



ARBORICULTURAL REPORT

Formal Arboricultural Report/Survey

(in accordance with BS 5837:2012 - *Trees in relation to design, demolition, and construction – Recommendations*)

Site: **Tree Tops, Marsh Lane, North Somercoates, Lincolnshire, LN11 7NT**

Prepared for: **Ian Topliss**

Date: 4th November 2021

Reference: QU-680-21-ENGIE

Surveyor/Report Author: **Andrew Hudson** ND Btec Forestry/Arb / TechArborA
Senior Arboricultural Consultant



andrew.hudson@engie.com / 07979 303 536 / dina.mysko@engie.com / 07971 804 783

EQUANS - Arboricultural Consultancy, New Oxford House, 2 George Street, Grimsby, North East Lincolnshire, DN31 1HB

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Client Details: Ian Topliss

Tree Tops
Marsh Lane
North Somercotes
Lincolnshire
LN11 7NT

Agent Details: Ross Davy Associates

Contact: Daniel Snowden
Phone: 01472 347956
E-mail: daniels@rossdavyltd.co.uk



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APPENDICES

Appendix "A" Tree Survey Schedule

Appendix "B" Tree Constraints Plan

(Note: This report should be read in conjunction with the attached plan/s)

1.0 INTRODUCTION

1.1 Purpose of Report

The purpose of this report is to provide a balanced approach with an assessment of trees at Tree Tops, Marsh Lane, North Somercoates, in relation to a residential type of development. This report is in accordance with BS 5837:2012 Trees in Relation to Design, Demolition and Construction.

1.2 Terms of Reference

EQUANS Arboricultural Consultancy has been instructed by agent Ross Davy Associates, on behalf of client Ian Topliss, to prepare a formal Arboricultural Report and Tree Constraints Plan. The survey and report will comply with the recommendations and guidance set out within the BS 5837:2012 - Trees in Relation to Design, Demolition and Construction and should be used to assist with site layout/design.

1.3 Timing

This tree survey has been completed prior to and independently of any specific proposals for development. This report will identify significant conflicts, which should be set against the quality and value of affected trees. The results of this survey should be used, along with any other relevant baseline data, to inform feasibility studies and design options.

1.4 Description of Development

Feasibility studies are in progress to establish suitability for residential development.



1.5 SITE DESCRIPTION

The site is located within the village of North Somercotes. North Somercotes is a coastal village in the East Lindsey district of Lincolnshire. The village is situated midway between the towns of Mablethorpe and Cleethorpes. RAF Donna Nook is based at North Somercotes. The beach at Donna Nook is 1½ miles from the village and is also host to a grey seal breeding colony.

1.6 The site sits within the grounds of an existing residential dwelling, addressed as Tree Tops, Marsh Lane and is situated on the northern fringes of the village. The host property benefits from grounds extending to around 0.76 acre or 3106sq m, with the main area of land to the rear of the host property. The principal boundary feature is hedging, although there is a small section of 1.8m closed boarded timber fencing along the southern boundary.

1.7 This site does benefit from a number of mature trees, although these are mainly located close to the host property or within/along the property boundary lines. Canopy coverage is quite dense within the south east corner of the site. To the rear of the host property there is a large expanse of open amenity grassland, that is currently managed on a regular basis as garden space.

1.8 The surrounding land use is mixed between residential, commercial and agricultural/paddock. Directly north there is a residential property with extensive grounds that includes a semi-mature woodland. To the east there is open paddock grazing, that appears to be in use for equine purposes. Directly south the land use is residential and just beyond Marsh Lane to the west there is a large field compartment, currently active arable farmland. Further beyond, the land use is mixed between residential and active agricultural farmland.



2.0 STATUS OF THE SITE

The Local Planning Authority (LPA) is East Lindsey District Council. It was confirmed via the Council's online mapping service, accessed on the 4th of November 2021, that trees within and adjacent to the subject property are afforded the protection of a Tree Preservation Order. The site and land adjacent are not within a Conservation Area.

