



ARBORICULTURAL IMPACT ASSESSMENT

At;

**LAND SOUTH OF MADDOXFORD LANE,
BOORLEY GREEN,
BOTLEY,
HAMPSHIRE**

For;

BLOOR HOMES LTD

Author;

Marco Bartolini
Arboricultural Consultant TechArborA (TE02501), PTI, FdScWM, Dip Mgmt



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no site investigation can ensure complete assessment
or prediction of the natural environment.*

Report Number: MB250305-02 Rev E

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EXECUTIVE SUMMARY

Following a tree survey, in accordance with BS5837:2012, of all trees on, and immediately adjacent to this site, it is deemed that the positions of the trees within the landscape would permit the proposed development of up to 280 dwellings.

The root protection areas of the trees (as shown on Tree Constraints Plan MB250305-01-01 in Section 6) do encroach into the proposed developable site and these can be adequately managed during construction. The vulnerable tree table highlights these incursions into the RPAs.

The access roads to the south around veteran and ancient notable landscape trees along with the eastern access (labelled Crossover South and Crossover East respectively) have been discussed at length with the Eastleigh Borough Council Tree Officer (Mr Chris Stringer). Following visits to site, taking measurements and reinspecting the trees, these locations were agreed as the most suitable for the access areas to occur. These widths (distances) are annotated on the respective drawings.

All the trees provide good visual separation between the development site and neighbouring land. The linear group of trees that form a spine between field boundaries are also positioned on a raised section of land and provide a natural barrier between land areas.

Woodland W1, has recently been designated as an Ancient Woodland and therefore should be afforded a 15 m buffer as a minimum to reduce the impact to the trees and soil.

The benefits of trees are becoming obvious. They are a place to seek shelter from the extreme weather conditions experienced in the UK over recent years that have been considered as the 'new normal'. Trees can regulate hydrology, temperature and humidity whilst offering shade or shelter from weather. They are a pleasing outlook (in favour of artificial hard structures) and offer a sense of well-being and calm (forest bathing). In addition, as an element of the SuDS process, it is scientifically proven that a mature tree can transpire at least 50,000 litres of water a year.

There is no doubt that the development and trees can live in a balanced state. Arbor-Eco Consultancy are confident, that with a sympathetic design to allow for the health and vitality of the trees, it can support an application for the development.

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1. INTRODUCTION

1.1 PROJECT BACKGROUND

Bloor Homes Ltd commissioned Arbor-Eco Consultancy to compile an Arboricultural Impact Assessment following the undertaking of an Arboricultural Survey of trees situated on Land South of Maddoxford Lane (Fig 1). The site is within the administrative boundary of Eastleigh Borough Council and within the county of Hampshire.



Fig 1: Survey Area.

This report details the impact that the proposed development will have upon the site's existing tree stock and sets out recommendations for the subsequent mitigation or avoidance of impact. The study has been completed in accordance with guidance contained within British Standard BS5837:2012 'Trees in relation to design, demolition and construction – Recommendations'.

1.2 SITE DESCRIPTION

The proposed development site is located towards the northern fringes of the town of Botley within a district called Boorley Green in the county of Hampshire. The western sections of the wider landscape are currently under development by a consortium of house building companies.

The northern boundary of the site abuts Maddoxford Lane, minor road. The eastern boundary abuts a residential property off Maddoxford Lane (named Holly Tree Farm) a section of woodland and a pastoral field. The southern boundary is delineated a shelterbelt of trees that separates the site from pastoral fields beyond which was a live railway track. The western boundary is delineated by properties off Goldfinch Crescent (live construction site), minor road and a pastoral field.

The trees surveyed were situated both internally to the site and growing around the periphery of the site including a congested area of trees surrounding the existing farmhouse and outbuildings. Towards the

centre of the site and to the western and eastern boundaries are linear groups of mature trees (predominantly Oak species) that are of historical and cultural importance being ancient and veteran trees.

The site is centred at Ordnance Survey Grid Reference SU 5146 1431. The topography of the ground was undulating to suit the ergonomics of a working farm. A section of land was heavily poached by animals leaving the soil compacted.

The location of the trees surveyed can be found on Tree Constraints Plan MB250305-01-01 in Section 6.

1.3 DEVELOPMENT PROPOSALS

Outline planning application with all matters reserved (except the main points of access) for the demolition of a residential dwelling (Use Class C3), removal of a mobile home, and demolition of existing buildings associated with a motor vehicle storage and motor vehicle body parts and scrap material business and the construction of up to 280 dwellings (Use Class C3), including affordable dwellings, and associated provision of informal and formal public open space, together with associated highways, landscape, earth works and level changes, foul and surface water drainage facilities, utilities provision and other associated and necessary infrastructure works

1.4 DOCUMENTATION PROVIDED

This assessment is based upon the information provided by the clients' architect in addition to information collected by Arbor-Eco Consultancy. The documents and drawings considered are detailed within Table 1.1.

Author	Document	Document Number	Date
Thrive Architects Ltd	Land Use and Access Plan	BLOO240103 LUP-01 P8 260218	Dec 2025

Table 1.1: Documentation Provided

2. STATUTORY PROTECTION

2.1 TREE PRESERVATION ORDER AND CONSERVATION AREA DESIGNATIONS

Examination of Eastleigh Borough Council (2025) Interactive Mapping (<https://emaps.eastleigh.gov.uk/webmaps/>) accessed on 16th May 2025 indicates that, at the time of the survey, there were no trees that are the subject of a Tree Preservation Orders at this site.

Further examination of Eastleigh Borough Council (2025) Interactive Mapping (<https://emaps.eastleigh.gov.uk/webmaps/>) accessed on 16th May 2025 indicates that, at the time of the survey, the site was not situated within a Conservation Area.

2.2 PROTECTED SPECIES

Planning - Bats: A bat survey must be performed on the relevant roost potential prior to demolition. If bats are found to be present, a Natural England licence will be required prior to demolition. Bats and the places they use for shelter or protection (i.e. roosts) receive European protection under The Conservation of Habitats and Species Regulations 2017, as amended (Habitats Regulations 2017, as amended). They receive further legal protection under the Wildlife and Countryside Act (WCA) 1981, as amended. This protection means that bats, and the places they use for shelter or protection, are capable of being a material consideration in the planning process. As bats re-use the same roosts (breeding site or resting place) after periods of vacancy, legal opinion is that roosts are protected whether or not bats are present. The Natural Environment and Rural Communities (NERC) Act 2006 places a duty on public bodies to have regard for the conservation of biodiversity and maintains lists of species and habitats which are of principal importance for the purposes of conserving biodiversity in England and Wales. A number of bat species are listed on Section 41 (England) and Section 42 (Wales) of the NERC Act 2006.

Trees - Bats: A bat survey must be performed on the relevant roost potential prior to any tree work being carried out. If bats are found to be present, a Natural England licence will be required prior to work being carried out. Bats and the places they use for shelter or protection (i.e., roosts) receive European protection under The Conservation of Habitats and Species Regulations 2017, as amended. They receive further legal protection under the Wildlife and Countryside Act (WCA) 1981, as amended. As bats re-use the same roosts (breeding site or resting place) after periods of vacancy, legal opinion is that roosts are protected whether or not bats are present. The Natural Environment and Rural Communities (NERC) Act 2006 places a duty on public bodies to have regard for the conservation of biodiversity and maintains lists of species and habitats which are of principal importance for the purposes of conserving biodiversity in England and Wales. A number of bat species are listed on Section 41 (England) and Section 42 (Wales) of the NERC Act 2006.

Nesting Birds: The removal of relevant features must be undertaken outside of the bird nesting season (this generally extends between March and August but is weather dependent). If this is not possible the area concerned should be checked immediately prior to removal by a suitably qualified ecologist. A licence can be obtained from Natural England to permit this work to be conducted and must be applied for beforehand. Nesting and nest building birds are protected under the Wildlife and Countryside Act WCA 1981 (as amended). Some species (listed in Schedule 1 of the WCA) are protected by special penalties.

In exceptional cases the law allows certain exemptions to permit legal activities (such as a development with planning permission) and where avoiding harm isn't possible. You may also be able to get a licence from Natural England for certain activities if you need to remove wild birds because they're causing problems.

The ecologist should also follow the Biodiversity Code of Practice for planning and development (BS 42020:2013).

2.3 OCCUPIERS' LIABILITIES ACT 1957 AND 1984

The Occupiers Liability Act 1957 regulates the area of Tort law in England.

An occupier of premises owes the same duty, the "common duty of care", to all his visitors whether by invite or otherwise. The common duty of care is a duty to take such care as in all the circumstances of the case is reasonable to see that the 'visitor' will be reasonably safe in using the premises for the purposes for which he is invited or permitted by the occupier to be there or for purposes other than that which they have been invited (trespassers).

3. ARBORICULTURAL IMPACT ASSESSMENT

3.1 INTRODUCTION

All trees within and closely surrounding the site have been surveyed and each has been identified with a unique number. The location of the trees can be found on Arbor-Eco Consultancy, Drawing Number MB250305-01-01 (4 sheets) in Section 5.

A schedule of the trees surveyed can be found within Appendix 1.

3.2 DEVELOPMENT DESIGN AND LONG-TERM IMPACTS

3.2.1 Potential Impact on the Amenity Value of Trees

Impacts

Tree Works including Removal

The proposed tree works are detailed in Table 3.1.

Proposed Tree Works

To permit space for the proposed hard landscaping it will be necessary to carry out tree work on this site prior to any other works being carried out.

Tree No	Species	BS5837 Cat	Tree work and reason required
T4	Oak	B1	Carry out branch to pruning to provide the crown height of 5.5 m above ground level in order for the highway to be formed for Crossover South.
T5	Oak	B1	Carry out branch to pruning to provide the crown height of 5.5 m above ground level in order for the highway and footpath to be formed for Crossover South.
T6	Oak	B1	Carry out branch to pruning to provide the crown height of 5.5 m above ground level in order for the highway and footpath to be formed for Crossover South.
G1	Mixed Species	C2	Remove in part to provide the necessary space to form Crossover South.
G2	Mixed Species	C2	Remove in part to provide the necessary space to form Crossover South.
G6	Mixed Species	C2	Remove in part to provide the necessary space for the proposed development.
G7	Mixed Species	C2	Remove to provide the necessary space for the proposed indicative LEAP and development.
H1	Mixed Species	C2	Remove in part to provide the necessary space to form the access road.
H2	Mixed Species	C2	Majority of hedgerow removed to form access and visibility splays.
H3	Mixed Species	C2	Remove in part to provide the necessary space to form the access road and cycleway.
H4	Mixed Species	C2	Remove majority to facilitate the development.

Table 3.1: Tree Works Required

The proposed development will require the removal of groups of trees (in part) G1, G2, G6 & most of G7, and a small element of hedgerow numbers (H1 & H3) is to be removed in addition to the majority of H2 to be removed to permit its successful implementation.

Tree and hedgerow removal and the proposed development is discussed below:

Development Construction:

- In terms of removals, it will be necessary to remove the groups of trees (in part) G1, G2, G6 and G7, along with a small element of H1. A small part of H3 shall be removed, as well as the majority of H2, to provide the necessary space to form a highway (and necessary visibility splays) with Maddoxford Lane. Finally, all but a very small section of H4 towards the northern boundary of the site will be removed to provide space for the development.
- All of the groups and the hedgerow (in part) identified for removal should not be considered a constraint to the proposed development, due to the relatively small impact the loss will make to the complete site. The trees form only a small percentage of canopy cover across the site and can be easily replaced during the soft landscaping phase following the development.
- The loss of H2 will have the greatest heritage visual impact of the site. However, there is an opportunity to plant a new mature hedgerow, of mixed native species, a few metres south of the removed hedgerow to allow that to establish and so the loss would be negligible.
- In addition to removals, it will also be necessary to carry out works to other trees – as detailed in Table 3.1.
- All trees and vegetation that overhang the highway (including access) should be crown-lifted to at least 5.2m to allow safe passage of high sided vehicles as well as being cut back sufficiently from the edge of the carriageway to allow clearance for wing mirrors. This includes car parking bays.
- Trees and vegetation that overhang footways and footpaths should be crown-lifted to at least 2.5 m above ground level and cut back to ensure the footpath/way is at least 1.2 m in width. This is to allow safe passage for all footpath/way users including wheelchairs, mobility scooters, etc. The vegetation within the car park should be pruned back to the kerb-edge to prevent vehicles damaging branches.
- These heights have been selected as an acceptable standard and any vegetation below this may be deemed to be an obstruction. The local authority may enforce Section 154 of the Highways Act (1980) which allows a Local Authority to serve notice upon the owner of the trees/ vegetation informing them that they need to clear any obstructions safely

Mitigation/Avoidance

Arbor-Eco Consultancy, Tree Protection Plan, Drawing Number MB250305-02-01, Section 5 indicates the groups of trees and the hedgerow removal to facilitate the development.

In addition, trees that have been identified for pruning work are also annotated on the drawing. Should any further pruning work be required then a further tree works schedule shall be submitted to the Local Authority Tree Officer for approval in conjunction with the coordination from the retained Arboricultural Consultant.

New tree planting should be carried out in accordance with British Standard 8545:2014 Trees: from nursery to independence in the landscape – Recommendations.

Topsoil; This material, e.g. general-purpose grade topsoil should be provided in accordance within BS3882:2015, and should be free of contaminants and other foreign objects potentially injurious to tree roots.

3.2.2 Proximity of Trees to Proposed Structure

Impacts

Branch Spread

Where the development area is shown on Land Use and Access Plan, provided by Thrive Architects (drawing number BLOO240103 LUP-01 P8 260218) it is not yet understood what element of the development will be immediately adjacent to the trees.

Shading

It is unlikely that any new building within the development will experience any shading during the day as the sun tracks across the horizon. The orientation of the buildings and aspects of the windows should reduce any shading of the southern faces due to their proximity to trees.

Leaf Litter, Fruits, Pollen, Sap etc.

Whilst the majority of the retained trees are species associated with significant fruit fall, leaf and branch drop or sap exudate problems the inconvenience experienced can be overcome by implementing good housekeeping.

Mitigation/Avoidance

Trees across this site overhanging highways, footways and footpaths will be the subject of cyclical pruning as the trees continue to grow. Further works will be required in the future to prevent conflict occurring with the traffic flow through the site. However, such works will not be significant as to impact the long-term visual quality of the trees, groups and hedgerows retained.

With respect to leaf litter, it is noted that the sweeping up of leaves and cleaning of gutters, which may become blocked by falling leaves, is considered to be routine seasonal household maintenance and, as such, no notable conflict with the proposed development is considered to occur. Nonetheless it may prove appropriate in certain areas to use gutter guards, or otherwise enclosed gutters, to minimise the potential for leaf fall to cause blockage and an ongoing nuisance.

3.3 POTENTIAL IMPACTS FROM CONSTRUCTION PROCESSES OF THE PROPOSED DEVELOPMENT

3.3.1 Potential Root and Canopy Protection

The proposed development of the site has been designed so that major works are not required within the RPAs of retained trees. Whilst the exact impacts would be verified by detailed design at Reserved Matters stage, the Illustrative Landscape Strategy indicates that a number of trees may be affected by the development whereby the developable area/features are shown to encroach into the RPAs.

There will be a number of trees that are vulnerable due to deconstruction or demolition activities as discussed within Section 3.3.6 below. Until such time as the methodology for the removal has been declared it is not understood which trees will require additional protection.

The following trees in Table 3.2 are therefore deemed potentially vulnerable to the construction activities proposed.

Impacts

The proposed development of the site has been designed so that major works are required within the RPAs of retained trees in the form of construction of hard surfacing. The Illustrative Landscape Strategy indicates

that a number of trees may be affected by the development whereby the developable area is shown to encroach into the RPAs. The following trees are deemed vulnerable to the construction activities proposed.

