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Tree protection plan and Method statements

For

Land south of Thorpe Rd, Weeley, Essex

Date	1st March 2023
Client	Rose Builders Ltd
Report by	Mr James Choat BSc, M Arbor A
Site	Land south of Thorpe Rd Weeley
Reference No.	TPSarbQU0018
Issue No	1
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Arboricultural ASSOCIATION
Professional Member
PR00530

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1. Summary

1.1.1 Tree Planning Solutions received instruction from Rose Builders Ltd to complete a suitable arboricultural site survey and produce this subsequent assessment for an area of land south of Thorpe Rd, Weeley, Essex.

1.1.2 Trees are a material consideration during the planning application process and require specialist input at the design stage to ensure the success for the end use of the proposed development whilst retaining the best tree specimens. Generally, local authorities provide local plan policies for planning applicants with regards to the suitable retention and protection criteria for trees during the application process and subsequent construction phase, and the level of detail that will be required to determine the application - details can be found on the local authority web site. Central government provide 'The National Planning Policy Framework' (NPPF 2021), which provides specific details of application acceptability; paragraphs 131 and 179 specifically relate to tree retention, biodiversity, habitat including trees and woodlands. Consultants providing arboricultural impact assessment (AIA) apply British Standard 5837 2012 criteria to demonstrate the suitable retention, design and protection of trees during the application / design process. The completed assessment forms part of the application detail and will aid the Planning Authorities decision with regard to the impact of the proposed development on the existing tree stock and local landscape character.

1.1.3 The survey and this assessment are provided to discharge planning conditions subject of an approved outline planning consent.

1.1.4 The site was surveyed on the 29th October 2017 with further site visits over the last 5 years for additional works as part of the ongoing planning phase, the weather was dry with a light wind, conditions for surveying trees were good. 28 individual trees, 11 tree groups and 11 hedgerows were surveyed as part of the assessment for trees that could be affected either directly or indirectly by the construction of the proposed development.

1.1.5 The report provides the following information and data in accordance with the criteria provided within BS 5837 2012 '*Trees in relation to design, demolition and construction Recommendations*'

- Tree survey and schedule
- Arboricultural Method Statement and Tree Protection Plan

1.1.6 This report pays particular reference to:

▪ British Standard 5837 2012	Trees in relation to design, demolition and construction Recommendations
▪ British Standard 3998 2010	Recommendations for tree work
▪ NHBC CH 4.2	Building near trees
▪ NJUG 4	National Joint Utilities Group 'Working Near Trees'
▪ NPPF 2021	National Planning Policy Framework

1.2 Statutory protection

1.2.1 It is not known at the time of preparing the report whether the site is subject to a tree preservation order (TPO) or situated within conservation area (CA). The hedgerows at the site that adjoin agricultural land are subject to hedgerow regulations as they are situated on land used for agriculture, this status will alter with approved planning / change of use. It is recommended the applicant obtain written consent from Tendring District Council and where applicable the Forestry Commission, before carrying out recommendations contained within this report. Furthermore, no works should be carried out to any 3rd party tree(s) without first obtaining consent from the owner(s) of the tree(s).

1.2.2 Multi agency nature on the map GIS data (MAGIC) was checked 29/10/22. The site is subject to site of special scientific interest (SSSI) impact zones – (Weeley Hall Woods).

1.3 Limitations

1.3.1 The applicant has supplied a plan of the existing and proposed (desired) site, no further information has been provided.

The following plans have been provided with the instruction for this report:

- Existing layout drawing provided by Rose Builders Ltd
- Proposed layout/concept drawing provided by Rose Builders Ltd

1.3.2 This survey is for the purpose of determining the impact of the development upon existing trees; it is not a detailed tree condition survey and should not be used as such. All trees have been assessed from ground level; no aerial or below ground parts have been inspected in detail.

1.3.3 The survey remains valid for 12 months. If during 12 months following the tree survey adverse weather conditions have occurred, or the site environment changed in any form, it is recommended the trees be reassessed.

1.3.4 The content of this report remains the property of Tree Planning Solutions unless otherwise stated. This report is not to be copied without written consent from Tree Planning Solutions.

1.3.5 The consultant is a qualified arboriculturist, occasionally opinions and views are provided regarding buildings and structures, the consultant is not a qualified buildings surveyor or structural engineer and therefore all opinions and views should be supported by a qualified structural/building engineer.