East Lindsey District Council (Somercotes Village) Tree Preservation Order 1980

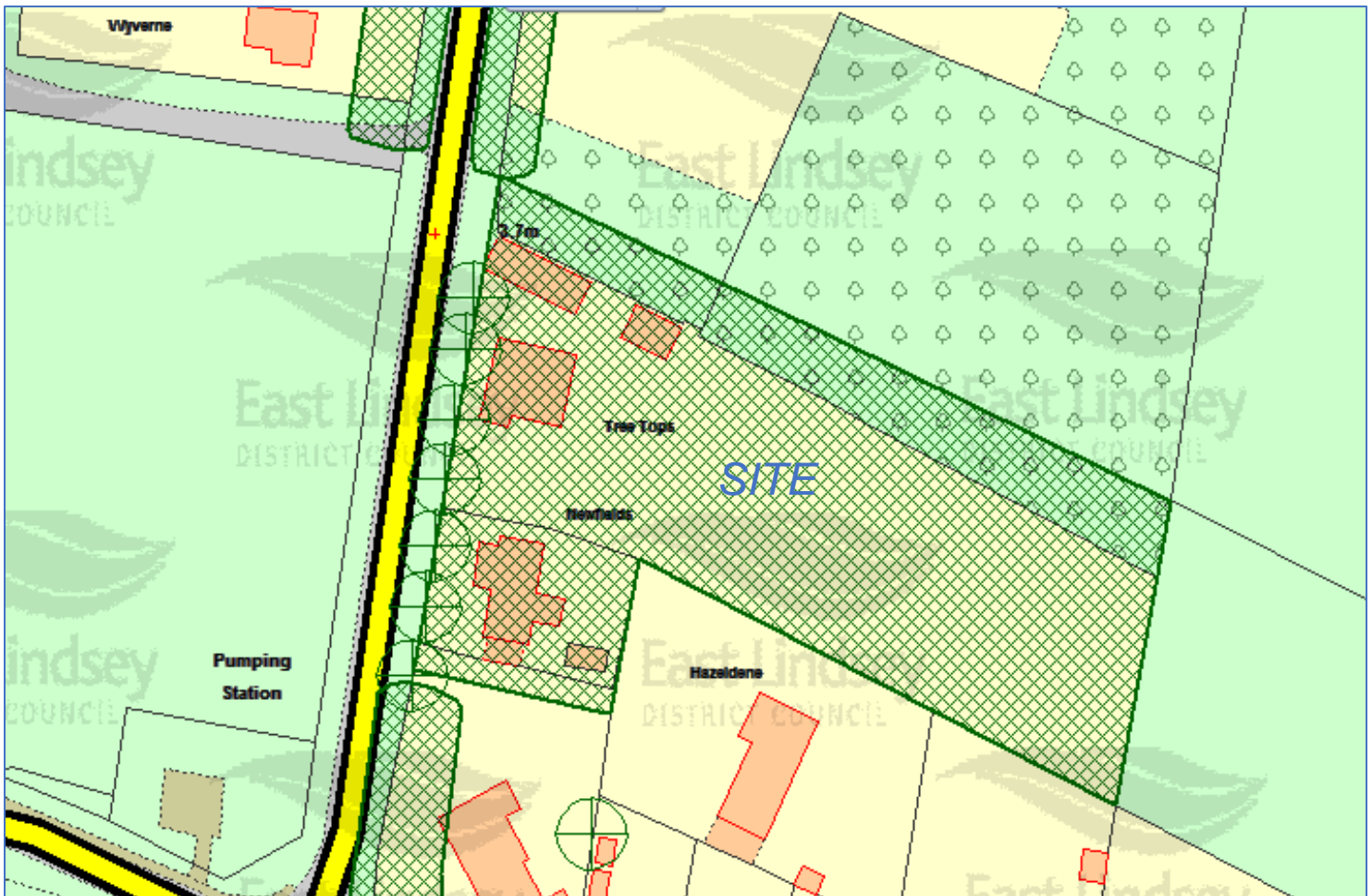


Image source: © East Lindsey District Council - Snip Shot from Council interactive mapping system