Tree No	Species	Tree vulnerability and reason supervision is required
14	Oak	Incursion from the construction of proposed circular footpath.
17	Oak	Incursion from the construction of proposed circular footpath.
18	Oak	Incursion from the construction of proposed circular footpath.
19	Ash	Incursion from the construction of proposed circular footpath.
20	Oak	Incursion from the construction of proposed circular footpath.
21	Oak	Incursion from the construction of proposed circular footpath.
22	Oak	Incursion from the construction of proposed circular footpath.
23	Oak	Incursion from the construction of proposed circular footpath.
24	Oak	Incursion from the developable area.
25	Oak	Incursion from the construction of proposed circular footpath.
26	Oak	Incursion from the construction of proposed circular footpath.
27	Oak	Incursion from the construction of proposed circular footpath.
28	Oak	Incursion from the construction of proposed circular footpath.
29	Oak	Formation of Crossover East and incursion from the developable area.
30	Oak	Incursion from the construction of proposed circular footpath.
31	Oak	Incursion from the developable area.
32	Ash	Incursion from the construction of proposed circular footpath.
33	Field Maple	Incursion from the construction of proposed circular footpath.
36	Oak	Incursion from the construction of proposed circular footpath.
37	Oak	Incursion from the developable area and incursion from the construction of proposed circular footpath.
40	Oak	Incursion from the construction of proposed circular footpath.
41	Oak	Incursion from the construction of proposed circular footpath.
42	Oak	Incursion from the construction of proposed circular footpath.
44	Oak	Incursion from the construction of proposed circular footpath.
48	Oak	Incursion from the construction of proposed SuDS basin.

Table 3.2 Vulnerable Trees (continues)

Tree No	Species	Tree vulnerability and reason supervision is required
49	Oak	Incursion from the construction of proposed SuDS basin.
52	Oak	Incursion from the construction of proposed circular footpath.
53	Ash	Incursion from the construction of proposed circular footpath.
54	Oak	Incursion from the construction of proposed circular footpath.
60	Ash	Incursion from the construction of proposed circular footpath.

Table 3.2: (cont'd) Vulnerable Trees

Overall, it is considered that the potential for harm to occur to the root systems of retained trees can be adequately controlled through the adoption of appropriate working practices and educating groundworkers to exclude access from vulnerable sections of trees RPAs.

Mitigation/Avoidance

Construction Exclusion Zones

To minimise the potential for harm to occur to the root systems and canopies of retained trees during development it will be necessary to implement construction exclusion zones throughout the site. These are areas surrounding the trees' RPAs and canopies in which no demolition or construction works, or related activities, will be undertaken. These zones will be demarcated by the erection of tree protection barriers prior to any works (with the exception of tree works) being carried out. The tree protection barriers shall be installed in accordance with the detail shown within BS5837:2012 and highlighted at Appendix 4. No variation of tree protection barriers shall be used without the express permission of the Local Authority Tree Officer or retained Arboricultural Consultant.

It is not yet determined whether the need for ground protection is likely at this stage as the provision of the finalised layout has yet to be issued. Any ground protection to be installed must be capable of supporting the expected loads and avoid compaction and damage to the soil.

The ground protection will be designed by a suitable engineer once the relevant loadings and access have been agreed.

It is recommended that the exclusion zones are afforded protection at all times through the use of tree protection barriers and where necessary, ground protection, (specified in accordance with BS5837:2012). It must be noted that any hoarding and tree protection barrier uprights driven into the ground within proximity to the RPA of a retained tree must adopt the procedures as specified within Section 3.3.9.

3.3.2 Site Access (Preliminary)

Impacts

Construction access to the site is proposed to make use of the existing access routes in to the site off Maddoxford Lane, minor road. To minimise the potential for harm to occur to the crowns of the retained trees or hedgerows which overhang the route further access facilitation pruning works may be required over time due to seasonal extension growth to the existing vegetation. The extent of such pruning works should be revised prior to any construction traffic entering the site.

Additionally, where vehicles need to pass within close proximity to retained trees protective barriers should be installed to prevent vehicles accidentally encroaching into areas where retained trees are situated to minimise the potential for collision damage to trees stems occurring.

Mitigation/Avoidance

It is strongly recommended that the access routes are temporarily formed in order to ensure no damage to any retained trees occur by having a recognised traffic management system that can be controlled.

The retained Arboricultural Consultant shall submit a summary written report or email to the local authority confirming that all tree protection measures are in place, fit for purpose and adequately signed prior to construction or demolition works being carried out.

3.3.3 Contractors Parking

Impacts

The location of contractor parking is yet to be determined, however, due to the expanse of this site not being used, the parking areas can be managed well away from the RPAs of retained trees.

Mitigation/Avoidance

The Site and Contracts Manager is to ensure that all highway laws are respected and **no parking** is to occur on any highway verge or footway. No neighbouring property shall be inconvenienced by construction or contractor activity.

3.3.4 Site Cabins and Welfare Facilities

Impacts

The location of the Site Cabins and Welfare Facilities is yet to be determined; however, due to the expanse of this site not being used, the opportunity to provide a site compound can be managed well away from the RPAs of retained trees.

Mitigation/Avoidance

Installation of protective barriers to ensure that trees are protected from forming a good access, including traffic management systems that will prevent physical damage to retained trees resulting from works to establish a Site Compound along with Welfare Facilities.

3.3.5 Delivery and Storage of Materials

Impacts

The proposed locations for site deliveries and materials storage during the development is yet to be determined; however, due to the expanse of this site there is ample opportunity to provide a site compound that it will occur outside of the RPAs of retained trees.

Mitigation/Avoidance

Ensure no storage occurs upon un-surfaced ground within the defined RPAs of the retained trees via the installation of protective barriers.

3.3.6 Demolition of Existing Structures

Impacts

There are a number of man-made structures and a residential building along with farm buildings to demolish, dismantle or remove. Fig 2 indicates the current location of the buildings in proximity to the structures.

Furthermore, these buildings are shown for removal on Arbor-Eco Consultancy, Tree Protection Plan Drawing Number MB250305-02-01, Section 5.



Fig 2: Buildings and structures highlighted for removal.

Mitigation/Avoidance

Where trees are in close proximity to the building or structure identified for removal then suitable tree protection shall be installed including ground protection for access and egress. An addendum of trees that will be vulnerable along with appropriate tree protection measures shall be added to the Arboricultural Method Statement.

Prior to any demolition activity taking place, control of vehicle movement across unmade ground shall be added to the Arboricultural Method Statement.

Where the use of 360-degree traversing vehicles is used, then they will be supervised by a banksman to ensure that any traversing arm shall not be in proximity to any retained tree.

The potential for significant harm to occur to the retained trees can be controlled through adoption of appropriate working techniques, such as top-down and pull-in for demolition work adjacent to trees.

3.3.7 Construction of Buildings

Impacts

The proposed construction of up to 280 residential units has been considered in proximity to retained trees and it is deemed that conflict with the trees can be controlled with good working practices, respect to trees, the installation of protective barriers that are adequately signed. The tree protection plan/s may need to be updated once the detailed design has been completed at the reserved matters stage.

The locations of the tree protection barriers are shown on Arbor-Eco Consultancy, Tree Protection Plan Drawing Number MB250305-02-01, Section 5.

To minimise the risk of damage occurring to the tree's the Site Manager and Contracts Manager will be responsible for the induction of all personnel highlighting the importance of the tree protection measures across the site and to report any tree damage (accidental or otherwise) to the retained Arboricultural Consultant through the various lines of communication.

3.3.8 Construction of New Hard Surfacing

Examination of Thrive Architect Ltd Land Use and Access Plan (BLOO240103 LUP-01 P8 260218) indicates that the construction of the proposed highway (hard surfacing) may pass within the RPAs of retained trees.

- Tree numbers 4, 5 & 6 will potentially have their RPAs encroached by the construction of a highway and suspended footpath (Fig 3).
- Tree numbers 29 & 30 will potentially have their RPAs encroached by the construction of a highway and footpaths (Fig 4).

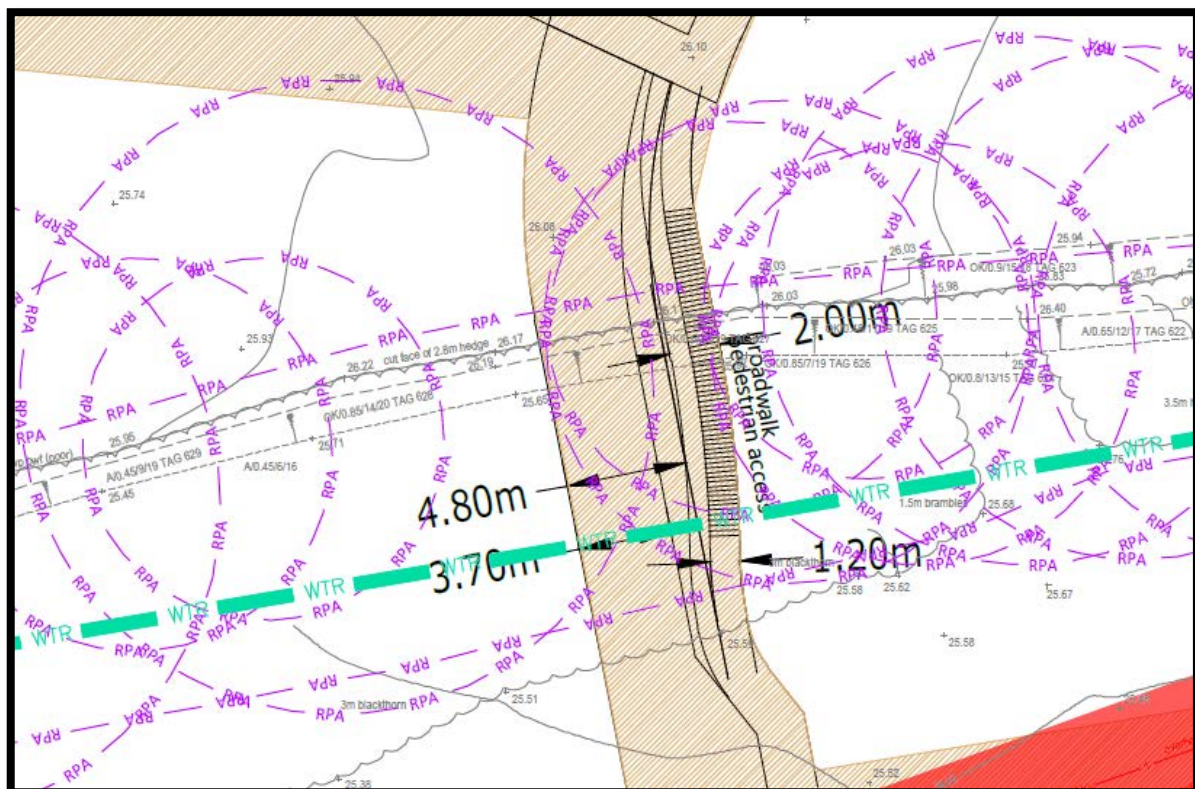


Fig 3: Indicative Crossover South

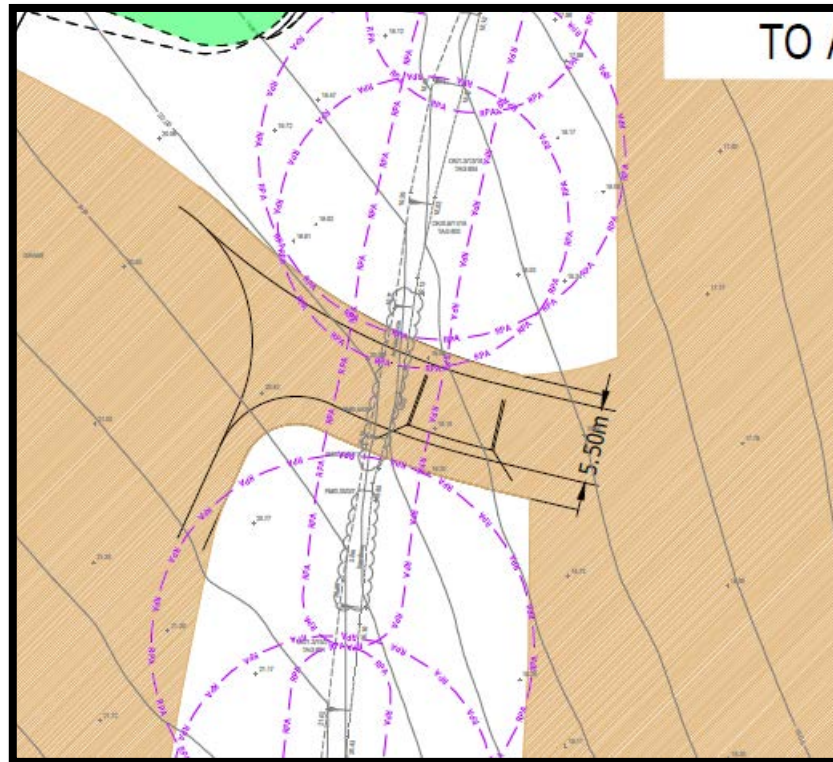


Fig 4: Indicative Crossover East

There are additional areas where the RPAs of retained trees may be compromised and these are listed above in Table 3.2 and shown on Arbor-Eco Consultancy, Tree Protection Plan, MB250305-02-01, Section 5.

The potential for significant harm to occur to the retained trees can be controlled through adoption of appropriate working techniques, which are to be agreed between the local highway authority and the council's arboriculturalist at the reserved matters stage or through discharge of condition if appropriate.

In agreement with Eastleigh Borough Council Tree Officer (Mr Chris Stringer) and in accordance with BS5837:2012, all areas of construction activity within the RPA should be supervised by the retained Arboricultural Consultant under an appropriately worded Planning Condition (See Section 3.3.14 for contact details). Table 3.2 identifies vulnerable trees where supervision will be carried out during the construction phase based on the current design.

Mitigation/Avoidance

Wherever it is intended to undertake construction operations within the Root Protection Areas of trees precautions must be taken to maintain the condition and health of tree's root systems. The following should be adhered to;

In particular:

- Works shall be conducted in such a manner as to prevent physical damage to roots during construction, such as soil compaction or root severance.
- Provision for water and oxygen to reach the roots must be made and the soil structure must not be disturbed.
- Provision must be made for future root growth and precautions taken to ensure that such root growth does not cause unacceptable levels of damage to the finished construction.

- The soil must not be compacted and soil bulk density must be maintained at suitable levels for tree root growth and function.

To achieve the above requirements for tree root growth and function the proposed hard surfaces shall be designed in accordance with details approved under an appropriately worded planning condition.

During a meeting between the author (Arbor-Eco Consultancy) and Eastleigh Borough Council Tree Officer (Mr Chris Stringer) on site, it was decided that the highway that passes between tree numbers 4, 5 & 6 will be constructed in accordance with a detailed method statement, which is to be approved as part of an appropriately worded Planning Condition.

In agreement with Eastleigh Borough Council Tree Officer (Mr Chris Stringer) and in accordance with BS5837:2012, all areas of construction activity within the RPA should be supervised by the retained Arboricultural Consultant (See Section 3.3.14 for contact details). Table 3.2 identifies vulnerable trees where supervision will be carried out during the construction phase under an appropriately worded Planning Condition.

3.3.9 Boundary and Ancillary Structures

Impacts

The exact details of any proposed boundary structures are not known at this time but shall be included within the Arboricultural Method Statement.

Mitigation/Avoidance

In agreement with Eastleigh Borough Council Tree Officer (Mr Chris Stringer) and in accordance with BS5837:2012, all areas of construction activity within the RPA should be supervised by the retained Arboricultural Consultant (See Section 3.3.14 for contact details). Table 3.2 identifies vulnerable trees where supervision will be carried out during the construction phase.

3.3.10 Site Gradients

Impacts

There are a number of areas where gradient changes are planned. These include the construction of SuDS basins that will be implemented across the site. During the planning phases with the architects, all areas of gradient change should have been designed outside of the RPAs of the retained trees.

Mitigation/Avoidance

Address the site of SuDS basins where they may impact with the roots of retained trees.