1.4 Qualifications

1.4.1 The consultant has been working within the Arboricultural industry for 24 years as a tree surgeon, tree officer and consultant. Knowledge and experience are regularly updated by attending industry related seminars and courses. Continued professional

development is verified by professional membership to the Arboricultural Association (membership No. PR00530), CPD is updated on-line, a record can be provided upon request.

1.4.2 The consultant holds a Bachelor of Science (BSc) degree in Rural Resource Development, a Higher National Diploma (HND) in Rural Resource Management, the Lantra Professional Tree Inspection Award, the RFS Level 2 Certificate in Arboriculture, level 3 certificate in Ecology and is a registered user of Quantified Tree Risk Assessment (QTRA).

2.1 The Site

2.2 Site description

2.2.1 The site is located centrally within the village of Weeley and accessed from Thorpe Road via a crossover providing vehicular access to the site. The site is situated within a semi-rural position with reasonable number of tree features within the immediate vicinity. The trees subject of this report are situated randomly throughout the application site. The application site does not contain any built structures. The application site consists of the following habitat / green features – improved grass, amenity trees, field margins ruderals and shrubs.

2.3 Topographical survey

2.3.1 A topographical survey was provided with the instruction for this project, all site features plotted to the survey were present during the tree survey site visit. The site is generally flat with no significant changes in the ground levels that would influence root orientation or morphology, it is therefore reasonable to assume all root protection areas (RPA's) are normal in terms of size and shape. Various inspection chambers were recorded during the survey, the date of construction/servicing is not known, it is not known therefore whether the below ground services are affecting / have previously affected the rooting zone of the trees. Overhead services were not recorded during the tree survey.

2.4 Soils

2.4.1 British Soil Geology Maps scaled at 1:50,000 show the site to be situated on bedrock of Thames Group – clay, silt and sand and superficial deposits of Cover sand - Clay, silt and sand. Sand and gravel soil texture is likely to offer a deeper rooting environment than that of clay as the roots can easily penetrate and explore sandy soils with little resistance, clay like soils tend to restrict root exploration. Clay soils can be modified by moisture, either reduced or increased in volume by fluctuations in moisture content, such fluctuations can influence how structures perform and therefore may require additional, engineered support to improve the stability or the structure. Local variations and differing soil seams of superficial and bedrock deposits do occur, differing bedrock and superficial deposits will have a different soil texture and structure to those described

above and will perform differently. It is recommended core samples be obtained to determine the exact soil texture at the site.

3.1 Tree survey and schedule

3.1.1 The tree schedule provides an account of all the trees at or adjacent to the site and is written on to a tabular form. Each tree is given a reference number (T1, T2, T3, G1 etc) that is plotted on to a tree survey plan to be cross-referenced with the tabular form. Contained within the schedule are the dimensions of each individual tree and any notable physiological or mechanical defects. An estimated life expectancy is derived from the condition and context of the tree and then graded for the retention suitability. The tabular form can be found in appendix 1 with explanatory notes for each column heading. The tree survey plan can be found in appendix 4. Provided below is a table of the existing trees, their current condition and British Standard 5837 category grading. The categories for retention are; A - high value, B - moderate value, C - low value and U - unable to be retained as a living tree, each category is given a colour code for use with the tree survey plan (appendix 2), A - Green, B- Blue, C - Grey and U- Red. There are further sub-categories used alongside the categorisation; 1 arboricultural, 2 landscape and 3 wildlife or historical values. A tree with more than 1 subcategory is considered more valuable than 1 with just 1, i.e. a tree categorised as B1/2/3 is more valuable than B1. British Standard 5837 recommends trees with a stem diameter of less than 150mm are categorised as C regardless of condition, form etc. it is assumed that a tree of this size can either be transplanted or replaced without any negative impact upon tree-based visual amenity. Veteran trees are automatically graded as category A due to their age and wildlife associations although they will likely contain significant defects, generally the defects are the microhabitats that increase their value.