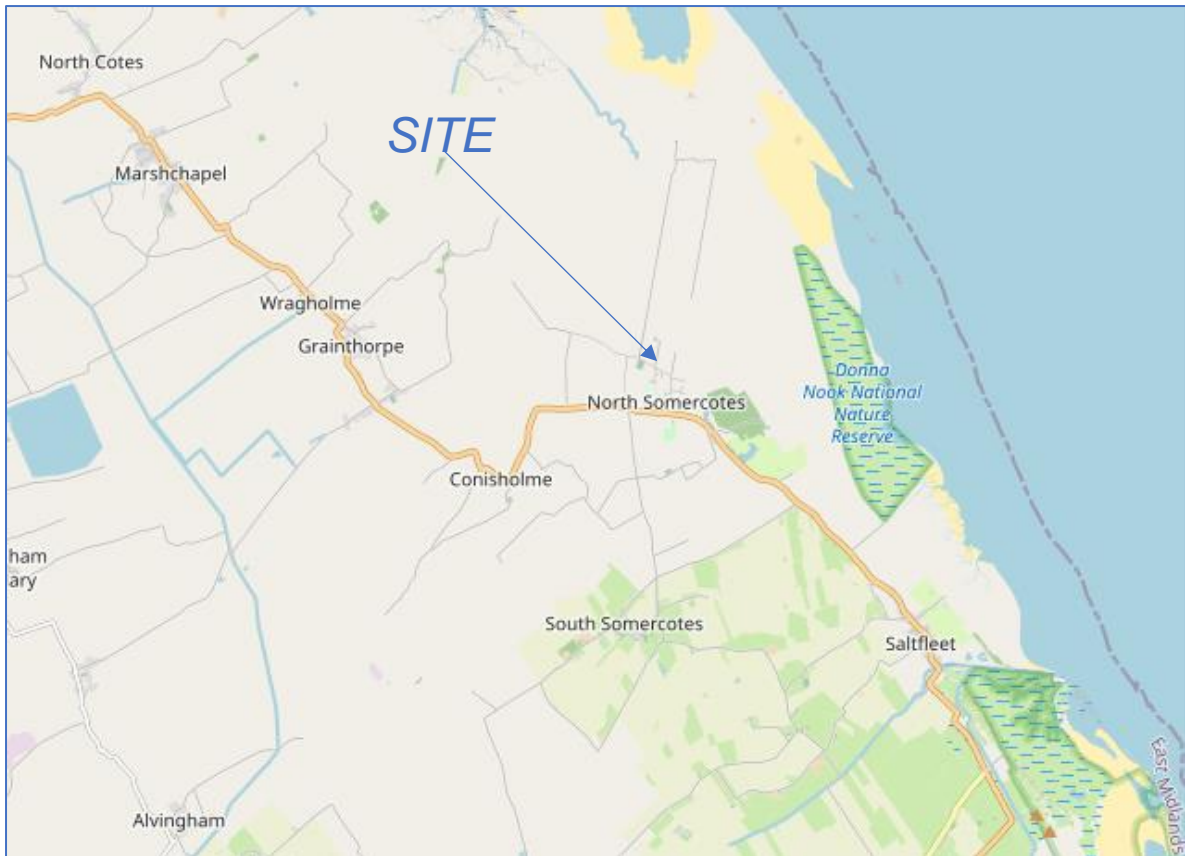
Note: Any works to protected trees / trees within a Conservation Area, outside of a planning permission will need permission from the Local Planning Authority



3.0 SITE LOCATION MAP & PLAN



Image sourced from Google Earth



© OpenStreetMap contributors



4.0 METHOD OF SURVEY

The tree survey was carried out by Andrew Hudson on the 15th of October 2021. All observations were made from ground level in overcast weather conditions. To assist in gathering information about trees the following apparatus was used:

- Clinometer – for measuring the height of trees
- Diameter tape measure – for measuring the diameter of the main stem at 1.5m above ground level
- Monocular – to aid in the visual assessment of trees
- Probe – where required, to investigate further symptoms of decay/defects
- Thor Hammer - where required, to investigate further symptoms of decay/defects

4.1 An overall assessment of 22 individual trees was made. On the Tree Constraints Plan (Appendix “B”) the individual trees are identified as T1 to T22.

4.2 It should be taken into consideration that trees and shrubs are living organisms and run the risk of rapid condition changes, unpredictable climatic and manmade events. An assessment of risk during a survey is based upon factors evident at the time of inspection. Comments upon the condition and safety of any tree relate to the condition of the tree at the time of inspection. It should be recognised that tree condition is subject to change due to but not limited to, for example, the effects of disease, wind, development works or changes in land use. The results of an inspection are only applicable for a limited period of 12 months; any further inspections should be made periodically on a basis commensurate with the level of risk or following sudden or extreme weather conditions. The consultant is not responsible for events that happen after the date of the report or due to factors that were not apparent at the time of the inspection or due to factors unpredictable at the time of inspection.

4.3 An assessment was made of the trees physiological and structural condition, noting any disorders or biomechanical features that present an obvious hazard to present or future users of the site or effect the trees life expectancy. Preliminary management works are proposed in order to either remove/reduce hazards or promote good arboricultural management practice. These recommendations do not take account of any development proposals at this stage. The trees overall quality and value for retention was assessed in accordance with BS5837: 2012 Trees in Relation to Construction. This was dependant on the trees physiological and structural condition, safe useful life expectancy, arboricultural, landscape, cultural and ecological value. Arboricultural and landscape value takes account of the tree's amenity value, which was determined by tree size, prominence, visibility, appropriateness, attractiveness, and screening value.

4.4 This survey has been undertaken in accordance with the recommendations and guidance of the BS 5837:2012; it is not intended to be a tree hazard assessment. Incidental notes may be made on a tree's structural integrity, though where trees are considered to represent an immediate hazard, recommendations will be given for intervention. It will be the landowner's responsibility to make the necessary arrangements.

5.0 ROOT PROTECTION AREA (RPA)

The root protection area (RPA) radius and area for each tree was calculated in accordance with BS 5837:2012. The RPA is an area of ground that provides sufficient soil rooting volume to ensure the survival of the tree.