In agreement with Eastleigh Borough Council Tree Officer (Mr Chris Stringer) and in accordance with BS5837:2012, all areas of construction activity within the RPA should be supervised by the retained Arboricultural Consultant (See Section 3.3.14 for contact details). Table 3.2 identifies vulnerable trees where supervision, under an appropriately worded Planning Condition, will be carried out during the construction phase.

3.3.11 Service Requirements

Impacts

As the adjacent sites were previously (and recently) developed there are existing service connections throughout part of it and it as such it is considered that various opportunities to create new service connections without harming trees exist. A utilities plan has been developed and is issued within the Planning Application document pack.

Mitigation/Avoidance

In agreement with Eastleigh Borough Council Tree Officer (Mr Chris Stringer) and in accordance with BS5837:2012, all areas of construction activity within the RPA should be supervised by the retained Arboricultural Consultant (See Section 3.3.14 for contact details). Table 3.2 identifies vulnerable trees where supervision will be carried out during the construction phase.

The methodology for the installation, maintenance or removal of any services within an RPA will be in accordance with NJUG Volume 4 'Guidelines for the Planning, Installation and Maintenance of Utility Services in Proximity to Trees'. This will include hand dug 'broken' trenches to ensure that maximum protection is given to tree roots.

3.3.12 Tree Planting and Landscaping

Where any hard surfacing is proposed within the RPA of a tree then this will be reviewed to determine if it can be relocated outside of the trees' root protection area. An appraisal of each tree requiring to be removed (such as those within G7 as an example) will be reviewed and discussed during the preparation of an Arboricultural Method Statement at the detailed reserved matters stage, which could include the following details:

1. The final location for each tree must be agreed with the retained Arboricultural Consultant after consideration for the soil structure, pH levels, and suitability of site conditions in the immediate area.
2. Preparation of the planting environment (including decompaction and drainage) should be at least to the standards set out in British Standard BS4428:1989 Code of practice for general landscape operations.
3. Soils for use in landscaping should meet British standards BS8601:2013 Specification for Subsoil and Requirements for Use.
4. Soil volume to support the growth of the tree is paramount. In order to achieve this, it will be useful to employ experts in this field, and one such expert is **deeproot** © who utilise **Silva Cell**© to achieve the volume required. Other manufacturers are available.
5. All planting pits must be excavated to size and be greater dimensions than that of the rootball. They shall then be lined with good quality topsoil (*3882:2015 British Standard Topsoil - Technical Information*) and mycorrhiza added to provide a root to soil adhesion for future growth.
6. Planting pits must be free draining to avoid prolonged waterlogging. Breaking up the planting pit sidewalls and bottom will be an essential part of the preparation work.
7. Planting depth must be to the nursery line. Planting too deep will suffocate the tree. Planting too shallow will make the tree unstable.
8. Appropriate tree stem protection from vehicle or people damage must be a consideration in the urban environment.
9. The area surrounding the tree stem must be mulched and kept weed free.
10. All new trees must be watered regularly. It is common knowledge that trees will die within their first 5 years of establishment through lack of management.
11. Formative pruning and general maintenance must be included in the final management plan.
12. Selecting the correct tree form will be a consideration. Fastigate or spreading, short or tall depending on the location of the tree.

The final tree selection and their planting locations shall be determined in conjunction with the retained Arboricultural Consultant (See Section 3.3.14 for contact details).

3.3.13 Preconstruction Recommendations

Auditable systems of site monitoring should be made available to the Local Planning Authority/Arboricultural Officer and included within the program of development construction as recommended within BS5837:2012. This should include a schedule of events whereby periods of supervision or input from the Project Arboriculturist is required (See Section 3.3.14 for contact details).

Carry out all tree works prior to any construction activity taking place.

A pre-commencement site meeting involving all interested parties should be convened to confirm;

- Protective barrier and ground protection locations and specifications.
- Tree Works Schedule;
- Exact locations of all Tree Protection Measures;
- Temporary Access into RPA Requirements;
- Contractors Compound Location;
- Contractors Parking Location;
- Contractors Storage Compound Location;
- Contractors Welfare Facility Location;
- Traffic Management Plan;
- Construction Phase Plan to include a solution to cross the RPAs of T4, 5 & 6;
- Landscaping Plan;
- Auditing and Periods of Supervision;
- Post Development Tree Inspection and Tree Management for 5 years (minimum);

3.3.14 Contact Details

Name: Marco Bartolini

Position: Arboricultural Consultant

Mobile: 07542 093882

Email: arborecoconsultancy@gmail.com

Mr Chris Stringer, Arboricultural Officer

Local Authority: Eastleigh Borough Council

Address: Eastleigh House, Upper Market St, Eastleigh SO50 9YN

Telephone: 023 8068 8000

3.3.15 Additional Considerations

Planning Context; National Planning Policy Framework

It is important to note that trees are a material consideration in the UK planning system and existing trees are an important factor requiring forethought when assessing the development potential of a site, whether they are within the working area or within such proximity to it that they may be affected by construction operations.

Environmental Benefits of Trees

It is worthwhile noting that the trees can intercept many of the hostile elements humans and animals need shelter from. Trees provide shading and offer significant humidity regulation and a cooling effect felt at ground level.

All trees will consume a considerable amount of ground water that will regulate the local hydrology and may assist with the removal of local flooding issues. A mature tree will consume tens of thousands of litres of water during a year.

A group of trees can provide an element of acoustic dampening effect at ground level and growing next to a road many tree species have been linked with the sequestration of impurities from the atmosphere. Finally, the trees will provide some shelter from prevailing winds and inclement weather. Therefore, it can be seen that the trees will benefit, rather than hinder, the landscape in which they are growing.

Biodiversity Enhancement

Biodiversity Net Gain (BNG) is an approach to development. It makes sure that habitats for wildlife are left in a measurably better state than they were before the development.

In England, BNG is mandatory under Schedule 7A of the Town and Country Planning Act 1990 (as inserted by Schedule 14 of the Environment Act 2021).

Developers must deliver a minimum BNG of 10%. This means a development will result in more or better-quality natural habitat than there was before development. The developer must also maintain the habitats created or enhance them for a minimum of 30 years. This applies to any off-site gains or significant on-site gains.

4. ARBORICULTURAL METHOD STATEMENT (HEADS OF TERMS)

It is considered that an Arboricultural Method Statement will be required due to the fact that the proposed construction phases will require significant works to be undertaken within and immediately adjacent to the RPAs of retained trees.

Arboricultural Supervision and Auditing will ensure that all site operations can occur with minimal risk of adverse impact upon trees that are to be retained.

In agreement with Eastleigh Borough Council Tree Officer (Mr Chris Stringer) and in accordance with BS5837:2012, all areas of construction activity within the RPA should be supervised by the retained Arboricultural Consultant.

A Pre-commencement Site Meeting will ensure that the following operations are supervised in accordance with the guidelines set out within BS5837:2012 Trees in relation to design, demolition and construction - Recommendations.

A pre-commencement site meeting involving all interested parties should be convened to confirm;

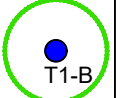
- Phases of development.
- Protective barrier and ground protection locations and specifications.
- Tree Works Schedule;
- Exact locations of all Tree Protection Measures;
- Temporary Access into RPA Requirements;
- Contractors Compound Location;
- Contractors Parking Location;
- Contractors Storage Compound Location;
- Contractors Welfare Facility Location;
- Traffic Management Plan;
- Construction Phase Plan to include a solution to cross the RPAs of T4, 5 & 6;
- Landscaping Plan;
- Auditing and Periods of Supervision;
- Post Development Tree Inspection and Tree Management for 5 years (minimum);

5. DRAWINGS

Drawing MB250305-01-01 Tree Constraints Plan (4 sheets)

Drawing MB250305-02-01 Tree Protection Plan Rev B (4 sheets)

Key

 Showing Canopy extent, category colour and tag number (with category)

Category A
Trees of high quality with an estimated remaining life expectancy of at least 40 years.

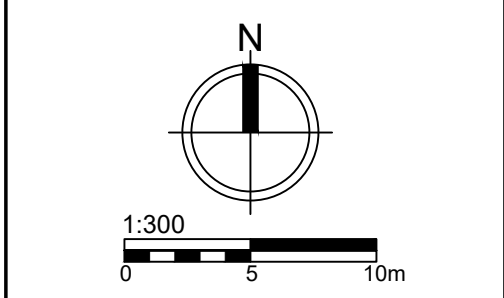
Category B
Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.

Category C
Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 100 mm.

Category U
Trees in such a condition that they can not realistically be retained as living trees in the context of the current land use for longer than 10 years.

Tree Groups
Shown as dashed centroboundary line. Colour represents category (see above).

 BS 5837:2012 Root Protection Area




Arbor-Eco Consultancy
2 Daisy Lane, Locks Heath,
Hants. SO31 6RA.
Email: arborescoconsultancy@gmail.com
Telephone: 07542 053592
Arboricultural Consultant
Marco Bartolini

Client
Bloor Homes Southern Ltd

Project
Land south of Maddoxford Lane

Drawing Title
Tree Constraints Plan - Sheet 1

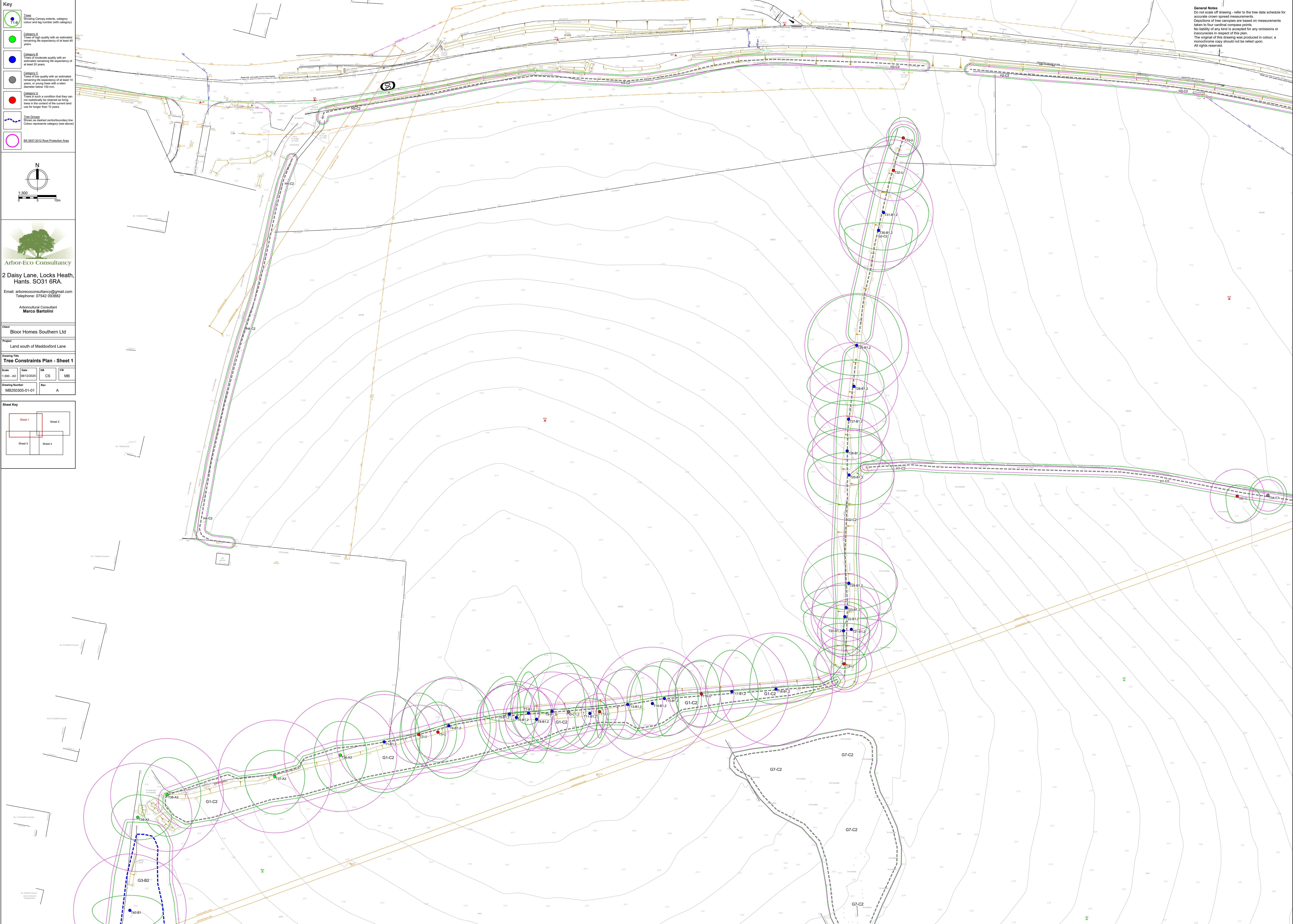
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Drawing Number
MB250305-01-01

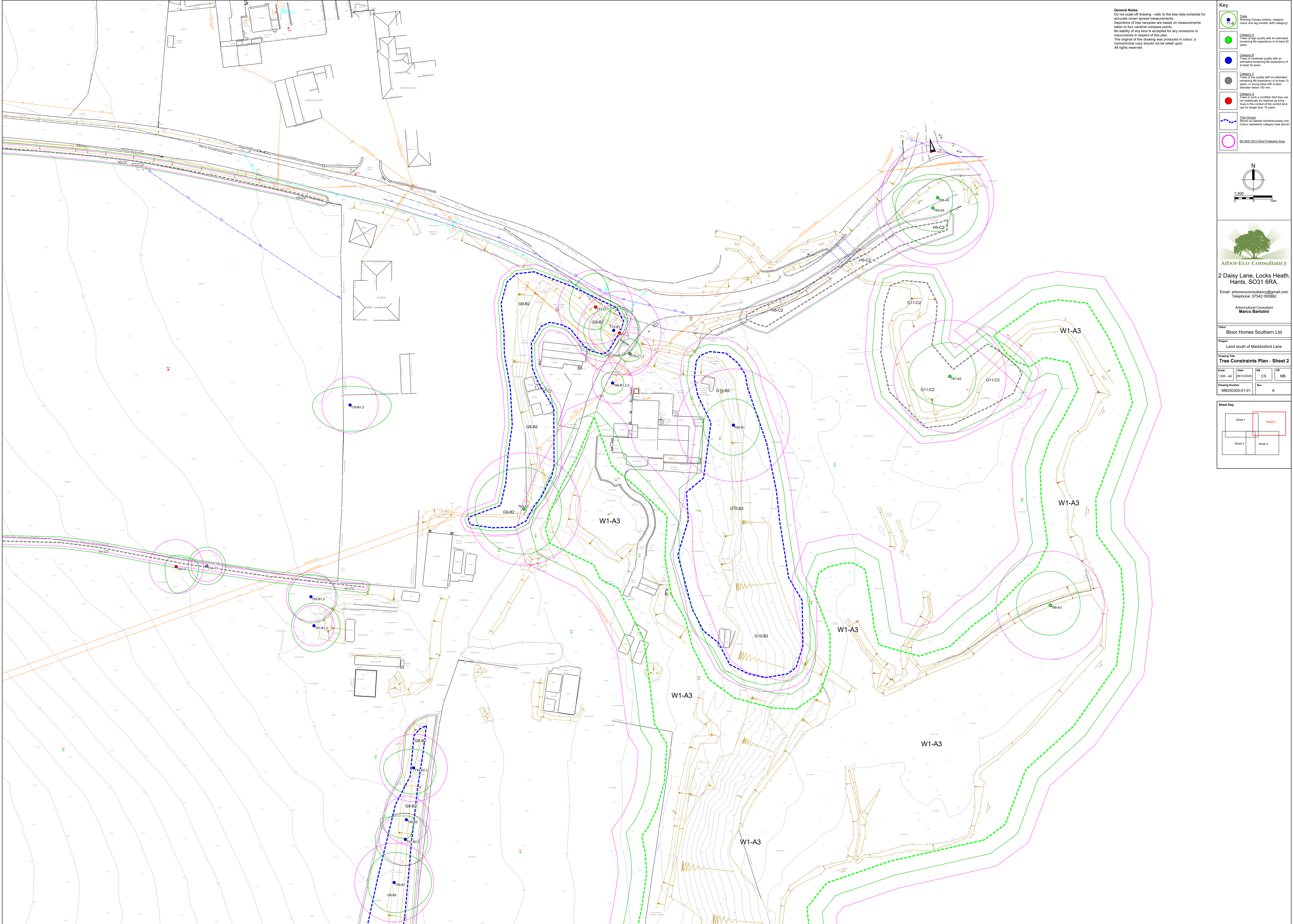
Rev	Rev
A	

Sheet Key

Sheet 1	Sheet 2
Sheet 3	Sheet 4



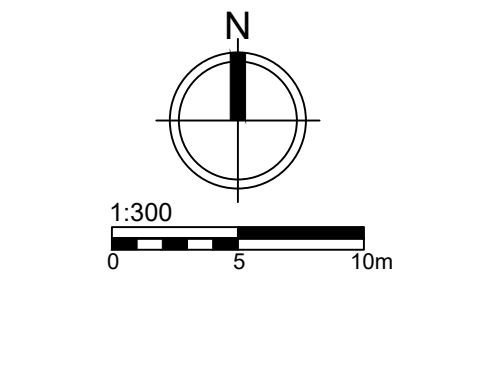
General Notes
Do not scale off drawing - refer to the tree data schedule for accurate crown spread measurements.
Depictions of tree canopies are based on measurements taken to four cardinal compass points.
No liability of any kind is accepted for any omissions or inaccuracies in respect of this plan.
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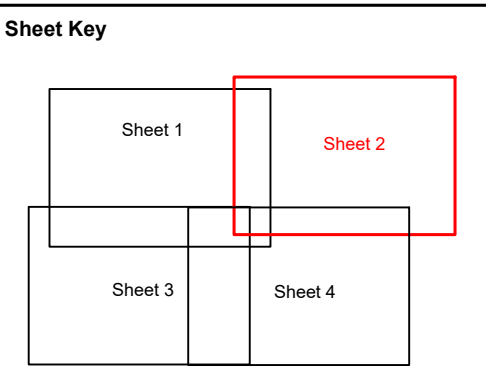
Key