Table 1 Tree condition table

Tree ref	Species	Age class	Observations	Category grading
G2	Oak, Hazel, Sweet Chestnut, Hawthorn	M	Small woodland/copse with PROW running through, possibly historical holloway. Evidence of coppicing, although secondary woodland flora, hazel indicating at least 200 years of age. Good wildlife interest.	A1/2/3
G3	Oak, Hazel, Sweet Chestnut, Hawthorn, Field maple	M	Small woodland/copse with PROW running through, possibly historical holloway. Evidence of coppicing, although secondary woodland flora, hazel indicating at least 200 years of age. Good wildlife interest.	A1/2/3
T1	Ash	M	Base not inspected due to dense surrounding vegetation. Growing within small woodland / copse.	A1/2/3
T2	Oak	M	Growing within woodland/copse. Good condition.	A1/2/3
T3	Oak	M	Twin stem tree. Growing within woodland/copse. Good condition.	A1/2/3
G4	Oak, Hazel, Sweet Chestnut, Hawthorn	M	Small woodland/copse with PROW running through, possibly historical holloway. Secondary woodland flora. Good wildlife interest.	A1/2/3

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Tree ref	Species	Age class	Observations	Category grading
G5	Oak, Hazel, Sweet Chestnut, Hawthorn	M	Small woodland/copse with PROW running through, possibly historical holloway. Secondary woodland flora. Good wildlife interest.	A1/2/3
T4	Oak	M	Aged tree. Ivy clad to 12m.	A1/2/3
G6	Oak, Hawthorn	M	Group forming hedgerow with some gaps. Oak have been reduced/pollarded below OHLE. Good screening from Railway. Good wildlife interest and connecting to other green features.	A1/2/3
T5	Oak	EM	Base not inspected due to dense surrounding vegetation. Branch snapped out at 5m.	A1/2/3
T6	Willow	EM	3rd party tree. Recent pollard.	C1
T7	Lime	EM	3rd party tree. Some pruning on property side.	C1
H1	Thorn, poplar	M	Good screening trees. Succession of blackthorn on outer edge. 1 poplar has failed in to field.	B1/2/3
G7	Oak, Hawthorn	M	Group forming hedgerow with some gaps. . Good screening from Railway. Good wildlife interest and connecting to other green features.	A1/2/3
H2	Thorn	Y	Planted hedgerow maintained at current dimensions cut on regular pruning regime. Good connections to other wildlife / green features.	B1/2/3
H3	Thorn, bramble, ivy	M	Thorn clad with bramble and ivy. Good Wildlife interest and connection to other wildlife /green features.	B1/2/3
G8	Holly	EM	Group of coppice hedgerow trees forming large coppice stool.	A1/2/3
T8	Oak	EM	Low branches. Good condition.	B1/2/3
T9	Hawthorn	M	Asymmetric crown. Leaning stem.	C1/2/3
T10	Oak	EM	Ivy and bramble clad, unable to fully assess base.	B1/2/3
T11	Oak	M	Aged tree. Good condition. Low branches.	A1/2/3
T12	Oak	M	Good condition.	A1/2/3
T13	Hawthorn	M	Decaying/lapsed coppice. Good wildlife value due to age and decaying parts.	C1/2/3
T14	Oak	M	3rd party tree. Slightly suppressed crown. Unable to fully inspect base. Aged tree.	A1/2/3
T15	Oak	M	3rd party tree. Lapsed pollard, some veteran associations. Good wildlife tree.	A1/2/3
H4	Thorn, bramble, ivy	M	Thorn clad with bramble and ivy. Good Wildlife interest and connection to other wildlife /green features.	B1/2/3
H5	Thorn, bramble, ivy	M	Thorn clad with bramble and ivy. Good Wildlife interest and connection to other wildlife /green features.	B1/2/3
H6	Thorn, bramble, ivy	M	Thorn clad with bramble and ivy. Good Wildlife interest and connection to other wildlife /green features.	B1/2/3
H7	Thorn, bramble, ivy	M	Thorn clad with bramble and ivy. Good Wildlife interest and connection to other wildlife /green features.	B1/2/3
H8	Thorn, bramble, ivy	M	Thorn clad with bramble and ivy. Good Wildlife interest and connection to other wildlife /green features.	B1/2/3
T16	Yew	M	Tree of significant age, fairly unusual for the area, set within historical property providing good historical context.	A1/2/3
T17	Horse chestnut	EM	Spiral cracks, old bleeding canker symptoms.	C1
T18	Holly	M	Good condition.	A1/2/3
T19	Holly	EM	Multi stem tree.	B1/2/3
G9	Fruit	EM	Group of fruit trees with leaning stems and basal wounds.	C1
T20	Yew	EM	Sparse crown. Climber within crown.	C1
H9	Leyland cypress	EM	Poor condition. Browning/die-back.	C1
H10	Thorn, holly, ivy	EM	Hedgerow with some gaps, some non-native trees beyond. Reasonable screening. Bases not inspected.	B1/2/3
T21	Holly	Y	Sparse crown. Die back of higher apex.	C1
T22	Ash	M	Ivy clad, situated within hedgerow. Unable to fully assess.	A1/2/3
T23	Ash	M	Ivy clad, situated within hedgerow. Unable to fully assess. Occasional deadwood within crown.	A1/2/3
T24	Hawthorn	M	Aged tree. Multi stem tree. Some minor crown decline. Situated within copse/small woodland.	A1/2/3