6.0 TREE SURVEY RESULTS *(general comments)*

- 6.1 An overall assessment of 22 individual trees was made. The full survey results are shown in the Tree Survey Schedule in Appendix "A".
- 6.2 4 individual trees (No. T5, T8, T12 & T17) has been assigned to the high quality and value, category "A". These trees are considered to have good form and good vigour with a remaining life expectancy of at least 40yrs.
- 6.3 8 individual trees (No. T1, T3, T6, T11, T13, T18 & T21) have been assigned to the moderate quality and value, category "B1". These trees are considered to be of moderate quality and value with an estimated contribution of at least 20yrs. Trees is lacking the special quality necessary to merit the category "A" designation.
- 6.4 10 individual trees, (Nos. T2, T7, T9, T10, T14, T15, T16, T19, T20 & T22) have been assigned to the low quality and value, category "C1". These trees are average trees of very limited merit or such impaired condition that they do not qualify in a higher category. Or trees having very limited future prospects.



6.5 Cascade chart for tree quality assessment taken from the BS 5837:2012

Category and definition	Criteria (including subcategories where appropriate)		
Trees unsuitable for retention (see Note)			
Category U Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years	<ul style="list-style-type: none"> Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality <p><i>NOTE</i> Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.</p>		
	1 Mainly arboricultural qualities	2 Mainly landscape qualities	3 Mainly cultural values, including conservation
Trees to be considered for retention			
Category A Trees of high quality with an estimated remaining life expectancy of at least 40 years	Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality	Trees with material conservation or other cultural value
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	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits	Trees with no material conservation or other cultural value

Note: Trees that have been categorized as "C", although may be a material consideration in a planning application, should not be allowed to impose a significant constraint on development of this site



7.0 PHOTOS

View from Marsh Lane looking north towards Donna Nook

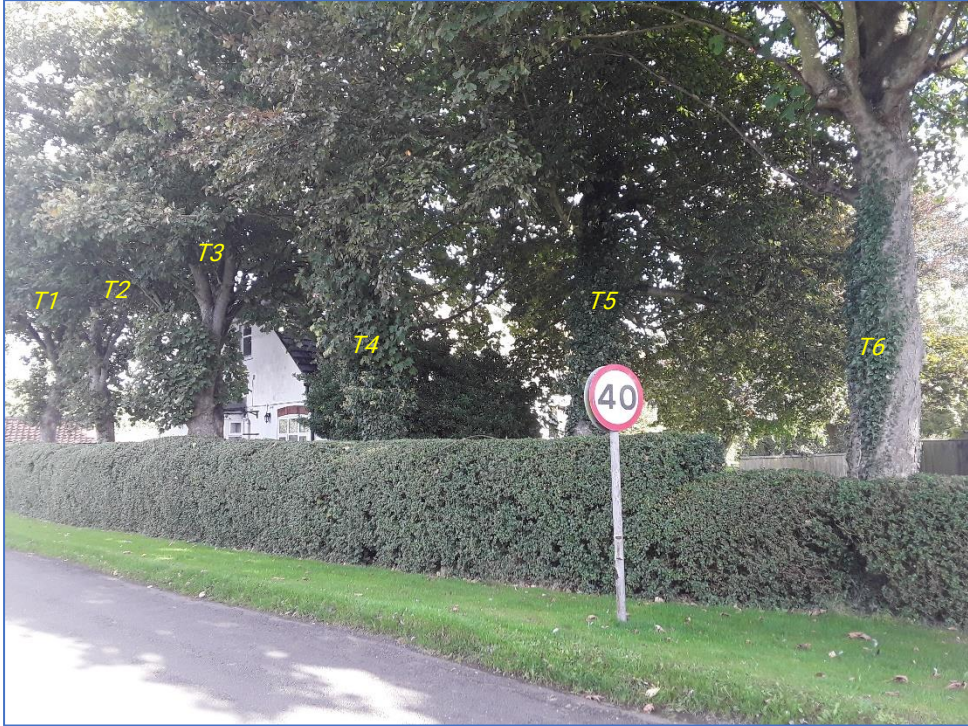


View from Marsh Lane looking south showing the existing access that serves the host property



7.1 Photos

A mature tree line dominates the front west side boundary with Marsh Lane



View from within the site looking east along the southern boundary line



7.2 Photos

T8 is located close to the host property within the rear garden space. This tree is considered to be of high importance



View from the northern boundary line looking east



7.3 Photos

Several trees dominate the south western boundary, of which have varying quality and value



View from the rear eastern boundary showing the rear garden space and trees positioned close to the host dwelling



The rear boundary consists predominantly of an unmanaged conifer hedge plants with 3 trees interspersed within



T21 is located on the rear eastern boundary line and is the largest tree on site. A dominating feature, this tree is considered to have moderate quality and value