- Trees**
Showing Canopy extent, category colour and tag number (with category)
- Category A**
Trees of high quality with an estimated remaining life expectancy of at least 40 years.
- Category B**
Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.
- Category C**
Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm.
- Category U**
Trees in such a condition that they can not realistically be retained as living trees in the context of the current land use for longer than 10 years.
- Tree Groups**
Shown as dashed centroboudary line
Colour represents category (see above)
- BS 5837:2012 Root Protection Area**

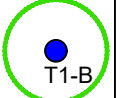


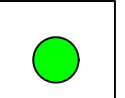
Arbor-Eco Consultancy
2 Daisy Lane, Locks Heath,
Hants. SO31 6RA.
Email: arbor-ecoconsultancy@gmail.com
Telephone: 07542 063862
Arboricultural Consultant
Marco Bartolini

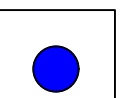
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Project Land south of Maddoxford Lane			
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Drawing Number MB250305-01-01	Rev A		

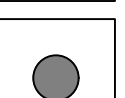


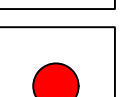
Key

 **Trees**
Showing Canopy extent, category colour and tag number (with category)

 **Category A**
Trees of high quality with an estimated remaining life expectancy of at least 40 years.

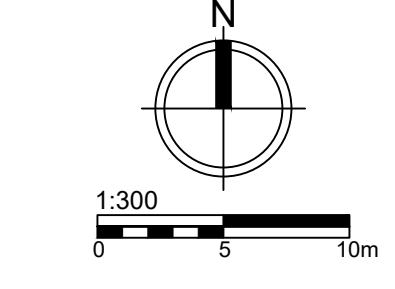
 **Category B**
Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.

 **Category C**
Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 100 mm.

 **Category U**
Trees in such a condition that they can not realistically be retained as living trees in the context of the current land use for longer than 10 years.

 **Tree Groups**
Shown as dashed centroboundary line. Colour represents category (see above).

 **BS 5832:2012 Root Protection Area**


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Arbor-Eco Consultancy
2 Daisy Lane, Locks Heath,
Hants. SO31 6RA.
Email: arborecoconsultancy@gmail.com
Telephone: 07542 053592
Arboricultural Consultant
Marco Bartolini

Client
Bloor Homes Southern Ltd

Project
Land south of Maddoxford Lane

Drawing Title
Tree Constraints Plan - Sheet 3

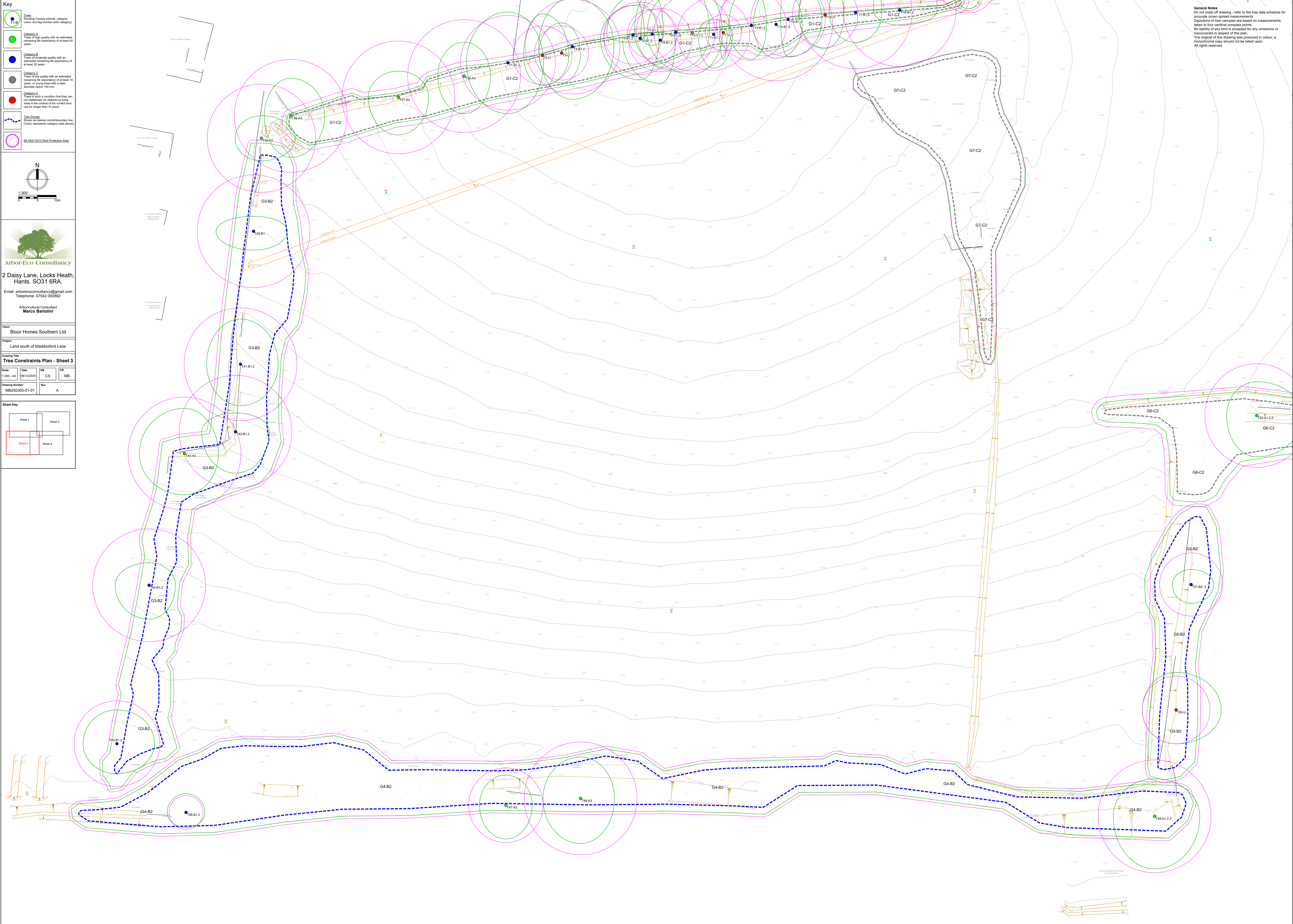
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MB250305-01-01

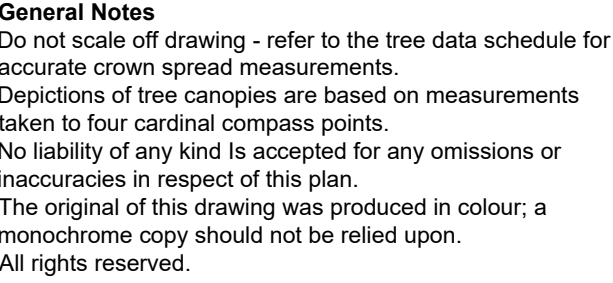
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Sheet Key

Sheet 1	Sheet 2
Sheet 3	Sheet 4



General Notes
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Sheet Key

Sheet 1

Sheet 2

Sheet 3

Sheet 4

Key

Trees
Showing Canopy extent, category colour and tag number (with category)

Category A
Trees of high quality with an estimated remaining life expectancy of at least 40 years.

Category B
Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.

Category C
Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 100 mm.

Category U
Trees in such a condition that they can not realistically be retained as living trees in the context of the current land use for longer than 10 years.

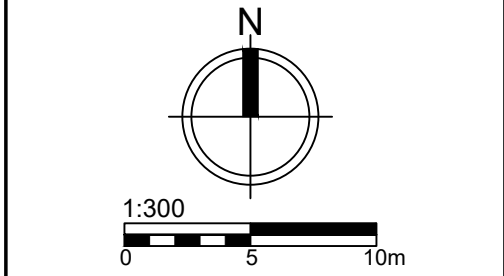
Tree Groups
Shown as dashed centrobundary line. Colour represents category (see above).

BS 5832:2012 Root Protection Area

Tree Protective Fencing

Section of Tree Protective Fencing to be removed once crossover ground protection is in place (specification TBC)

Trees for Removal



Arbor-Eco Consultancy
2 Daisy Lane, Locks Heath,
Hants. SO31 6RA.
Email: arbor-ecoconsultancy@gmail.com
Telephone: 07542 093882

Arboricultural Consultant
Marco Bartolini

Client			
Bloor Homes Southern Ltd			
Project			
Land south of Maddoxford Lane			
Drawing Title			
Tree Protection Plan - Sheet 1			
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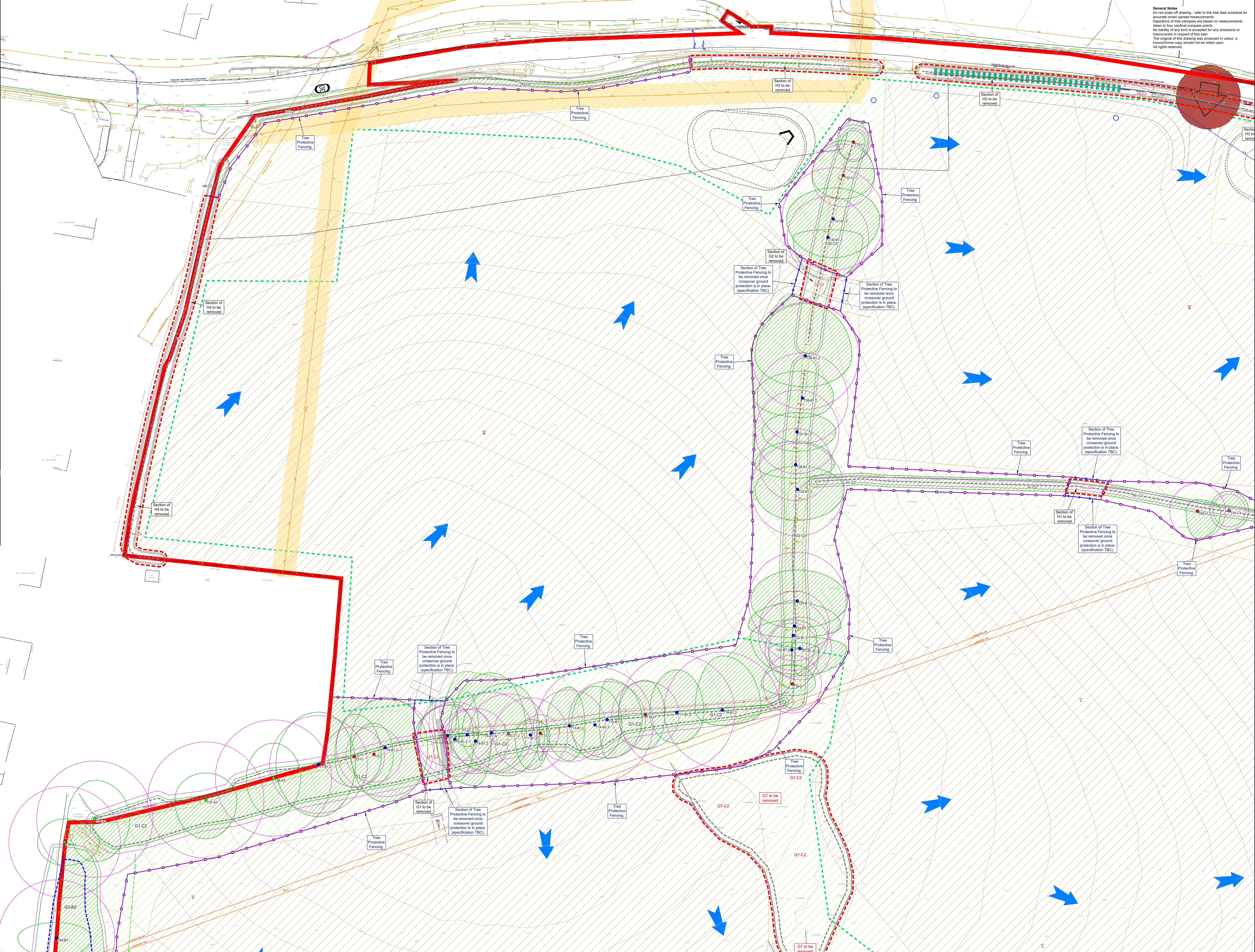
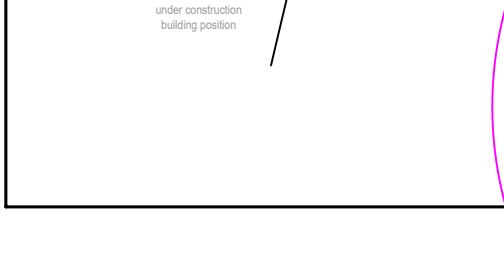
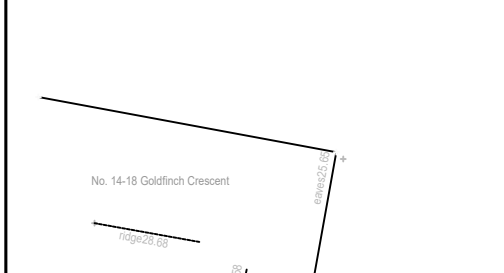
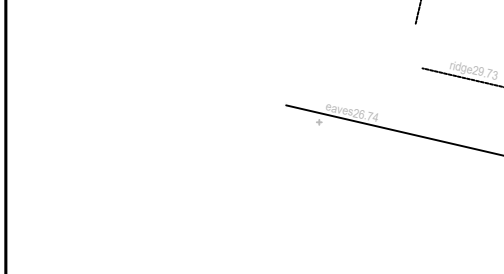
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Sheet 1