Tree ref	Species	Age class	Observations	Category grading
T25	Sweet chestnut	M	Situated within small copse/woodland. Base restricted due to woodland debris.	A1/2/3
G10	Thorn, sweet chestnut, ash	M	Small copse/woodland, good screening, wildlife and landscape value.	A1/2/3
T26	Oak	M	Former hedgerow tree, hedgerow since grubbed out.	A1/2/3
T27	Oak	M	Former hedgerow tree, hedgerow since grubbed out. Aged tree with some veteran associations.	A1/2/3
T28	Oak	M	Former hedgerow tree, hedgerow since grubbed out. Aged tree with some veteran associations.	A1/2/3
G11	Ash, alder, hawthorn, sallow	M	Wetland trees rooted along Holland Brook, tree synonymous with type of habitat. Occasional alder have been previously coppiced.	A1/2/3
H11	Oak, field maple, hawthorn, blackthorn	M	Hedgerow of native specimens rooted on railway boundary. Good screening properties. Good wildlife properties with good connectivity to aged trees and other green features.	A1/2/3

3.2.2 All category A trees should be retained. The development design should seek to accommodate such trees using special construction techniques and design modification. There should be only very minor work within the RPA and only minor crown works, generally those required to improve the condition of the tree. Category A trees are those that offer a significant contribution to the amenity and character of the area, they have a long-life expectancy and contain very few defects.

3.2.3 The majority of category B trees should be retained where their long-term retention is achievable. A mixture of tree works, design modification and special construction techniques should be employed to accommodate category B trees. Generally, category B trees have a life expectancy over 20 years and offer a medium to long-term contribution to the amenity/character of the area. Category B trees contain occasional defects that can be remedied with suitable tree works.

3.2.4 The category C trees are desirable for retention in the short term. Generally, category C trees have a life expectancy of less than 20 years and would be acceptable to remove once new planting is established. Category C trees contain many defects that are likely to reduce the long-term life expectancy of the tree. Category C trees do not add to the character or visual amenity of the area.

4.1 Tree works specification

4.1.1 All tree works are to be completed as a starting phase of development unless otherwise stated.

4.1.2 All works are to be completed to BS3998 2010 'Recommendations for tree works'

4.1.3 Research suggests that tree works are better completed when the trees are using the least amount of energy and when conditions do not favour pathogens. It is recommended that the works specified below be carried out in midsummer July/early August or the dormant period Jan/Feb. Specifically, times of bud break and leaf abscission should be avoided. This may need further assessment for different species or for aged/veteran trees whose energy reserve and potential to kinetic ratio is susceptible to change from minor tree works. Where this is likely to occur, a separate management plan for that individual tree may be required.

4.1.4 Provided below is a table showing tree works specification. The key for works urgency can be found in Appendix 1 Explanatory notes.

Table 2 Tree works specification

Tree ref	Species	Age class	Tree works to facilitate construction and / or access	Preliminary management recommendations	Works urgency (Preliminary works only)	Category grading
G2	Oak, Hazel, Sweet Chestnut, Hawthorn	M	None	None	0	A1/2/3
G3	Oak, Hazel, Sweet Chestnut, Hawthorn, Field maple	M	None	None	0	A1/2/3
T1	Ash	M	None	None	0	A1/2/3
T2	Oak	M	None	None	0	A1/2/3
T3	Oak	M	None	None	0	A1/2/3
G4	Oak, Hazel, Sweet Chestnut, Hawthorn	M	None	None	0	A1/2/3
G5	Oak, Hazel, Sweet Chestnut, Hawthorn	M	Hand excavation and root pruning within RPA, see method statement provided in section 6 and tree protection plan appendix 4.	None	0	A1/2/3
T4	Oak	M	Hand excavation and root pruning within RPA, see method statement provided in section 6 and tree protection plan appendix 4.	None	0	A1/2/3
G6	Oak, Hawthorn	M	None	None	0	A1/2/3