8.0 DISCUSSION (general comments)

- 8.1 This site has a mature tree population, mostly positioned around the host property or within/close to the property boundary lines. Due consideration will need to be given to the above ground constraints the trees pose by virtue of their size and position, although it should be recognised that tree size can easily be controlled through correct arboricultural management. More importantly it would be the below ground constraints represented by the root protection area (RPA) where careful planning would be needed to ensure a harmonious relationship between trees and the introduction of structures and/or hard surfaces.
- 8.2 The morphology and disposition of the roots to some trees will be influenced by the existing site conditions. An important aspect of root growth and development is that it is dynamic and highly dependent on the soil environment. The existing ground conditions around the trees are generally quite good for root growth and proliferation with areas that are rich in water and minerals. Any modification to the RPA that may be required due to existing site conditions will reflect a soundly based arboricultural assessment of likely root distribution.
- 8.3 12 individual trees have been identified as category 'A/B', moderate to high quality trees. Any design/layout should limit undue pressure on these trees and special consideration should be given to ensure a harmonious and sustainable relationship with the development can be achieved.
- 8.4 10 individual trees have been identified as category "C", trees of low quality and value. It would be reasonable to suggest that trees of such low quality and value with limited long-term prospects would not be worthy of being given any significant weight in any planning decisions.
- 8.5 The quality and value of the existing tree stock, that I have been instructed to survey, has been identified allowing informed decisions to be made concerning which trees should be removed or retained should development occur. The results of this survey and constraints plan should be used to assist with feasibility studies and any final site layout and design.
- 8.6 It is essential that details of design proposals should be developed in conjunction with the project arboriculturist and, where required, input from a suitably qualified engineer. When incorporating existing trees into a development proposal it is essential to demonstrate that proposals are technically feasible. Such details should be included within planning applications.



9.0 FOUNDATION DESIGN

Where the introduction of a structure within the RPA of retained trees is unavoidable it should be taken into consideration that there are solutions that may be engineered.

9.1 Design Options *(referenced from the BS 5837:2012)*

The use of traditional strip footing can result in extensive root loss and should be avoided. The insertion of specially engineered structures within RPAs may be justified if this enables the retention of a good quality tree that would otherwise be lost, usually category "A" or "B". Designs for foundation design that would minimise adverse impact on trees should be site specific with specialist advice being sought from a suitably qualified engineer.

9.2 Root damage can be minimised by using:

- Piles, with site investigation used to determine their optimal location whilst avoiding damage to roots important for the stability of the tree, by means of hand tools or compressed air soil displacement, to a minimum depth of 600mm.
- Beams laid at or above ground level and cantilevered as necessary to avoid tree roots identified by site investigation.

9.3 Slabs for large structures such as dwellings should be constructed with a ventilated air space between the underside of the slab and the existing soil surface (to enable gas exchange and venting through the soil surface). In such cases, a specialist irrigation system should also be employed (e.g., roof run-off re-directed under the slab). The design of the foundation should take account of the effect of the load bearing properties on underlying soil from the re-directed roof run-off. Approval in principle for a foundation that relies on top-soil retention and roof run-off under the slab should be sought from the building control authority prior to this approach being relied on.

9.4 Where piling is to be installed near to trees, the smallest practical pile diameter should be used, as this reduces the possibility of striking major tree roots and reduces the size of the rig required to sink the piles. If a piling mat is required, this should conform to the parameters of temporary ground protection as per BS 5837:2012. Use of the smallest practical piling rig is also important where piling within the branch spread is proposed. The pile type should be selected bearing in mind the need to protect the soil and adjacent roots from the potential toxic effects of uncured concrete e.g., sleeved bored pile or screw pile.



- 9.5 An arboriculturist can provide a performance specification comprising of a list of arboricultural requirements the insertion of a structure must meet. Engineers will assess the particular site characteristics and use the performance specification to devise an appropriate design.

10.0 INSTALLATION OF SERVICES

The installation of services for this proposal must be kept as far as practically possible from the root protection area (RPA) of any retained trees. Trenching near trees by conventional means, using a mechanical excavator, inevitably causes root loss, as the bucket easily rips through roots. For services such as foul, surface, electric, gas, BT etc., the most practical solution would be to run all services through one trench. Where encroachment into the RPA cannot be avoided trench-less techniques should be adopted. An alternative would be to hand dig a trench minimising the cutting of roots. Pipes and ducted cables can then be thread through enabling installation with very little damage, provided that the borehole is small and deeper than the main lateral roots.

- 10.1 In the UK, the usual guidelines for trenching by utility companies are provided by NJUG Volume 4 (previously NJUG 10), which is available to download at <http://www.njug.org.uk/publications/>. By agreeing to the guidelines to be followed during trenching, all parties are assured that problems can be solved using a common set of criteria. Supervisors from the appointed contractor should direct operatives to follow the agreed practices and it is quite likely that the Local Authority Tree Officer will monitor for compliance.