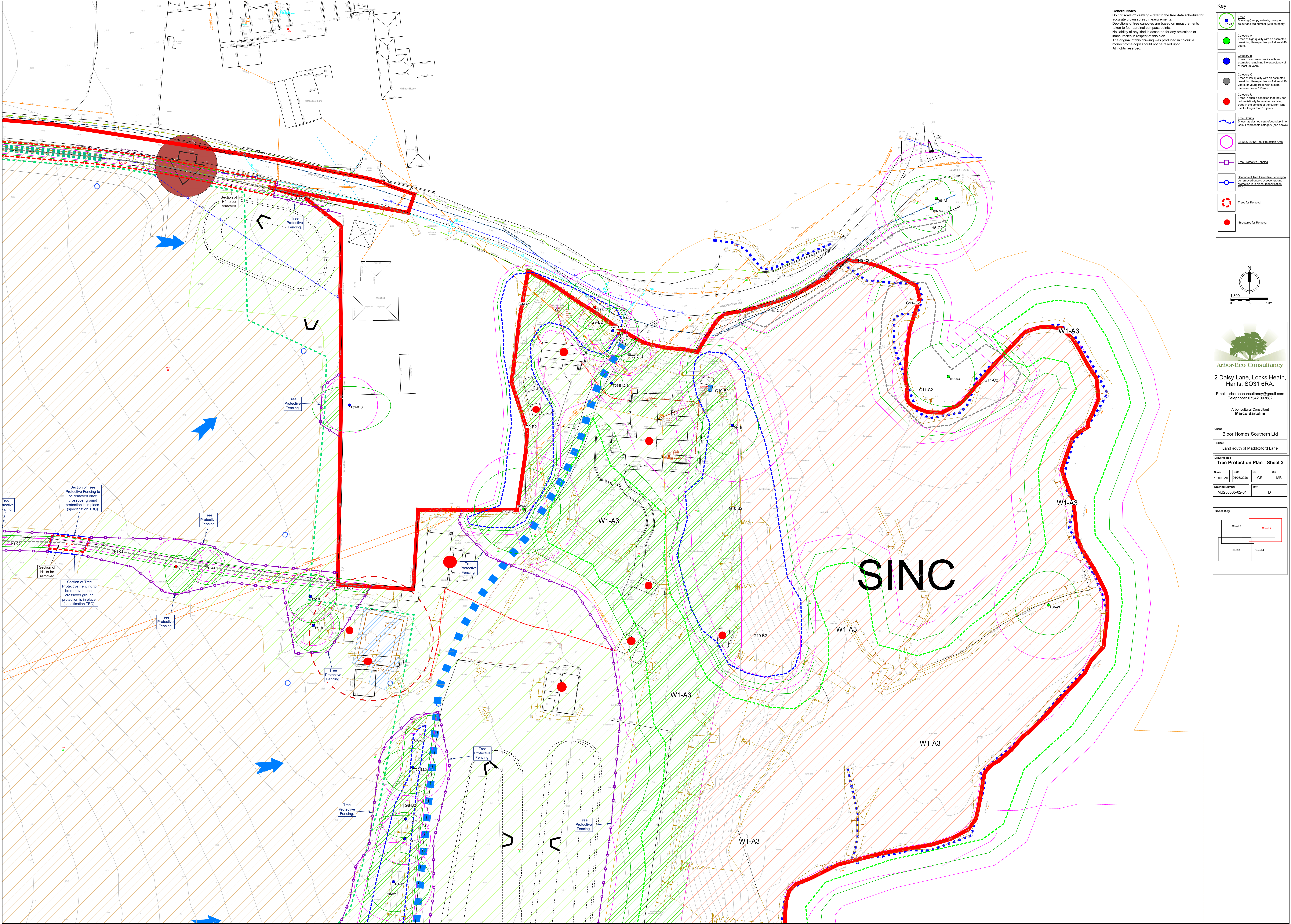
Sheet 2

Sheet 3

Sheet 4



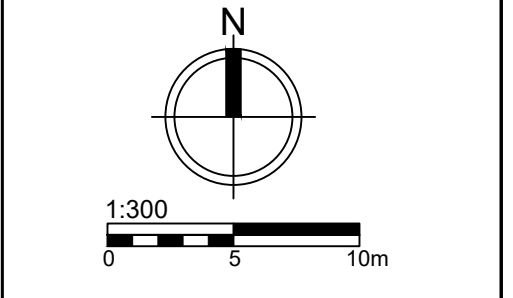
General Notes
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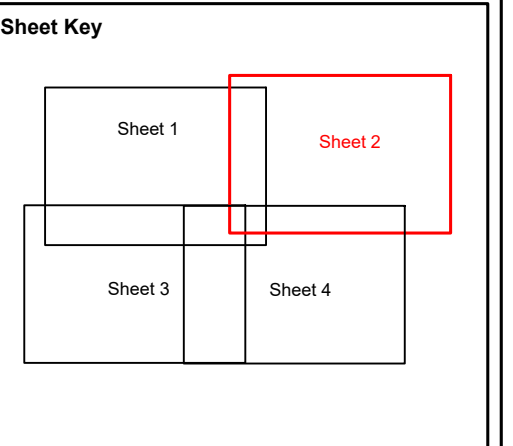
Key

- Tree Canopy Extents, category colour and tag number (see above)
- Category A: Trees of high quality with an estimated remaining life expectancy of at least 40 years.
- Category B: Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.
- Category C: Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 100 mm.
- Category U: Trees in such a condition that they can not realistically be retained as living trees in the context of the current land use for longer than 10 years.
- Tree Groups: Shown as dashed contour boundary line. Colour represents category (see above).
- BS 5637:2012 Root Protection Area
- Tree Protective Fencing
- Sections of Tree Protective Fencing to be removed once crossover ground protection is in place (specification TBC)
- Trees for Removal
- Structures for Removal



Arbor-Eco Consultancy
2 Daisy Lane, Locks Heath,
Hants. SO31 6RA.
Email: arborecoconsultancy@gmail.com
Telephone: 07542 095862
Arboricultural Consultant
Marco Bartolini

Client			
Bloor Homes Southern Ltd			
Project			
Land south of Maddoxford Lane			
Drawing Title			
Tree Protection Plan - Sheet 2			
Scale	Date	CS	CB
1:300 - A3	05/03/2025	CS	MB
Drawing Number	Rev		
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Key

Showing Canopy extent, category colour and tag number (with category)

Category A
Trees of high quality with an estimated remaining life expectancy of at least 40 years.

Category B
Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.

Category C
Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 100 mm.

Category U
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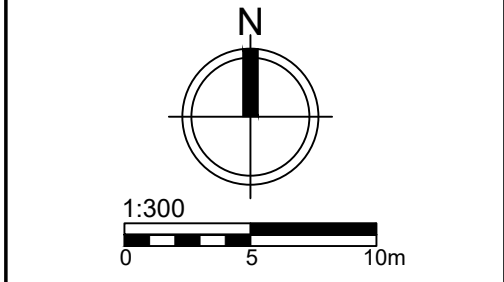
Tree Groups
Shown as dashed centrounary line. Colour represents category (see above).

B2-0832-2012 Root Protection Area

Tree Protective Fencing

Section of Tree Protective Fencing to be removed once crossover ground protection is in place (specification TBC)

Trees for Removal



Arbor-Eco Consultancy
2 Daisy Lane, Locks Heath,
Hants. SO31 6RA.
Email: arborescoconsultancy@gmail.com
Telephone: 07542 093882
Arboricultural Consultant
Marco Bartolini

Client
Bloor Homes Southern Ltd

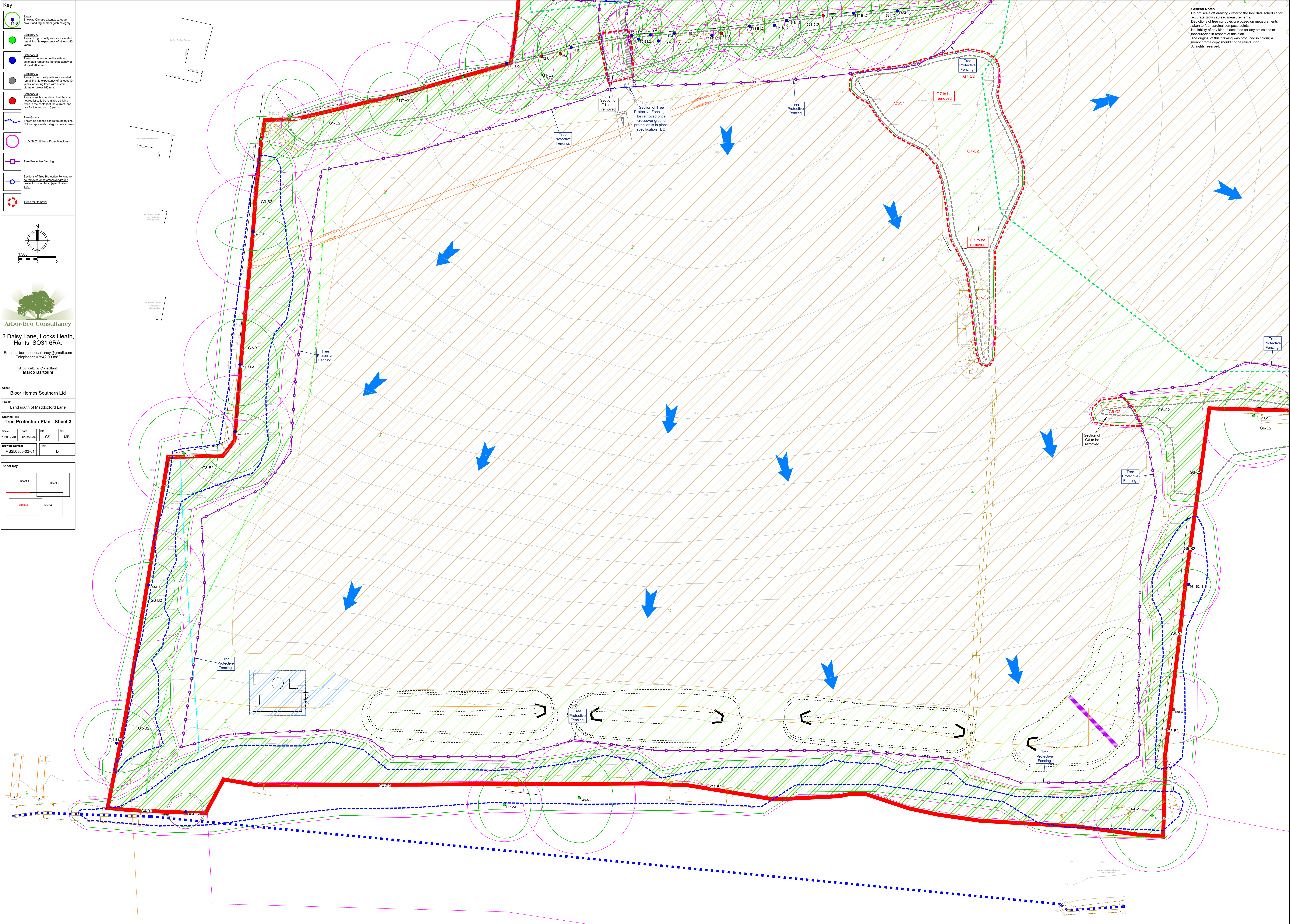
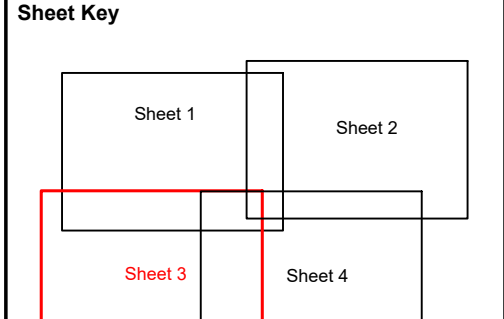
Project
Land south of Maddoxford Lane

Drawing Title
Tree Protection Plan - Sheet 3

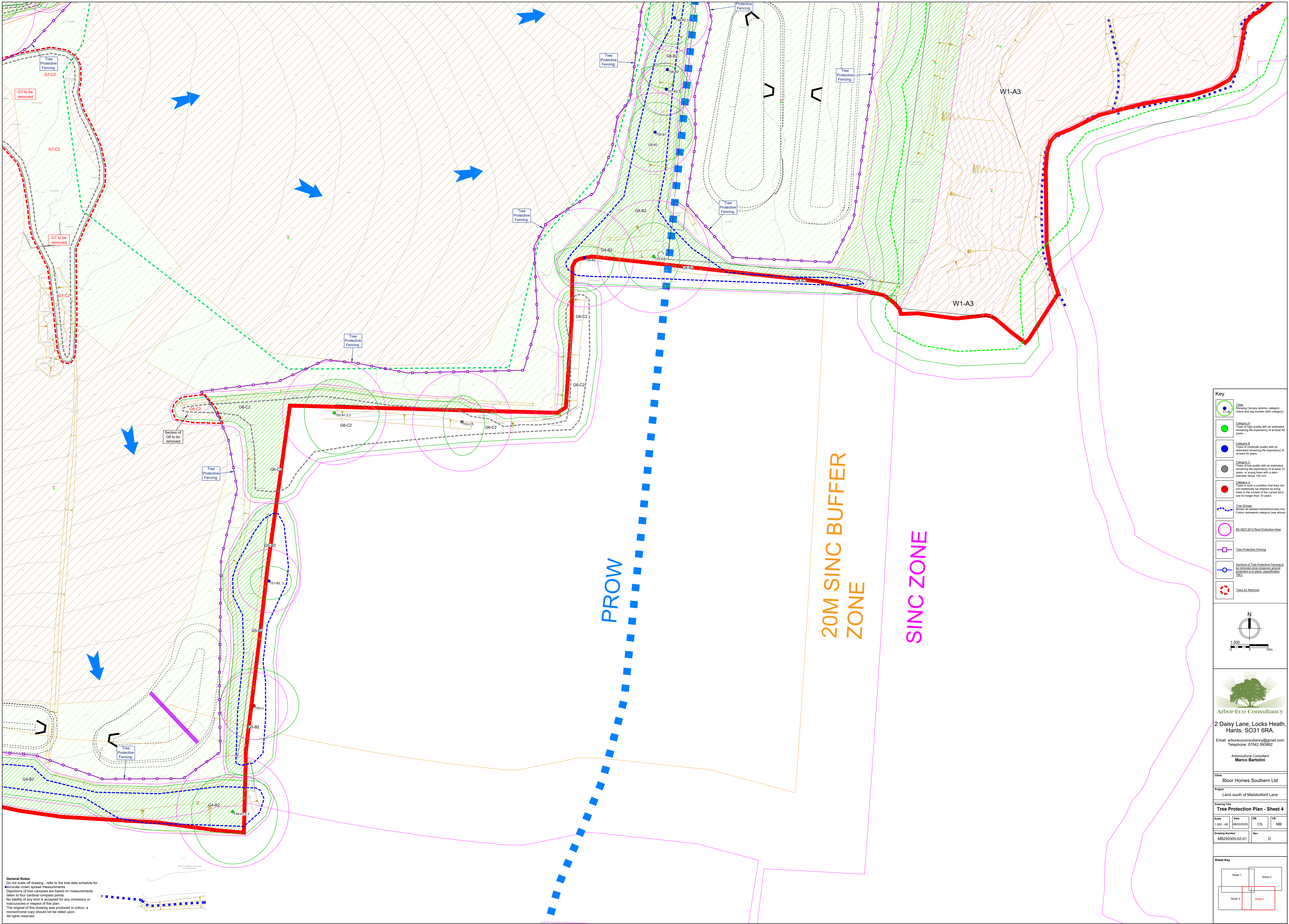
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Drawing Number
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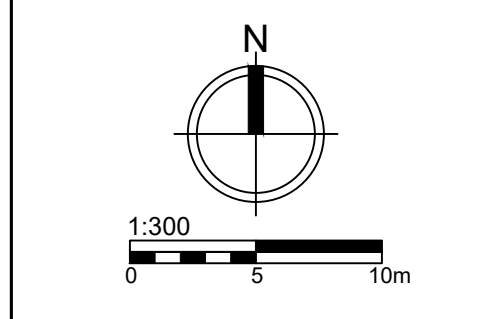
General Notes
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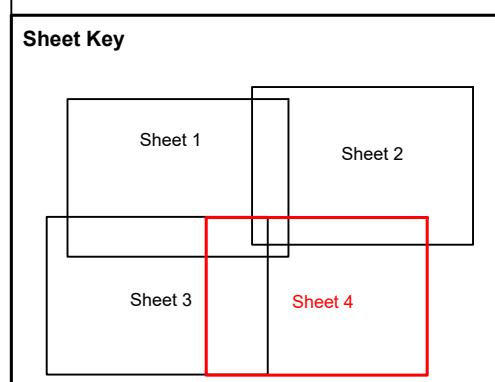
Key