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Tree ref	Species	Age class	Tree works to facilitate construction and / or access	Preliminary management recommendations	Works urgency (Preliminary works only)	Category grading
T5	Oak	EM	None	Remove torn branch and clean wound.	3	A1/2/3
T6	Willow	EM	None	None	0	C1
T7	Lime	EM	None	None	0	C1
H1	Thorn, poplar	M	None	Remove failed poplar, check base of remaining tree once area cleared.	3	B1/2/3
G7	Oak, Hawthorn	M	Part remove section of group to facilitate construction of railway footbridge. Reduce lateral spread by 2m to facilitate construction of railway footbridge. See tree protection plan appendix 4.	None	0	A1/2/3
H2	Thorn	Y	None	None	0	B1/2/3
H3	Thorn, bramble, ivy	M	Part remove of sections of H3 to facilitate construction of internal access roads. Hand excavation and root pruning within RPA, see method statement provided in section 6 and tree protection plan appendix 4.	None	0	B1/2/3
G8	Holly	EM	Part remove sections of group to facilitate construction of internal road access. Hand excavation and root pruning within RPA, see method statement provided in section 6 and tree protection plan appendix 4.	None	0	A1/2/3
T8	Oak	EM	Hand excavation and root pruning within RPA, see method statement provided in section 6 and tree protection plan appendix 4.	None	0	B1/2/3
T9	Hawthorn	M	None	None	0	C1/2/3
T10	Oak	EM	None	Clear ivy and bramble and reassess.	3	B1/2/3
T11	Oak	M	Hand excavation and root pruning within RPA, see method statement provided in section 6 and tree protection plan appendix 4.	None	0	A1/2/3
T12	Oak	M	None	None	0	A1/2/3
T13	Hawthorn	M	None	None	0	C1/2/3
T14	Oak	M	None	None	0	A1/2/3
T15	Oak	M	None	None	0	A1/2/3
H4	Thorn, bramble, ivy	M	None	None	0	B1/2/3
H5	Thorn, bramble, ivy	M	Fell and grind stumps following below ground service check.	None	0	B1/2/3
H6	Thorn, bramble, ivy	M	Part remove small section on eastern aspect.	None	0	B1/2/3
H7	Thorn, bramble, ivy	M	Part remove small section on northern aspect.	None	0	B1/2/3
H8	Thorn, bramble, ivy	M	Hand excavation and root pruning within RPA, see method statement provided in section 6 and tree protection plan appendix 4.	None	0	B1/2/3
T16	Yew	M	None	None	0	A1/2/3
T17	Horse chestnut	EM	None	Consider felling	3	C1

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Tree ref	Species	Age class	Tree works to facilitate construction and / or access	Preliminary management recommendations	Works urgency (Preliminary works only)	Category grading
T18	Holly	M	None	None	0	A1/2/3
T19	Holly	EM	None	None	0	B1/2/3
G9	Fruit	EM	None	None	0	C1
T20	Yew	EM	None	Remove climber.	3	C1
H9	Leyland cypress	EM	None	None	0	C1
H10	Thorn, holly, ivy	EM	Reduce lateral spread by 2m to facilitate construction of parking area.	None	0	B1/2/3
T21	Holly	Y	None	Monitor, likely to decline further.	3	C1
T22	Ash	M	None	Sever ivy to 1m and re-inspect.	3	A1/2/3
T23	Ash	M	Hand excavation and root pruning within RPA, see method statement provided in section 6 and tree protection plan appendix 4.	Remove any deadwood over public right of way. Sever ivy to 1m and re-inspect.	3	A1/2/3
T24	Hawthorn	M	Hand excavation and root pruning within RPA, see method statement provided in section 6 and tree protection plan appendix 4.	None	0	A1/2/3
T25	Sweet chestnut	M		None	0	A1/2/3
G10	Thorn, sweet chestnut, ash	M	Reduce lateral spread by 5m to facilitate construction of railway footbridge. See tree protection plan appendix 4.	None	0	A1/2/3
T26	Oak	M	None	None	0	A1/2/3
T27	Oak	M	None	None	0	A1/2/3
T28	Oak	M	None	None	0	A1/2/3
G11	Ash, alder, hawthorn, sallow	M	None	Habitat could be improved with addition of further native stock and perhaps 1 - 2 native black poplar (preferably female). Some works to the brook could improve the banks providing micro habitats along brook.	3	A1/2/3
H11	Oak, field maple, hawthorn, blackthorn	M	None	None	0	A1/2/3