11.0 CONCLUSION

- 11.1** The results of this survey and constraints plan should be made available to all interested parties during feasibility studies and design options and used to assist with a site layout and design. Trees that have been given a low quality and value category “C” would not usually be retained where they would impose a significant constraint on the development of the site.
- 11.2** Trees can generally tolerate a certain amount of changes in rooting environment and with careful consideration to the below ground constraints represented by the root protection area and the above ground constraints the trees pose by virtue of their size and position, I am confident that this site can be developed without there being an adverse impact on retained trees.
- 11.3** Where the Local Planning Authority recognises and accepts the impact of a proposal on trees, there may be a planning requirement for more concise arboricultural information. Where this is a requirement a formal Arboricultural Method Statement and Tree Protection plan will expand on details in this report focusing on tree protection and specialist techniques if required, with illustrative specifications, timing and phasing of construction operations also including where necessary a performance specification. A formal Arboricultural Method Statement and Tree Protection Plan should be undertaken by an Arboriculturalist who is familiar with trees and development and the BS 5837: 2012.



12.0 REFERENCE TO “Tree Survey Schedule” TREE DESCRIPTIONS AND RECOMMENDATIONS

Data collected in the “Tree Survey Schedule” of App. “A”. Headings in the schedule are as follows:

Tree No. Reference numbers for each tree(s) as it appears in the documents are:

- T** = Individual tree (numbering starts at T1)
- G** = Groups of trees (numbering starts at G1)

Species: The common (generic) name for the species has been used

Age Class: The maturity of the tree/s is defined in 5 categories:

- Y** = Young – small/recently planted tree not yet established
- SM** = Semi mature – fully established tree in the early stages
- M** = Mature – biologically mature tree.
The “M” may be prefixed by an “E” for early or an “L” for late
- OM** = Over mature – old tree showing signs of terminal decline
- V** = Veteran

Stem Diameter: Stem diameter to the nearest centimetre (cm) taken at 1.5m above ground level unless specified otherwise. For multi-stem trees the reading relates to immediately above the root flare

RPA radius: Root protection area calculated in metres (m)

Stem No.: Appears in documents as twin stemmed or multi-stemmed.

Height: Trees height calculated with the use of a clinometer in metres (m)

Crown Spread: Estimated in metres (m) taken at four cardinal points (N, S, E, W) from the stem

Physiological Condition: This is based on an assessment of the tree’s health and vigour, i.e., Good, Fair, Poor, Dead. Groups of trees are allocated an overall assessment. Thus, individual trees within a group may have a higher or lower score

Structural Condition: Description of defects or symptoms of defects (where applicable), i.e., collapsing, compression forks, bark inclusions, fungi

Comments: A summary of comments on each tree or group of trees

Management Recommendations: Arboricultural works required

Remaining Contribution: Estimated in years, i.e., -10, 10-20, 20-40, 40+

Category Grade:

- A** = Trees of high quality and value. Shown as green on the tree constraints plan (TCP)
- B** = Trees of moderate quality and value. Shown as blue on the TCP
- C** = Trees of low quality and value. Shown as grey on the TCP
- U** = Trees to be removed. Shown as red on the TCP

13.0 PERSONAL PROFESSIONAL STATEMENT

(Andrew Hudson ND Btec Forestry/Arboriculture / TechArborA)

Acting consultant preparing reports for various organisations including British Standard reports for architects and developers in supporting planning applications.

Andrew holds a Btec National Diploma in Forestry and Arboriculture which was awarded at distinction level.

Andrew began working with trees as a forestry contractor, obtaining extensive knowledge and practical experience on various contracts throughout Lincolnshire, East Midlands, East Yorkshire, and East Anglia. Having worked for a number of years within the forestry sector Andrew moved to arboriculture, eventually becoming a fully qualified tree surgeon. This presented a broad spectrum of experience in arboriculture, which was enough to acquire the position of Arboricultural Officer at Local Authority level. This provided valuable experience in all aspects of arboriculture providing him with an inclusive insight into the social, legal and safety issues associated with the management of urban trees in the planning system and Local Authority owned tree stock.

Andrew is part of EQUANS Arboricultural Consultancy providing a service advising on a whole range of tree issues.



Appendix A "Tree Survey Schedule"

ARBORICULTURAL CONSULTANCY

Site: Tree Tops, Marsh Lane, North Somercotes, Lincolnshire, LN11 7NT
 Client: Ian Topliss
 Brief: BS5837 Survey

Surveyor: Andrew Hudson
 Assessment Date: 15th October 2021
 Viewing Conditions: Clear / Sunny

Category Grading and Definition

- Trees of high quality with an estimated remaining life expectancy of at least 40 years
- Trees of low quality with an expected remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm
- Trees of moderate quality with an estimated remaining life expectancy of at least 20 years
- Trees in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years