- Trees
Showing Canopy extents, category
colour and tag number (see category)
- Category A
Trees of high quality with an estimated
remaining life expectancy of at least 40
years.
- Category B
Trees of moderate quality with an
estimated remaining life expectancy of
at least 20 years.
- Category C
Trees of low quality with an estimated
remaining life expectancy of at least 10
years, or young trees with a stem
diameter below 100 mm.
- Category U
Trees in such a condition that they can
not realistically be retained as living
trees in the context of the current land
use for longer than 10 years.
- Tree Groups
Shown as dashed centreboundary line
Colour represents category (see above)
- BS 5837:2012 Root Protection Area
- Tree Protective Fencing
- Sections of Tree Protective Fencing to
be removed once protective ground
protection is in place (specification
T50)
- Trees for Removal




Arbor-Eco Consultancy
2 Daisy Lane, Locks Heath,
Hants. SO31 6RA.
Email: arborecoconsultancy@gmail.com
Telephone: 07542 093882
Arboricultural Consultant
Marco Bartolini

Client		Bloor Homes Southern Ltd	
Project		Land south of Maddoxford Lane	
Drawing Title			
Tree Protection Plan - Sheet 4			
Scale	Date	DB	CB
1:300 - A0	06/03/2026	CS	MB
Drawing Number	Rev		
MB250305-02-01	D		



REFERENCES AND BIBLIOGRAPHY

- Ancient woodland, ancient trees and veteran trees: advice for making planning decisions (2025) <https://www.gov.uk/guidance/ancient-woodland-ancient-trees-and-veteran-trees-advice-for-making-planning-decisions> Accessed on 08/12/25.
- Arboricultural Advisory Information Services. (2007) 'Practice Note 12. Through Trees to Development'.
- Arboricultural Association. (2009) Guidance Note 7. *Tree Surveys: A guide to Good Practice*. The Arboricultural Association, Stonehouse.
- Biodiversity Net Gain (2025) <https://www.gov.uk/guidance/understanding-biodiversity-net-gain> Accessed on 08/12/25.
- British Standards Institution. (1989) *British Standard BS4428:1989 Code of practice for general landscape operations (excluding hard surfaces)*. British Standards Institution, London.
- British Standards Institution. (2010) *British Standard 3998:2010; Tree work – Recommendations*. British Standards Institution, London.
- British Standards Institution. (2012) *British Standard 5837:2012, Trees in relation to design, demolition and construction – recommendations*. British Standards Institution, London.
- British Standards Institution. (2013) *British Standard 8601:2013 Specification for Subsoil and Requirements for Use*. British Standards Institution, London.
- British Standard Institution. (2014) *British Standard 8545:2014 Trees: from nursery to independence in the landscape – Recommendations*. British Standards Institution, London.
- British Standard Institution. (2015) *British Standard 3882:2015 British Standard Topsoil - Technical Information*. British Standards Institution, London.
- Johnson & More (2004) *Tree Guide*, Collins. London.
- Lonsdale, D. (1999) *Principles of Tree Hazard Assessment and Management*. DETR, London.
- Magic Mapping (2025) <https://magic.defra.gov.uk/> Accessed on 08/12/25.
- Mattheck, C., Breloer, H. (1994) *The Body Language of Trees: A Handbook for Failure Analysis*. Department of the Environment; Lonsdale, D. (Ed) *Research for Amenity Trees*. HMSO, England.
- National Design Guide (2024) (<https://www.gov.uk/government/publications/national-design-guide/national-design-guide-accessible-version>) Accessed on 08/12/25.
- National House Builders Council (NHBC) (2017) *Standards Part 4.2, Building Near Trees*. Milton Keynes.
- National Planning Policy Framework (2024). <https://www.gov.uk/guidance/national-planning-policy-framework/>. Department for Communities and Local Government. Accessed on 08/12/25.
- National Joint Utilities Group. (2007). Volume 4: NJUG Guidelines for the Planning, Installation and Maintenance of Utility Services in Proximity to Trees. NJUG, London.

Planning Practice Guidance. (2024). Tree Preservation Orders and trees in Conservation Areas.
<http://planningguidance.planningportal.gov.uk>. Accessed on 08/12/25.

Phillips, R. (2006) *Mushrooms. A Comprehensive Guide*. MacMillan Publishers Ltd, London.

Roberts *et al.* (2013) *Tree Roots in the Built Environment. Research for Amenity Trees No.8*. Arboricultural Association, Stonehouse.

Slater, D. (2018) *Natural bracing in trees: management recommendations*. The Arboricultural Journal.

Strouts, R.G., Winter, T.G., (2004) *Diagnosis of Ill Health in Trees*. Forestry Commission, Office of the Deputy Prime Minister; Research for Amenity Trees. TSO, England.

Tree Council (2025) <https://treecouncil.org.uk/science-and-research/ash-dieback/> Accessed on 08/12/25.

APPENDICES

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APPENDIX 1

Table A1.1 – Tree Survey Schedule

Tree No.	Species	No. Stems	Diam (mm)	H't (m)	Ht 1 st Branch (m)	Branch Spread (m)				Crown Clearance (m)				Age	Phys Cond	Struc Cond	Est. Remain Contrib (Years)	Cat	Comments	Preliminary Management Recommendations
						N	E	S	W	N	E	S	W							
1	Common Oak	1	1050	27.0	2.0 N	13.5	9.5	13.5	11.0	2.0	4.0	3.0	5.0	M	G	G	20+	B1,2	Barbed wire occluded to through stem. Heavily poached ground by horses. Ivy on stem and in crown limited access to survey. Recent branch drop. Storm damage to upper canopy. Major deadwood in crown.	Crown clean deadwood.
2	Common Ash	2	630	23.0	4.0 W	11.0	7.0	8.0	5.0	8.0	10.0	8.0	4.0	M	P	P	<10	U	Heavily poached ground by horses. Ivy on stem and in crown limited access to survey. Storm damage to upper canopy. Major deadwood in crown. Ash dieback evident Class 3. Bifurcated at 1.0 m above ground level.	Fell to ground level.
3	Common Ash	2	600	24.0	8.0 N	8.0	5.0	8.0	6.0	6.0	10.0	10.0	11.0	M	P	P	<10	U	Bifurcated at ground level. Heavily poached ground by horses. Ivy on stem and in crown limited access to survey. Ash dieback evident Class 3. Storm damage to upper canopy. Major deadwood in crown. Cavity at base of stem.	Fell to ground level.
4	Common Oak	1	1050	26.0	3.0 S	13.0	11.0	14.0	9.0	6.0	3.0	3.0	4.0	M	F	G	20+	B1,2	Heavily poached ground by horses. Ivy on stem and in crown limited access to survey. Storm damage to upper canopy. Major deadwood in crown. Barbed wire occluded through stem.	Crown clean deadwood.
5	Common Oak	1	640	22.0	2.0 S	10.0	3.0	2.0	7.0	12.0	11.0	4.0	6.0	M	F	G	20+	B1,2	Crown weighted to north due to congested group. Heavily poached ground by horses. Ivy on stem and in crown restricted access to survey. Tall and etiolated due to group pressure. Barbed wire occluded through stem. Major deadwood in crown.	Crown clean deadwood.

Table A.1: Results of Arboricultural Survey (continues)

Tree No.	Species	No. Stems	Diam (mm)	H't (m)	Ht 1 st Branch (m)	Branch Spread (m)				Crown Clearance (m)				Age	Phys Cond	Struc Cond	Est. Remain Contrib (Years)	Cat	Comments	Preliminary Management Recommendations
						N	E	S	W	N	E	S	W							
6	Common Oak	1	780	26.0	2.0 W	9.0	5.0	11.0	10.5	12.0	11.5	4.0	4.0	M	F	G	20+	B1,2	Heavily poached ground by horses. Ivy on stem and in crown restricted access to survey. Tall and etiolated. Bifurcated at 2.0 m above ground level. Major deadwood in crown.	Crown clean deadwood.
7	Common Oak	1	540	20.0	2.0 W	11.0	3.0	3.0	3.0	3.0	3.0	2.0	4.0	M	F	G	20+	B1,2	Tall and etiolate due to congested group. Heavily poached ground by horses. Ivy on stem and in crown limited access to survey. Stunted and suppressed. Tree leans to north. Major deadwood in crown.	Crown clean deadwood.
8	Common Oak	1	700	20.0	4.0 N	2.0	4.0	11.5	10.0	10.0	7.0	1.0	2.0	M	F	G	20+	B1,2	Heavily poached ground by horses. Ivy on stem and in crown limited access to survey. Crown weighted to south due to congested group. Major deadwood in crown.	Crown clean deadwood.
9	Turkey Oak	1	860	22.0	2.0 N	15.5	9.0	10.0	11.0	4.0	2.0	2.0	3.0	M	F	G	20+	B1,2	Heavily poached ground by horses. Ivy on stem and in crown restricted access to survey. Apical stem historically removed. Extended lateral branches. Barbed wire occluded through stem. Major deadwood in crown.	Crown clean deadwood.
10	Common Ash	2	840	24.0	5.0 W	13.0	8.0	11.0	12.0	5.0	6.0	5.0	300.0	M	F	F	10+	C1,2	Bifurcated at 1.0 m above ground level. Ash dieback evident Class 2. Heavily poached ground by horses. Ivy on stem and in crown restricted access to survey. Storm damage to upper canopy. Major deadwood in crown. Decay cavity at bifurcated union. Barbed wire occluded through stem.	Crown clean deadwood. Crown reduce by approx. 8.0 m to suitable growth points.

Table A.1: (cont'd) Results of Arboricultural Survey (continues)

Tree No.	Species	No. Stems	Diam (mm)	H't (m)	Ht 1 st Branch (m)	Branch Spread (m)				Crown Clearance (m)				Age	Phys Cond	Struc Cond	Est. Remain Contrib (Years)	Cat	Comments	Preliminary Management Recommendations
						N	E	S	W	N	E	S	W							
11	Common Oak	1	780	23.0	2.0 S	4.0	5.0	9.0	4.0	2.0	2.0	1.0	2.0	M	F	G	20+	B1,2	Tall and etiolated due to congested group. Heavily poached ground by horses. Ivy on stem and in crown restricted access to survey. Major deadwood in crown.	Crown clean deadwood.
12	Common Oak	1	400	8.0	1.0 S	1.0	1.0	7.0	1.0	-	-	-	1.0	EM	F	P	<10	U	Stunted and suppressed by group and weight of ivy. Crown weighted south. Heavily poached ground by horses. Ivy on stem and in crown limited access to survey.	Sever ivy at base to prevent collapse of tree.
13	Common Oak	1	760	22.0	2.0 S	10.0	4.0	9.0	6.0	6.0	4.0	2.0	6.0	M	F	G	20+	B1,2	Bifurcated at 2.5 m above ground level. Barbed wire occluded through stem. Heavily poached ground by horses. Ivy on stem and in crown limited access to survey. Major deadwood in crown. Cavity at base of stem. Large buttress roots.	Crown clean deadwood.
14	Common Oak	1	1480	26.0	3.0 S	10.0	7.0	9.0	6.0	5.0	2.0	1.0	2.0	M	G	G	20+	B1,2	Heavily poached ground by horses. Ivy on stem and in crown limited access to survey. Major deadwood in crown. Trifurcated at 1.7 m above ground level. Barbed wire occluded through stem. Cavity forming at base. Significant storm damage to canopy.	Crown clean deadwood.

Table A.1: (cont'd) Results of Arboricultural Survey (continues)

Tree No.	Species	No. Stems	Diam (mm)	H't (m)	Ht 1 st Branch (m)	Branch Spread (m)				Crown Clearance (m)				Age	Phys Cond	Struc Cond	Est. Remain Contrib (Years)	Cat	Comments	Preliminary Management Recommendations
						N	E	S	W	N	E	S	W							
15	Common Oak	1	810	20.0	3.0 S	10.5	9.0	10.0	2.0	8.0	7.0	6.0	1.0	M	F	G	20+	B1,2	Crown weighted north-east due to T14. Barbed wire occluded through stem. Heavily poached ground by horses. Ivy on stem and in crown restricted access to survey. Storm damage to canopy. Major deadwood in crown. Mammal damage to stem calloused over.	Crown clean deadwood.
16	Common Ash	2	710	20.0	2.0 W	9.0	5.0	9.0	7.0	4.0	3.0	2.0	2.0	M	P	F	<10	U	Ash dieback evident Class 3. Bottle-butt stem. Barbed wire occluded through stem. Bifurcated at 1.5 m above ground level. Heavily poached ground by horses. Ivy on stem and in crown limited access to survey. Major deadwood in crown. Cavity at base of stem.	Crown clean deadwood. Crown reduce by approx. 8.0 m to suitable growth points.
17	Common Oak	2	1400	23.0	2.0 N	11.0	7.0	8.0	7.0	4.0	6.0	10.0	7.0	M	F	G	20+	B1,2	Bramble and dense understorey prevented access to stem. Bifurcated at 1.5 m above ground level. Barbed wire occluded through stem. Heavily poached ground by horses. Ivy on stem and in crown limited access to survey. Major deadwood in crown.	Crown clean deadwood.
18	Common Oak	1	1700	25.0	5.0 S	14.0	10.0	4.0	7.0	4.0	11.0	3.0	12.0	M	F	G	20+	B1,2 Int	Barbed wire occluded through stem. Trifurcated at 2.5 m above ground level. Heavily poached ground by horses. Ivy on stem (very mature stems) and in crown restricted access to survey. Fasciated stem – browsed by mammals. Potential ancient tree status. Recent wayleave work carried out. Major deadwood in crown.	Crown clean deadwood.

Table A.1: (cont'd) Results of Arboricultural Survey (continues)

Tree No.	Species	No. Stems	Diam (mm)	H't (m)	Ht 1 st Branch (m)	Branch Spread (m)				Crown Clearance (m)				Age	Phys Cond	Struc Cond	Est. Remain Contrib (Years)	Cat	Comments	Preliminary Management Recommendations
						N	E	S	W	N	E	S	W							
19	Common Ash	2	620	23.0	6.0 W	5.0	6.0	3.0	8.0	11.0	9.0	17.0	8.0	M	F	P	<10	U	Heavily side pruned for overhead services easement. Recent wayleave work carried out. Significant branch drop. Cavity in stem at union. Ash dieback evident Class 2. Bifurcated at 1.5 m above ground level. Heavily poached ground by horses. Major deadwood in crown.	Crown clean deadwood. Crown reduce by approx. 8.0 m to suitable growth points.
20	Common Oak	1	570	23.0	4.0 S	2.0	7.0	10.0	6.0	16.0	7.0	4.0	6.0	M	F	G	20+	B1,2	Crown weighted west due to congested group. Heavily poached ground by horses. Major deadwood in crown. Storm damage to canopy.	Crown clean deadwood.
21	Common Oak	1	670	23.0	4.0 S	3.0	12.0	7.0	2.0	3.0	2.0	5.0	10.0	M	F	G	20+	B1,2	Crown weighted east due to congested group. Ivy on stem. Heavily poached ground by horses. Major deadwood in crown. Storm damage in crown.	Crown clean deadwood.
22	Common Oak	1	730	26.0	2.0 E	4.0	6.0	10.0	11.0	2.0	2.0	2.0	4.0	M	F	G	20+	B1,2	Barbed wire occluded through stem. Heavily poached ground by horses. Major deadwood in crown. Ivy on stem and in crown limited access to survey.	Crown clean deadwood.
23	Common Oak	3	750	25.0	2.0 N	6.0	12.0	3.0	12.0	2.0	1.0	6.0	7.0	M	F	G	20+	B1,2	Trifurcated at ground level. Heavily poached ground by horses. Major deadwood in crown. 1 stem dead. Barbed wire occluded through stem.	Crown clean deadwood and dead stem.
24	Common Oak	1	1030	26.0	5.0 E	8.0	13.0	7.0	12.0	4.0	5.0	6.0	7.0	M	F	G	20+	B1,2	Decay pocket in stem from old pruning wound. Storm damage in crown. Cavity at base of stem. Heavily poached ground by horses. Major deadwood in crown. Ivy on stem and in crown limited access to survey. Large buttress roots. Poor past management.	Crown clean deadwood.