5.1 Tree protection method statement

5.1.1 Tree protection is required to prevent physical damage to the stem, branch and crown structure. Tree protection is used also to prevent indirect damage caused by loads passing over the root protection area that would otherwise cause compaction of the soil. Soil compaction reduces soil pore space, which in turn reduces; soil air, available water and nutrients, the anaerobic environment will prevent healthy and strong root growth (elongation, thickening, mycorrhizal association, etc.). Prolonged anaerobic soil conditions will lead to longer term poor tree health with symptoms (crown die back, sparse crown, poor extension growth, etc.) not evident until well after the occurrence. The simplest and most effective way to prevent damage to any retained tree on the development site is the provision of a construction exclusion zone around the tree and its calculated rooting area.

5.1.2 The areas for protection will see the RPA confirmed on the ground with the erection of a scaffold frame with wire mesh attached (Please see appendix 2 Barrier protection construction profile, diagram 2). Where site personnel require access across the RPA, ground protection will be installed utilising scaffold boards laid on a compressible layer (100mm of woodchip) with geotextile membrane beneath, as per British Standard 5837 section 6.2.3.3 (see appendix 4 tree protection plan). Where plant less than 2 tonnes requires access across an RPA, the compressible layer as described above should be increased to 200-300mm and the scaffold boards substituted for composite boards fit for the applied load, plant above 2 tonnes should utilise reinforced concrete slabs or specialised track mats fit for the applied load.

5.1.3 The barrier protection will contain and display information highlighting the protected tree and consequences of any breach of tree protection. Please see appendix 3, example of informative to be placed on barrier protection.

5.1.4 The tree protection plan is shown in appendix 4. This shows; the RPA for each retained tree, the location of protective barriers/ground protection and areas for site storage and contractors parking.

6.1 Construction method statements

6.1.2 Provided in this section are arboricultural method statements primarily concerned with working within the RPA of the retained trees. The method statements are designed to minimise/remove any impact or damage/disturbance that may otherwise occur. The method statements provided should be distributed to all key staff involved with the development.

6.2 Excavation within the RPA

6.2.1 Excavation will be required within the RPA of H3, T4, G5, G8, H8, T8, G10, T11, T23 and T24 as identified in the impact assessment section 5 and tree protection plan appendix 5 for the preparation of levels for the footway access and internal adoptable highways. The method statement provided below is in accordance with British Standard 5837 section 7.2.

Sequential method statement for hand excavation and root pruning H3, T4, G5, G8, H8, T8, G10, T11, T23 and T24

1. Remove grassed surface with turf remover set at 50mm, store all turfs outside of RPA. Loosen underlying soils with air spade or fork / rake. Carefully remove topsoil / upper soil horizon using handheld tools only (spade, shovel, soft brush, trowel) to achieve excavation depth of 100mm for preparation of levels for informal / permissive footpaths and 200 - 300mm for construction of adoptable highways and footways.

2. Where roots are encountered but pliable push to side of pit or downwards.

3. Any exposed roots should immediately be wrapped or covered in damp hessian to prevent desiccation and to protect them from rapid temperature changes.

4. If required, sever any roots with a diameter less than 25mm (use a sharp tool to provide a clean cut across the cross section near to a root junction/growth point).

5. Avoid severing roots greater than 25mm or clumps of roots (root mats). If this is necessary, then request an arboriculturist to attend the site to assess likely impact upon tree health and future stability.

6. Prior to backfilling any roots should be removed from the protective wrapping and surrounded by sharp sand, or other loose granular fill, before soil or other material is replaced. The backfill is to be free from any contaminants or foreign objects.

