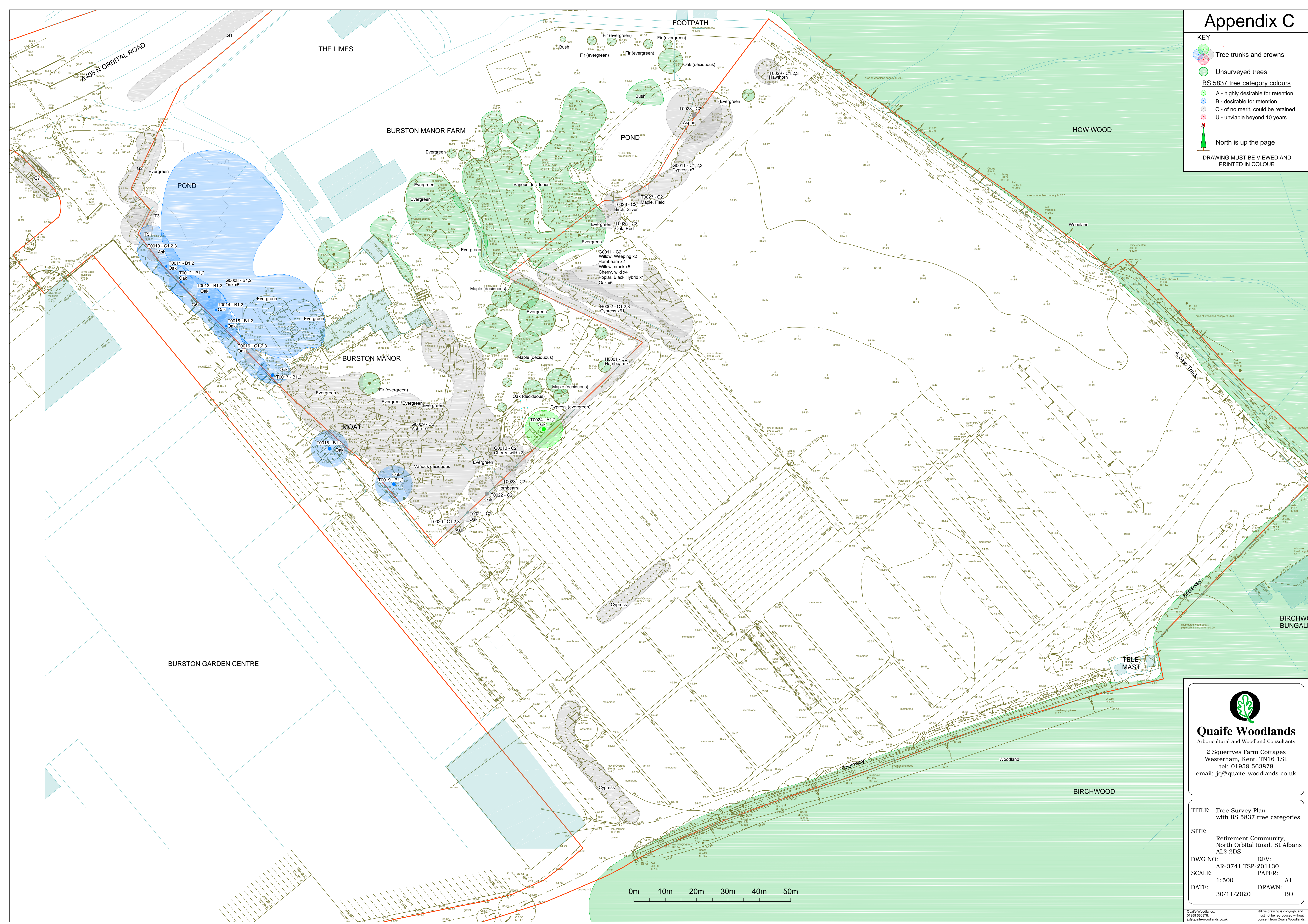
9. Tree management responsibilities

- 9.1 The Leyland cypress hedge (H0002) and the mixed group of broadleaved trees (G0011) will be maintained as per the above prescriptions and will be safeguarded under the S106 agreement for the site.

Appendix C

KEY

- Tree trunks and crowns
- Unsurveyed trees
- BS 5837 tree category colours
 - A - highly desirable for retention
 - B - desirable for retention
 - C - of no merit, could be retained
 - U - unviable beyond 10 years
- North is up the page
- DRAWING MUST BE VIEWED AND PRINTED IN COLOUR



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TITLE: Tree Survey Plan with BS 5837 tree categories
SITE: Retirement Community, North Orbital Road, St Albans AL2 2DS
DWG NO: AR-3741 TSP-201130
SCALE: 1:500
DATE: 30/11/2020
REV: PAPER:
A1
BO

Appendix D

KEY

- Tree crowns and root protection areas (RPA)
- Tree protection fence fig. 3
- Unsurveyed trees
- Trees to be pruned
- Trees to be removed



- BS 5837 tree category colours**
- A - highly desirable for retention
 - B - desirable for retention
 - C - of no merit, could be retained
 - U - unviable beyond 10 years
- DRAWING MUST BE VIEWED AND PRINTED IN COLOUR**

Tree protective fencing in accordance with BS5837:2012 fig. 3 comprising at least 2m tall weld-mesh panel fencing supported on blocks with diagonal bracing supports on the tree side of the fence. To be erected prior to demolition and construction.

Tree to be pruned

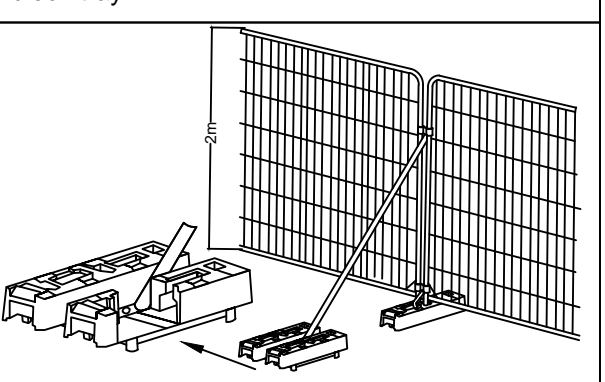
Trees to be removed

Trees to be removed		
Tree No.	Species	Category
n/a	Row of cypress trees	n/a
n/a	Row of cypress trees	n/a

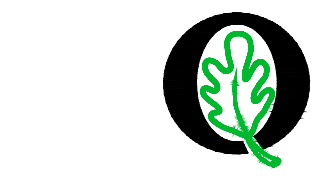
Trees to be pruned		
Tree No.	Species	Tree work
T0018	Oak	Crown lift south-west side over road to 5.5m

BS 5837:2012 fig. 3 tree protection fencing

To comprise of 2m tall welded mesh panels on rubber or concrete feet. Panels are to be joined together using a minimum of two anti-tamper couplers, installed so that they can only be removed from inside the fence. The panels should be supported on the inner side by stabiliser struts, which should be mounted on a block tray.



0m 10m 20m 30m 40m 50m



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TITLE: Tree Protection Plan
BS 5837:2012 compliant
SITE: Retirement Community,
North Orbital Road, St Albans,
AL2 2DS
DWG NO: AR-3741 TPP-201130
SCALE: 1:500
DATE: 30/11/2020
REV: REV: 1
PAPER: A1
DRAWN: BO

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