Table A.1: (cont'd) Results of Arboricultural Survey (continues)

Tree No.	Species	No. Stems	Diam (mm)	H't (m)	Ht 1 st Branch (m)	Branch Spread (m)				Crown Clearance (m)				Age	Phys Cond	Struc Cond	Est. Remain Contrib (Years)	Cat	Comments	Preliminary Management Recommendations
						N	E	S	W	N	E	S	W							
25	Common Oak	1	980	24.0	4.0 W	6.0	12.0	8.0	11.0	7.0	10.0	9.0	8.0	M	G	G	20+	B1,2	Growing on boundary bank. Heavily poached ground by horses. Major deadwood in crown. Ivy on stem and in crown limited access to survey. Barbed wire occluded through stem.	Crown clean deadwood.
26	Common Oak	1	760	24.0	5.0 N	6.0	10.0	3.5	10.5	4.0	6.0	4.0	4.0	M	F	G	20+	B1,2	Growing on boundary bank. Heavily poached ground by horses. Major deadwood in crown. Ivy and brambles on stem and in crown restricted access to survey. Barbed wire occluded through stem.	Crown clean deadwood.
27	Common Oak	1	880	23.0	4.0 S	5.0	10.0	5.0	9.0	5.0	8.0	7.0	6.0	M	F	G	20+	B1,2	Growing on boundary bank. Bramble growing on stem prevented detailed inspection. Heavily poached ground by horses. Major deadwood in crown. Storm damage to canopy. Ivy on stem and in crown limited access to survey. Barbed wire occluded through stem.	Crown clean deadwood.
28	Common Oak	1	960	24.0	5.0 N	7.0	8.0	5.0	12.5	6.0	8.0	9.0	7.0	M	F	G	20+	B1,2	Poor past management. Cavity at base of stem. Large buttress roots. Storm damage to canopy. Growing on boundary bank. Heavily poached ground by horses. Major deadwood in crown. Ivy on stem and in crown limited access to survey. Barbed wire occluded through stem.	Crown clean deadwood.
29	Common Oak	1	1140	25.0	5.0 S	13.5	12.0	8.0	13.0	2.0	5.0	2.0	4.0	M	F	G	20+	B1,2	Mammal damage to base of stem. Cavity at base of stem. Growing on boundary bank. Heavily poached ground by horses. Major deadwood in crown. Large buttress roots. Barbed wire occluded through stem.	Crown clean deadwood.

Table A.1: (cont'd) Results of Arboricultural Survey (continues)

Tree No.	Species	No. Stems	Diam (mm)	H't (m)	Ht 1 st Branch (m)	Branch Spread (m)				Crown Clearance (m)				Age	Phys Cond	Struc Cond	Est. Remain Contrib (Years)	Cat	Comments	Preliminary Management Recommendations
						N	E	S	W	N	E	S	W							
30	Common Oak	1	860	21.0	3.0 S	2.0	9.0	11.0	9.0	6.0	7.0	5.0	6.0	M		G	20+	B1,2	Growing on boundary bank. Heavily poached ground by horses. Major deadwood in crown. Storm damage to canopy. Barbed wire occluded through stem.	Crown clean deadwood.
31	Common Oak	1	1080	23.0	4.0 E	8.0	12.0	10.0	12.0	2.0	2.0	2.0	2.0	M	F	G	20+	B1,2	Growing on boundary bank. Heavily poached ground by horses. Branch tear out wounds in crown. Storm damage to canopy. Major deadwood in crown. Barbed wire occluded through stem.	Crown clean deadwood.
32	Common Ash	1	670	21.0	4.0 S	9.0	8.0	6.0	8.0	7.0	6.0	7.0	7.0	M	F	F	<10	U	Poor form. Ash dieback evident Class 3. Mammal damage to base of stem. Cavity at base of stem. Growing on boundary bank. Heavily poached ground by horses. Major deadwood in crown.	Fell to retain monolith at 6.0 m tall for biodiversity.
33	Field Maple	6	370	7.0	0.0 W	5.5	4.0	5.0	4.0	0.0	0.0	0.0	0.0	OM	P	P	<10	U	Multi-stemmed at ground level. Restricted access due to ivy and bramble. Heavily poached ground by horses. Major deadwood and hanging deadwood in crown. Stunted and suppressed by ivy and bramble.	Crown clean deadwood. Sever ivy to reduce weight in canopy.
34	Norway Spruce	1	330	13.0	1.0 S	5.0	5.0	5.0	5.0	1.0	1.0	1.0	1.0	EM	G	G	10+	C1	Off-site tree. Restricted access prevented detailed assessment. Growing within neighbouring garden. Overhangs site by 1.5 m.	None at time of survey.
35	Common Oak	3	610	13.0	1.0 W	5.0	11.0	7.0	10.0	7.0	9.0	9.0	8.0	M	F	F	20+	B1,2	Trifurcated at 1.0 m above ground level. Ivy on stem. Ploughed field adjacent to stem.	None at time of survey.

Table A.1: (cont'd) Results of Arboricultural Survey (continues)

Tree No.	Species	No. Stems	Diam (mm)	H't (m)	Ht 1 st Branch (m)	Branch Spread (m)				Crown Clearance (m)				Age	Phys Cond	Struc Cond	Est. Remain Contrib (Years)	Cat	Comments	Preliminary Management Recommendations
						N	E	S	W	N	E	S	W							
36	Common Oak	1	1200	26.0	3.0 N	9.0	7.0	10.0	7.0	3.0	3.0	3.0	3.0	V	G	G	40+	A3	Ivy on stem and in crown limited access to survey. Veteranising. Elder tree growing at the base of stem. Major deadwood in crown. Heavily compacted RPA by horses.	None at time of survey.
37	Common Oak	1	1000	26.0	3.0 N	7.0	8.0	10.0	8.0	4.0	4.0	4.0	4.0	V	G	G	40+	A3	Veteran attributes. Poached ground by horses and heavily compacted RPA. Major deadwood in crown. Barbed wire occluded through stem.	None at time of survey.
38	Common Oak	1	1100	28.0	2.0 N	10.0	9.0	11.0	7.0	4.0	4.0	4.0	4.0	V	G	G	40+	A3	Veteran attributes. Poached ground by horses and heavily compacted RPA. Major deadwood in crown. Barbed wire occluded through stem.	None at time of survey.
39	Common Oak	1	1200	30.0	2.0 W	6.0	9.0	6.0	7.0	2.0	2.0	2.0	2.0	M	G	G	40+	A3	Part of linear group. Damage to buttress roots. Detritus around base of stem.	None at time of survey.
40	Common Oak	1	1300	28.0	4.0 W	4.0	9.0	5.0	10.0	4.0	4.0	13.0	6.0	OM	F	G	20+	B1	Cables attached to stem and branches. Major deadwood in crown. Compacted and disturbed RPA.	None at time of survey.
41	Common Oak	1	1190	21.0	5.0 S	12.0	10.0	11.0	9.0	5.0	5.0	5.0	5.0	V	G	G	20+	B1,2	Compacted and disturbed RPA.	None at time of survey.
42	Common Oak	1	980	20.0	4.0 S	5.0	9.0	11.0	9.0	6.0	4.0	5.0	5.0	V	G	G	20+	B1,2	Compacted and disturbed RPA.	None at time of survey.
43	Common Oak	1	1250	19.0	5.0 N	12.0	9.0	11.0	12.0	4.0	4.0	6.0	5.0	V	G	G	40+	A3	Compacted and disturbed RPA.	None at time of survey.
44	Common Oak	1	950	14.0	6.0 S	6.0	7.0	9.0	9.0	5.0	4.0	4.0	6.0	V	G	G	20+	B1,2	Restricted access prevented detailed assessment.	None at time of survey.
45	Common Oak	2	950	16.0	1.5 S	9.0	10.0	8.0	9.0	2.0	2.0	2.0	2.0	EM	G	G	20+	B1,2	Major deadwood in crown.	None at time of survey.
46	Common Oak	1	370	11.0	6.0 N	5.0	5.0	4.0	5.0	4.0	4.0	4.0	4.0	EM	G	G	20+	B1,2	Historic pruning and crown lifting evident.	None at time of survey.
47	Common Oak	1	820	21.0	2.0 N	8.0	7.0	9.0	7.0	2.0	2.0	2.0	2.0	M	G	G	40+	A3	Major deadwood in crown. Off-site tree.	None at time of survey.

Table A.1: (cont'd) Results of Arboricultural Survey (continues)

Tree No.	Species	No. Stems	Diam (mm)	H't (m)	Ht 1 st Branch (m)	Branch Spread (m)				Crown Clearance (m)				Age	Phys Cond	Struc Cond	Est. Remain Contrib (Years)	Cat	Comments	Preliminary Management Recommendations
						N	E	S	W	N	E	S	W							
48	Common Oak	1	1250	25.0	2.0 S	11.0	9.0	12.0	10.0	2.0	2.0	2.0	2.0	M	G	G	40+	A3	Major deadwood in crown. Off-site tree. Ancient notable landscape tree.	None at time of survey.
49	Common Oak	1	1300	23.0	2.0 E	10.0	12.0	14.0	11.0	3.0	9.0	1.5	6.0	V	G	G	40+	A1,2,3	Major deadwood in crown.	None at time of survey.
50	Common Ash	1	740	21.0	10.0 W	10.0	12.0	9.0	9.0	5.0	5.0	9.0	8.0	M	P	F	<10	U	Ash dieback CI 3.	None at time of survey.
51	Field Maple	1	690	15.0	1.0 W	4.0	6.0	5.0	5.0	4.0	4.0	1.5	2.0	M	G	F	20+	B2, 3	Compression forks at 1.5m.	None at time of survey.
52	Common Oak	1	1130	18.0	4.0 W	9.0	12.0	11.0	8.0	2.0	4.0	8.0	5.0	V	G	G	40+	A1,2,3	Veteran tree with significant attributes.	None at time of survey.
53	Common Ash	1	1090	18.0	4.0 S	7.0	6.0	9.0	5.0	4.0	1.0	4.0	3.0	M	F	G	10+	C3	Ash dieback evident CI 2/3. Major deadwood in crown.	None at time of survey
54	Common Oak	1	1090	18.0	1.0 S	3.0	8.0	9.0	8.0	10.0	3.0	1.0	5.0	M	G	F	20+	B3	Compression failure on main stem at 5m potential to rebalance crown for long term retention.	None at time of survey
55	Common Oak	1	1340	18.0	4.0 E	9.0	7.0	9.0	8.0	5.0	4.0	4.0	5.0	M	G	G	40+	A3	Major deadwood in crown. Notable landscape tree.	Remove deadwood over public footpath and powerline.
56	Goat Willow	3	870	14.0	0.5 W	8.0	10.0	8.0	7.0	0.5	2.0	1.0	3.0	M	G	F	20+	B1	Low hanging branches over footpath.	Raise low canopy to 3.0 m above ground level over footpath
57	Common Oak	1	560	10.0	2.0 W	7.0	6.0	7.0	8.0	2.0	2.0	2.0	2.0	EM	G	G	20+	B2,3	Major deadwood in crown.	None at time of survey.
58	Common Oak	1	510	8.0	1.5 W	1.0	2.0	5.0	7.0	4.0	5.0	2.0	2.0	EM	G	G	20+	B2	Asymmetrical crown. Overhead services through crown. Ivy on stem and in crown limited access to survey.	Sever ivy at base of stem.
59	Common Oak	1	740	9.0	1.5 W	5.0	6.0	7.0	8.0	2.0	2.0	1.0	1.0	EM	G	G	20+	B2,3	Ivy on stem and in crown limited access to survey.	Sever ivy at base of stem.
60	Common Ash	2	600	11.0	5.0 N	3.0	6.0	7.0	3.0	4.0	4.0	5.0	4.0	EM	F	G	<10	U	Tree not in leaf. Ash dieback evident throughout crown.	Resurvey in May for signs of vitality.
61	Common Oak	1	540	13	2.0 N	6.0	7.0	7.0	6.0	2.0	3.0	2.0	5.0	EM	G	G	20+	B1,2	No visible significant defects.	None at time of survey.
62	Common Oak	1	540	12.0	2.0 N	6.0	7.0	7.0	6.0	2.0	3.0	2.0	5.0	EM	G	G	20+	B1,2	No visible significant defects.	None at time of survey.

Table A.1: (cont'd) Results of Arboricultural Survey (continues)

Tree No.	Species	No. Stems	Diam (mm)	H't (m)	Ht 1 st Branch (m)	Branch Spread (m)				Crown Clearance (m)				Age	Phys Cond	Struc Cond	Est. Remain Contrib (Years)	Cat	Comments	Preliminary Management Recommendations
						N	E	S	W	N	E	S	W							
63	Common Oak	1	1840	26.0	2.0 W	11.0	10.0	12.0	13.0	8.0	10.0	3.0	4.0	V	G	G	40+	A3	Off-site tree. Overhead services through crown. Artificial structures in RPA. Major deadwood in crown. Ivy on stem and in crown limited access to survey. Cavities in crown. Fungi around base of stem. Veteran tree.	None at time of survey.
64	Common Oak	1	1300	23.0	4.0 N	7.0	7.0	8.0	8.0	5.0	5.0	5.0	5.0	M	F	G	20+	B1	Off-site tree. Part of linear group. Restricted access limited assessment. Ivy on stem and in crown limited survey.	None at time of survey.
65	Common Oak	1	1650	26.0	2.0 S	9.0	12.0	10.0	10.0	2.0	2.0	2.0	2.0	M	G	G	40+	A3	Artificial structures in RPA. Major deadwood in crown. Ancient notable tree. Companion tree.	None at time of survey.
66	Common Oak	1	1600	26.0	2.0 N	5.0	4.0	9.0	12.0	2.0	2.0	2.0	2.0	M	G	G	40+	A3	Artificial structures in RPA. Major deadwood in crown. Ancient notable tree. Companion tree.	None at time of survey.
67	Common Oak	1	1500	24.0	1.0 S	9.0	7.0	8.0	11.0	2.0	2.0	2.0	2.0	M	G	G	40+	A3	Major deadwood in crown. Ivy on stem and in crown limits access to survey. Restricted access prevents detailed assessment.	None at time of survey.
68	Common Oak	1	1200	25.0	1.0 S	9.0	8	8.0	9	2.0	2.0	2.0	2.0	M	G	G	40+	A3	Major deadwood in crown. Ivy on stem and in crown limits access to survey. Restricted access prevents detailed assessment.	None at time of survey.
69	Lawson Cypress	3	450	12.0	2.0 N	3.0	3.0	3.0	3.0	2.0	2.0	2.0	2.0	EM	G	F	20+	B1,23	No visible significant defects.	None at time of survey.
70	Lawson Cypress 'Ellwoodii'	1	470	10.0	0.5 S	4.0	3.0	2.0	3.0	1.0	3.0	3.0	3.0	M	F	F	10+	C1,2	Garden tree. No visible significant defects.	None at time of survey.
71	Common Ash	2	920	18.0	5.0 E	7.0	5.0	6.0	5.0	7.0	6.0	6.0	5.0	M	P	F	<10	U	Ash dieback evident CI 3.	Fell to ground level.
72	Common Oak	1	550	20.0	5.0 S	6.0	7.0	7.0	8.0	5.0	8.0	4.0	6.0	EM	G	G	20+	B1,2	No visible significant defects.	None at time of survey.