7. Monitor tree health during next 2 growth seasons. Check leaf colour, size, density and extension growth.

6.3 Soft surfaces within RPA

6.2.1 Provided below is a method statement to avoid damaging/disturbance to the roots of the retained trees during soft landscape operations.

- No tractor mounted or heavy plant rotavating machinery is to be used unless working on surface fit for purpose to reduce/spread load and prevent soil compaction.

- Cultivation is to be completed using manual hand tools only.

- Existing soil is to be used, where additional soil is required it should be contaminant free, well drained and suitable PH, texture and structure for the site and planting/existing trees/shrubs.

- Damage to roots is to be avoided, large structural roots may be seen at or near the surface and where they radiate from the stem of the tree from large buttresses. After around 4m radial distance structural roots tend to taper to around 3cm in diameter.

- Changes in ground levels are to be avoided, any lowering or raising of levels should be carried out using a suitable method statement that provides continued soil conditions of gas exchange and water percolation.

- Planting is to be done with care and to avoid severing tree roots; generally, planting should be completed outside the RPA.

7.1 General arboricultural considerations

7.1.1 Provided in this section are wider arboricultural considerations to be used either at the later design stage or when on-site with the contracting team. Further information contained within this section provides details on tree and associated wildlife legislation. The method statements provided should be distributed to all key staff involved with the development.

7.2 Storage

7.2.1 There is to be no storage within the RPA of any retained trees. An outline area can be designated at pre-commencement construction site meeting.

7.3 Contractors parking

7.3.1 There is to be no parking within the RPA of any retained trees. An outline area can be designated at pre-commencement construction site meeting.

7.4 Slope

7.4.1 All mixing and storage of materials/chemicals to be done on a pre-prepared flat/level surface with sealed sides to prevent any runoff. Storage of all chemicals/materials likely to cause harm to the trees should be in a sealed container or area with a bund to prevent run off if spillages occur. Site personnel are to have access to spillage treatment equipment.

7.5 Services

7.5.1 Methods for service run construction within the RPA are micro tunnelling, Surface launched directional drilling, pipe ramming and impact moling, method statements for these should be provided by the relevant utility companies. Shallow trenching may be

acceptable for minor services; if shallow trenching is required then hand excavation should be adopted using an approved method statement.

7.5.2 All overhead services to be located outside the present and future crown spread of the retained trees.

7.6 Levels

7.6.1 No stripping or raising of levels within the RPA without consent from the local authority. If site levels need to be reduced the use of hand excavation or an air spade should be adopted using an approved method statement. If site levels are to be raised the material added should allow for water infiltration and gaseous exchange allowing the roots to carry out their normal biological function, the use of structural soil and below ground aeration system may be required depending on area and depth.

7.7 Development phasing

7.7.1 All contracting staff working at the site should be briefed on approved working practices and protection requirements for the retained trees.

7.7.2 The tree works specification should be completed following approval from the local authority.

7.7.3 Prior to the commencing of development the chosen arboriculturist should re- assess all retained trees and provide further assessment.

7.7.4 All barrier/ground protection should be erected/laid and confirmed as correct by the arboriculturist. All signs should be placed on the barriers at a height of 2m at 3m intervals.

7.7.5 Barrier/ground protection altered after intensive phase of development.

7.7.6 Soft landscaping as final phase of development.

7.7.7 Barrier / ground protection removed following landscaping phase.

7.8 Monitoring

7.8.1 Site key personnel

Architect and Contractors

Name	Position	Contact details
Builder TBC		
Will Vote	Lead / Project Consultant	WVote@rosebuilders.co.uk

Planning Authority

Name	Position	Contact details
Tendring District Council	Tree and Landscape Officer	cdawson@tendringdc.gov.uk

Arboriculturist

Name	Position	Contact details
James Choat	Arboricultural Consultant	07813204621
		james@treeplanningsoutions.co.uk

7.8.2 It is recommended that all trees and protection methods be monitored for the duration of development. A qualified arboriculturist will make a regular visit; the project arboriculturist is to carry out an assessment of tree health and protection condition and make recommendations when required.