Tree No.	Species	Age Class	Stem Diameter (cm)	RPA (m²)	Stem No.	Height (m)	Crown Spread (m)	Physiological Condition	Structural Condition	Comments	Management Recommendations	Remaining Contribution (yrs)	Category Grading
T1	Sycamore	Mature	50	6	1	12	N4, E4, S4, W4	Good	Good	Tree has good form and good vigour. Single stem up to approx 3.5m, from here the tree forks to develop the main canopy structure. Previous management, pollarded at approx 8m. This pollard management has not been carried out for some time. High canopy structure, up to approx 8m. East side canopy conflict with dwelling roof line. East side lower canopy conflict with BT pole/line.	In context with the current land use remove, cut back branches interfering with dwelling structure and services. Should development occur management should be reconsidered in context with the proposed land use.	20+	B1
T2	Sycamore	Mature	50	6	1	9	N2, E4, S3, W3	Fair	Fair	Single stemmed up to the current height. Historically managed as a pollard, cutting back the structural scaffold limbs to approx 8m. Pollard has since lapsed. Extensive die back of upper west side canopy with a dead leader branch. Cavity at approx 4.5m north side main stem. East side canopy conflict with dwelling roof line. Major/minor dead wood present.	In context with the current land use remove, cut back branches interfering with dwelling structure. Should development occur management should be reconsidered in context with the proposed land use.	10	C1
T3	Sycamore	Mature	70	8.4	1	16	N4, E5, S3, W4	Good	Good	Tree has good form and good vigour. Historically the east side canopy has been pollarded, this management has since lapsed. East side canopy conflict with dwelling. Single stem up to approx 2m, from here the tree develops two co-dominant stems that form the main canopy structure. High canopy structure, up to approx 6m. Basal area restricted due to dense privet hedging. Minor dead wood present.	In context with the current land use reduce the east side canopy by approx 2m to reduce conflict with dwelling.	20+	B1
T4	Sycamore	Mature	52	6.2	1	16	N3, E5, S3, W4	Good	Good	Single stem up to approx 4m, from here the tree forks to develop the main canopy structure. Main stem and forks colonised by ivy, this restricts visual inspection. West side basal area restricted due to dense privet hedging. Historically pollarded at approx 8m. This pollard management has since lapsed. Minor dead wood present.	In context with the current land use no works recommended. Should development occur management should be reconsidered in context with the proposed land use.	20	B1
T5	Beech	Mature	52	6.2	1	18	N3, E7, S4, W4	Good	Good	Tree has good form and good vigour. Single stemmed tree up to the current height. High canopy structure west side up to approx 5, the remaining canopy is varying between 2m and 4m. Main stem colonised by ivy growth.	In context with the current land use no works recommended. Should development occur management should be reconsidered in context with the proposed land use.	40+	A1
T6 (off site)	Sycamore	Sycamore	est. 52	6.2	1	20	N3, E4, S3, W4	Good	Good	Tree off site. Tree has good form and good vigour. Single stem up to approx 2.5m, from here the tree forks to develop the main structural scaffold limbs. Historically pollarded at approx 9m. High canopy structure, up to approx 6m. Minor dead wood present.	In context with the current land use no works recommended. Should development occur management should be reconsidered in context with the proposed land use.	20+	B1
T7	Cherry	Semi-Mature	21	2.5	1	6	N4, E3, S2, W3	Fair	Good	Single stem up to approx 1.5m, from here the tree develops its main structural scaffold limbs. Approx 2m from neighbouring dwelling side elevation. South side canopy has been cut back to the boundary line due to conflict with dwelling. Long term retention is not considered to be viable.	In context with the current land use no works recommended. Should development occur management should be reconsidered in context with the proposed land use.	<10	C1
T8	Beech	Mature	71	8.5	1	15	N6, E5, S6, W7	Good	Good	Tree has good form and good vigour, a good example of the species. Single stem up to approx 2m, from here the tree develops its main structural scaffold limbs to form the main canopy structure. Included bark at points of union to structural scaffold limbs north side and south side. Low canopy structure, approx 1m from ground level. Minor dead wood present.	In context with the current land use no works recommended. Should development occur management should be reconsidered in context with the proposed land use.	40	A1
T9	Purple Plum (twin stem)	Mature	26, 38	5.5	2	10	N4, E4, S4, W4	Fair	Fair	Twin stem at base. Included bark at point of union. Low canopy structure, approx 1m from ground level. North side canopy fire damage due to location of garden waste fire bin. Major/minor crossing branches. Major/minor dead wood present.	In context with the current land use no works recommended, although avoid future fires close to canopy. Should development occur management should be reconsidered in context with the proposed land use.	10	C1



Appendix A "Tree Survey Schedule"

ARBORICULTURAL CONSULTANCY

Site: Tree Tops, Marsh Lane, North Somercotes, Lincolnshire, LN11 7NT
 Client: Ian Topliss
 Brief: BS5837 Survey

Surveyor: Andrew Hudson
 Assessment Date: 15th October 2021
 Viewing Conditions: Clear / Sunny