Table A.1: (cont'd) Results of Arboricultural Survey (continues)

Tree No.	Species	No. Stems	Diam (mm)	H't (m)	Ht 1 st Branch (m)	Branch Spread (m)				Crown Clearance (m)				Age	Phys Cond	Struc Cond	Est. Remain Contrib (Years)	Cat	Comments	Preliminary Management Recommendations
						N	E	S	W	N	E	S	W							
73	Common Ash	1	820	18.0	6.0 S	9.0	4.0	6.0	7.0	5.0	7.0	4.0	9.0	M	P	P	<10	U	Ash dieback evident CI 3/4	Fell to ground level.
G1	Hawthorn Oak Ash Blackthorn Field Maple Bramble	1	360	8.0	0.0 S	3.0	3.0	3.0	3.0	0.0	0.0	0.0	0.0	Y EM M	F	F	10+	C2	Understorey field boundary group.	None at time of survey.
G2	Hawthorn Oak Ash Blackthorn Field Maple Bramble	1	300	8.0	0.0 S	3.0	3.0	3.0	3.0	0.0	0.0	0.0	0.0	Y EM M	F	F	10+	C2 Int	Part managed through flailing. Waterlogged ground. Dense understorey restricted access in part. Browsed by mammals. Barbed wire, bramble and ivy prevented a detailed assessment. Understorey vegetation to mature boundary trees. Ivy on stem and in crown limited access to survey.	None at time of survey.
G3	Hawthorn Oak Ash Blackthorn Field Maple Holm Oak Bramble	1	300	15.0	0.0 W	5.0	5.0	5.0	5.0	0.0	0.0	0.0	0.0	Y EM M	G	G	20+	B2 Int	Shelterbelt with mature trees throughout, mainly inaccessible due to understorey and RPAs compromised by active neighbouring building site.	None at time of survey.
G4	Hawthorn Oak Ash Blackthorn Field Maple Holm Oak Bramble	1	320	12.0	0.0 N	6.0	6.0	6.0	6.0	0.0	0.0	0.0	0.0	Y EM M	F	G	20+	B2	Shelterbelt of field boundary trees and shrubs with bramble and scrub encroaching bare ground.	None at time of survey.
G5	Hawthorn Oak Ash Blackthorn Field Maple Bramble	1	330	14	0.0 N	6.0	6.0	6.0	6.0	0.0	0.0	0.0	0.0	Y EM M	F	G	20+	B2 Int	On and off-site group. Shelterbelt of field boundary trees and shrubs with bramble and scrub encroaching bare ground.	None at time of survey.

Table A.1: (cont'd) Results of Arboricultural Survey (continues)

Tree No.	Species	No. Stems	Diam (mm)	H't (m)	Ht 1 st Branch (m)	Branch Spread (m)				Crown Clearance (m)				Age	Phys Cond	Struc Cond	Est. Remain Contrib (Years)	Cat	Comments	Preliminary Management Recommendations
						N	E	S	W	N	E	S	W							
G6	Hazel Elder Hawthorn Holly Oak Ash	1	260	8.0	0.0 E	5.0	5.0	5.0	5.0	0.0	0.0	0.0	0.0	Y EM M	F	F	10+	C2	Lapsed hazel coppice stool distributed throughout hedgerow.	None at time of survey.
G7	Alder Hawthorn Blackthorn Oak	1	250	5.0	0.0 W	3.0	3.0	3.0	3.0	0.0	0.0	0.0	0.0	Y EM M	F	F	10+	C2	Stressed trees in group. Alder in decline - drought. Scrub layer encroaching bare ground.	None at time of survey.
G8	Goat Willow Oak Hazel Ash Blackthorn	1	330	15.0	0.0 W	4.0	4.0	4.0	4.0	0.0	0.0	0.0	0.0	Y EM M	F	G	20+	B2	Ancient woodland ground flora. Peninsular of encroaching scrub and mature trees along field boundary.	None at time of survey.
G9	Cherry Laurel Holly Blackthorn Hazel	1	250	10.0	0.0 N	4.0	4.0	4.0	4.0	0.0	0.0	0.0	0.0	Y EM M	F	G	20+	B2 Int	Garden and highway shelterbelt of ornamental and naturalised planting.	None at time of survey.
G10	Oak Hazel Bramble Hawthorn Blackthorn	1	800	20.0	0.0 S	8.0	8.0	8.0	8.0	0.0	0.0	0.0	0.0	Y EM M OM	G	G	20+	B2 Int	Scrub and understorey of Hazel and Bramble. Restricted access due to dense understorey. Cherry Laurel spreading in understorey adjacent to highway. Linear group of mature Oak trees.	None at time of survey.
G11	Alder Ash	1	<u>210</u>	11.0	0.0 S	4.0	4.0	4.0	4.0	0.0	0.0	0.0	0.0	Y EM	F	F	10+	C2 Int	Alder trees in decline. Watercourse limited access. Bramble restricted access.	None at time of survey.
H1	Hawthorn Field Maple Bramble Ivy	1	<u>70</u>	4.0	0.0 W	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	Y EM M	F	F	10+	C2 Int	Part managed through flailing. Browsed by mammals. Barbed wire, bramble and ivy prevented a detailed assessment. Understorey vegetation to mature boundary trees. Ivy on stem and in crown limited access to survey.	None at time of survey.
H2	Hawthorn Field Maple Bramble Ivy Ash	1	<u>80</u>	3.0	0.0 W	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	Y EM M	F	F	10+	C2	Lapsed managed hedgerow.	None at time of survey.

Table A.1: (cont'd) Results of Arboricultural Survey (continues)

Tree No.	Species	No. Stems	Diam (mm)	H't (m)	Ht 1 st Branch (m)	Branch Spread (m)				Crown Clearance (m)				Age	Phys Cond	Struc Cond	Est. Remain Contrib (Years)	Cat	Comments	Preliminary Management Recommendations
						N	E	S	W	N	E	S	W							
H3	Hawthorn Field Maple Bramble Ivy Ash	1	80	2.5	0.0 W	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	Y EM M	F	F	10+	C2	Lapsed managed hedgerow.	None at time of survey.
H4	Hawthorn Field Maple Bramble	1	80	3.0	0.0 W	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	Y EM M	F	F	10+	C2	Lapsed managed hedgerow.	None at time of survey.
H5	Hawthorn Field Maple Bramble Ivy Ash --Elder	1	150	3.0	0.0 N	3.0	3.0	3.0	3.0	0.0	0.0	0.0	0.0	Y EM M	F	F	10+	C2	Lapsed managed hedgerow.	None at time of survey.
W1	Hawthorn Oak Ash Blackthorn Field Maple Holm Oak Alder Cherry Laurel Elder Bramble	1	900	12.0	0.0 W	8.0	8.0	8.0	8.0	0.0	0.0	0.0	0.0	Y EM M OM V	G	G	40+	A3 Int	Restricted access prevented detailed assessment. Woodland area with ancient woodland indicator ground flora species. Mature woodland at boundary edge. Watercourse throughout woodland.	None at time of survey.
Key <u>Age Class</u> Y: Young = tree within first third of average life expectancy EM: Early mature = tree within second third of average life expectancy M: Mature = tree within final third of average life expectancy OM: Over mature = tree beyond average life expectancy V: Veteran = shows signs of retrenchment and in decline. D: Dead.						<u>Physiological Condition</u> G: Good = no health problems F: Fair = symptoms of ill health that may be remedied P: Poor = poor health D: Dead <u>Structural Condition</u> G: Good = no structural defects F: Fair = remedial structural defects P: Poor = significant structural defects D: Dead										Majority of surveyed trees dimensions have been estimated measurements due to access restrictions RPA: Root Protection Area Major deadwood: branches in excess of 50 mm diameter Minor deadwood: branches/twigs less than 50 mm diameter Int: Interim category due to access restrictions.				

Table A1:1 (cont'd) Tree Survey Schedule

APPENDIX 2

Table A2.1 – Root Protection Areas of Trees and Hedgerows Surveyed

Tree No	Tree Species	Stem Diam (mm)	Radius (m)	RPA (m ²)
1	Common Oak	<u>1050</u>	12.6	499
2	Common Ash	<u>630</u>	7.8	191
3	Common Ash	<u>600</u>	7.2	163
4	Common Oak	<u>1050</u>	12.6	499
5	Common Oak	<u>640</u>	7.8	191
6	Common Oak	<u>780</u>	9.6	290
7	Common Oak	<u>540</u>	6.6	137
8	Common Oak	<u>700</u>	8.4	222
9	Turkey Oak	<u>860</u>	10.5	346
10	Common Ash	<u>840</u>	10.2	327
11	Common Oak	<u>780</u>	9.6	290
12	Common Oak	<u>400</u>	4.8	72
13	Common Oak	<u>760</u>	9.3	272
14	Common Oak	<u>1480</u>	15.0	707
15	Common Oak	<u>810</u>	9.9	308
16	Common Ash	<u>710</u>	8.7	238
17	Common Oak	<u>1400</u>	15.0	707
18	Common Oak	<u>1700</u>	15.0	707
19	Common Ash	<u>620</u>	7.5	177
20	Common Oak	<u>570</u>	6.9	150
21	Common Oak	<u>670</u>	8.1	206
22	Common Oak	<u>730</u>	9.0	255
23	Common Oak	<u>750</u>	9.0	255
24	Common Oak	<u>1030</u>	12.6	499
25	Common Oak	<u>980</u>	12.0	452
26	Common Oak	<u>760</u>	9.3	272
27	Common Oak	<u>880</u>	10.8	366
28	Common Oak	<u>960</u>	11.7	430
29	Common Oak	<u>1140</u>	13.8	598
30	Common Oak	<u>860</u>	10.5	346
31	Common Oak	<u>1080</u>	13.2	547
32	Common Ash	<u>670</u>	8.1	206
33	Field Maple	<u>370</u>	4.5	64
34	Norway Spruce	<u>330</u>	4.2	55
35	Common Oak	<u>610</u>	7.5	177
36	Common Oak	<u>1200</u>	15.0	652
37	Common Oak	<u>1000</u>	15.0	452
38	Common Oak	<u>1100</u>	15.0	547
39	Common Oak	<u>1200</u>	14.4	652
40	Common Oak	<u>1300</u>	15.0	707
41	Common Oak	<u>1190</u>	15.0	652
42	Common Oak	<u>980</u>	15.0	452
43	Common Oak	<u>1250</u>	15.0	707
44	Common Oak	<u>950</u>	15.0	408

Table A2-1: RPA and Approximate Root Protection Radius of Trees and Hedgerows Surveyed (continues)

Tree No	Tree Species	Stem Diam (mm)	Radius (m)	RPA (m ²)
45	Common Oak	<u>950</u>	11.4	408
46	Common Oak	<u>370</u>	4.5	64
47	Common Oak	<u>820</u>	9.9	308
48	Common Oak	<u>1250</u>	15.0	707
49	Common Oak	<u>1300</u>	15.0	707
50	Common Ash	<u>740</u>	9.0	255
51	Field Maple	<u>690</u>	8.4	222
52	Common Oak	<u>1130</u>	13.8	598
53	Common Ash	<u>1090</u>	13.2	547
54	Common Oak	<u>1090</u>	13.2	547
55	Common Oak	<u>1340</u>	15.0	707
56	Goat Willow	<u>870</u>	10.5	346
57	Common Oak	<u>560</u>	6.9	150
58	Common Oak	<u>510</u>	6.3	124
59	Common Oak	<u>740</u>	9.0	255
60	Common Ash	<u>600</u>	7.2	163
61	Common Oak	<u>540</u>	5.4	137
62	Common Oak	<u>540</u>	6.6	137
63	Common Oak	<u>1840</u>	15.0	707
64	Common Oak	<u>1300</u>	15.0	707
65	Common Oak	<u>1650</u>	15.0	707
66	Common Oak	<u>1600</u>	15.0	707
67	Common Oak	<u>1500</u>	15.0	707
68	Common Oak	<u>1200</u>	14.4	652
69	Lawson Cypress	<u>450</u>	5.4	92
70	Lawson Cypress 'Ellwoodii'	<u>470</u>	5.7	102
71	Common Ash	<u>920</u>	11.1	387
72	Common Oak	<u>550</u>	6.6	137
73	Common Ash	<u>820</u>	9.9	308
G1	Mixed Species	<u>360</u>	4.5*	64*
G2	Mixed Species	<u>300</u>	3.6*	41*
G3	Mixed Species	<u>300</u>	3.6*	41*
G4	Mixed Species	<u>320</u>	3.9*	48*
G5	Mixed Species	<u>330</u>	4.2*	55*
G6	Mixed Species	<u>260</u>	3.3*	34*
G7	Mixed Species	<u>250</u>	3.0*	28*
G8	Mixed Species	<u>330</u>	4.2*	55*
G9	Mixed Species	<u>250</u>	3.0*	28*
G10	Mixed Species	<u>800</u>	9.6*	290*
G11	Mixed Species	<u>210</u>	2.7*	23*
H1	Mixed Species	<u>70</u>	0.9*	3*
H2	Mixed Species	<u>80</u>	1.2*	5*
H3	Mixed Species	<u>80</u>	1.2*	5*
H4	Mixed Species	<u>80</u>	1.2*	5*

Table A2-1: (cont'd) RPA and Approximate Root Protection Radius of Trees and Hedgerows Surveyed (continues)

Tree No	Tree Species	Stem Diam (mm)	Radius (m)	RPA (m ²)
H5	Mixed Species	<u>150</u>	2.2*	10*
W1	Mixed Species	<u>900</u>	15.0*	366*
Key: <u>000</u>: estimated dimensions due to access restrictions *: Average measurement taken around centre of woodland, group or hedgerow				

Table A2-1: (cont'd) RPA and Approximate Root Protection Radius of Trees and Hedgerows Surveyed

Table A2-1 provides details of the Root Protection Area (RPA) of all trees surveyed which were classified as either Category A, B, C or U specimens. This table also gives an approximate root protection radius for these trees.

APPENDIX 3

Headings for Protective Barrier Notices and Example Sign

Root Protection Area (RPA) Model Notice

DON'T excavate within this area
DON'T use any form of mechanical plant with this area
DON'T store materials, plant or equipment within this area
DON'T move plant or vehicles within this area

DO contact the Local Authority Arboricultural Officer or owner of the tree if excavation within this area is unavoidable

DO protect any exposed roots uncovered within this area with dry sacking

DO backfill with a suitable inert granular and top soil material mix as soon as possible on completion of work

ANY WORK in this area requires permission from the Local Authority Arboricultural Officer



**PROTECTIVE FENCING. THIS
FENCING MUST BE
MAINTAINED IN ACCORDANCE
WITH THE APPROVED PLANS
AND DRAWINGS FOR THIS
DEVELOPMENT.**



**TREE PROTECTION AREA
KEEP OUT !**

**(TOWN & COUNTRY PLANNING ACT 1990)
TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY
PLANNING CONDITIONS AND/OR ARE 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**

APPENDIX 4

Details of Protective Barrier (Default)

The diagram illustrates the construction of a temporary safety fence. It features a series of vertical uprights (5) driven into the ground, with a minimum depth of 0.6 m. Horizontal cross-members (3) are attached to the uprights using standard scaffold clamps (6). Heavy gauge 2 m tall galvanized tube and welded mesh infill panels (2) are secured to the cross-members with wire ties (3). The fence is supported by a diagonal bracing system (1) that extends from the top of the uprights to the ground level (4). The height of the fence is indicated as ≥ 2 m, and the distance between uprights is indicated as ≤ 3 m. A key identifies the components: 1. Standard scaffold poles, 2. Heavy gauge 2 m tall galvanized tube and welded mesh infill panels, 3. Panels secured to uprights and cross-members with wire ties, 4. Ground level, 5. Uprights driven into the ground until secure (minimum depth 0.6 m), 6. Standard scaffold clamps.

APPENDIX 5

Photographic Montage