7.8.3 Site specific monitoring

Item	Number of visits required	Timing of visit
Pre-commencement site meeting with key personnel. (Contractor, site manager, architect). Tree works Tree protection installation (ground/barrier) as per tree protection plan and method statements within supplied arboricultural report. Identify area for contractors parking, site storage and access. Place 'exclusion zone' signs at 2m height, 3m intervals facing outwards on temporary fencing.	1 – 2 depending on whether items can be completed on same day.	Meeting to be arranged between architect and site manager before construction phase.
Site visit during construction phase to monitor tree health and tree protection condition.	20 – 6 specifically when excavating within the RPA's as specified in the method statement.	During construction phase
Removal of tree protection.	1	After intensive construction phase

7.8.4 The above is subject to the client/site manager informing the project staff of the proposed date for each development activity. Following each site visit a brief report (see appendix 5 arboricultural monitoring form) to be sent to the client and local authority within 24 hrs following the visit. Any incidents will be dealt with within 2 hours and to be reported to the project arboriculturist, photos to be provided via email and recommendations provided verbally, if required a site visit should be undertaken to provide further advice/ recommendations.

7.9 Incidents/variations

7.9.1 Planned

- Site manager to contact arboriculturist for any anticipated/planned variations
- Arboriculturist to assess impact upon trees and offer advice regarding alternative methods
- Arboriculturist to update tree officer providing details of variations

7.9.2 Non-planned

- Site manager to inform arboriculturist of incident
- Site manager to photograph incident and send to arboriculturist
- Arboriculturist to provide initial advice via telephone or email
- Arboriculturist to make site visit within 1 day to assess impact upon trees and offer advice to reduce/remove impact

- Arboriculturist to update the local authority tree officer providing details of incident and measure taken to reduce/remove impact.

7.10 Wildlife legislation

7.10.1 The Wildlife and Countryside Act 1981, The Habitats Directive 1994 (consolidated under Conservation of Habitats and Species Regulations 2017) and The Countryside and Rights of Way Act 2000. These acts protect certain species of flora and fauna; it is an offence to intentionally or recklessly destroy species or habitats contained within these acts. Trees, especially veteran or ancient, can support associated flora and fauna that is protected via the above legislation. It is recommended the applicant employ a suitably qualified ecologist to carry out a survey of the area to ensure no offence is committed. See the following link for further details.
https://www.gov.uk/guidance/protected-species-how-to-review-planning-applications

7.11 Tree legislation

7.11.1 Town and Country Planning Act 1990 (Trees Regulations 2012). It is an offence to cut down, uproot, lop, top, or cause wilful damage or destruction to a tree subject of a tree preservation order or conservation area. Such acts will lead to prosecution and if convicted a fine not exceeding £20,000 in the magistrate's court; if the case is referred to the crown court the fine may be unlimited. See the following link for further details.
https://www.gov.uk/guidance/tree-preservation-orders-and-trees-in-conservation-areas

7.11.2 Hedgerow regulations 1997 protect certain hedgerows from being removed (grubbed out), certain exemptions apply. A removal notice is required to be sent to the local authority before removing a hedgerow subject of the above regulations. See the following link for further details.
http://www.legislation.gov.uk/uksi/1997/1160/contents/made

7.11.3 Forestry Act 1967 as amended - Felling licences are issued by the forestry commission, certain exemptions apply, you should check with the Forestry Commission that a

licence is not required before felling trees. See the following link for further details.

http://www.legislation.gov.uk/ukpga/1967/10/contents

8.1 Conclusion

8.1.1 Trees H3 (part of), H5, H6 (part of), H7 (part of), G7 (part of) and G8 (part of) will require removal to facilitate construction of the proposal. Trees G7, H10 and G10 will require lateral spread reduction to facilitate construction of the parking areas and railway footbridge. Trees H3, T4, G5, G8, H8, T8, G10, T11, T23 and T24 will require excavation within the RPA's to facilitate construction of footpaths, cycle and visitor parking and adoptable highway and footways, as suitable method statement in accordance with BS 5837 is provided in section 9 and the tree protection plan appendix 4. No further tree works, or special construction techniques, are required to protect / retain the trees. The trees can be adequately protected during the intensive phase of development using temporary barriers in accordance with BS 5837 2012 as detailed on the tree protection plan appendix 4.

8.1.2 Tree protection and method statements have been provided within this report to reduce the risk of direct and indirect development related damage that may otherwise occur to the retained trees. In conclusion, assuming the method statements and tree protection are implemented as part of the development, the proposal can be constructed with reduced disturbance to the trees.