Category Grading and Definition

- Trees of high quality with an estimated remaining life expectancy of at least 40 years
- Trees of low quality with an expected remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm
- Trees of moderate quality with an estimated remaining life expectancy of at least 20 years
- Trees in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years

Tree No.	Species	Age Class	Stem Diameter (cm)	RPA (m²)	Stem No.	Height (m)	Crown Spread (m)	Physiological Condition	Structural Condition	Comments	Management Recommendations	Remaining Contribution (yrs)	Category Grading
T10 (ownership unknown)	Silver Birch	Early Mature	25	3	1	11	N3, E1, S4, W4	Fair	Good	Single stem up to approx 2m, from here the tree forks to develop the main canopy structure. East side canopy suppressed by adjacent tree cover, this presents an unbalanced crown structure with a canopy lean to the west. Small / discoloration of the leaves.	In context with the current land use no works recommended. Should development occur management should be reconsidered in context with the proposed land use.	10	C1
T11 (ownership unknown)	Silver Birch	Mature	37	4.4	1	12	N4, E4, S4, W4	Fair	Good	Tree has good form and good vigour. Single stem up to approx 1m, from here the tree forks to develop two co-dominant stems. U shaped union. Minor dead wood, crossing branches. Some fire damaged branches to the south east canopy. Minor dead wood present.	In context with the current land use no works recommended, although avoid future fires close to canopy. Should development occur management should be reconsidered in context with the proposed land use.	20	B1
T12 (ownership unknown)	Silver Birch	Mature	51 (below fork)	6.1	1	11	N5, E3, S4, W4	Good	Good	Tree has good form and good vigour. Single stem up to approx 0.5m, from here the tree forks to develop two co-dominant stems. U shaped union. Basal area restricted due to dense hedging, this restricts visual inspection. Canopy height approx 2m from ground level. Minor dead wood present.	In context with the current land use no works recommended. Should development occur management should be reconsidered in context with the proposed land use.	40	A1
T13 (ownership unknown)	Silver Birch (twin stem)	Mature	51, 26	6.9	2	12	N4, E5, S4, W4	Good	Good	Twin stem at base. South side stem close to point of union has developed 3 structural scaffold limbs, with the historic failure of a fourth. Wide spreading tree. Canopy height, approx 2m from ground level. Minor dead wood present.	In context with the current land use no works recommended. Should development occur management should be reconsidered in context with the proposed land use.	20	B1
T14	Cherry (multi stem)	Mature	57 (at base)	6.8	4	12	N6, E6, S6, W6	Good	Fair	Multi stem at base x4. Included bark at points of union. Canopy structure, approx 3m from ground level. Wide spreading tree. Minor dead wood, crossing branches.	In context with the current land use no works recommended. Should development occur management should be reconsidered in context with the proposed land use.	10	C1
T15	Cherry (multi stem)	Mature	est. 38	4.6	Multiple	10	N2, E3, S3, W4	Fair	Fair	Multi stem regrowth from coppice stump. Major/minor dead wood present. Slight dieback of branches.	In context with the current land use no works recommended. Should development occur management should be reconsidered in context with the proposed land use.	<10	C1
T16	Ash (multi stem)	Mature	65 (at base)	7.8	4	9	N4, E3, S4, W4	Good	Fair	Multi stem at base x4. Coppice regrowth from historic tree failure. Low canopy structure, approx 1m from ground level. Long term retention is not considered viable.	In context with the current land use no works recommended. Should development occur management should be reconsidered in context with the proposed land use.	10	C1
T17	Sycamore	Mature	70	8.4	1	15	N6, E4, S6, W5	Good	Good	Tree has good form and good vigour. Single stem up to approx 2m, from here the tree develops it's main structural scaffold limbs. Main stem and structural scaffold limbs colonised by ivy. This restricts visual inspection. Dense ground vegetation and ivy around basal area. This restricts visual inspection. North side canopy into the site, canopy height approx 2m from ground level. Minor dead wood, crossing and duplicating branches.	In context with the current land use sever ivy at base and remove first 6m, clear around basal area. Re-inspect. Should development occur management should be reconsidered in context with the proposed land use.	40+	A1
T18	Ash	Mature	71	8.5	1	17	N8, E5, S6, W5	Good	Good	Single stem up to approx 3m, from here the tree develops it's main structural scaffold limbs. Main stem and structural scaffold limbs colonised by ivy growth, this restricts visual inspection. Dense ground vegetation and ivy growth around basal area restricts visual inspection. Slight dieback and sparseness of upper canopy. Minor dead wood present.	In context with the current land use sever ivy at base and remove first 6m, clear around basal area. Re-inspect. Should development occur management should be reconsidered in context with the proposed land use.	20	B1



Appendix A "Tree Survey Schedule"

ARBORICULTURAL CONSULTANCY

Site: Tree Tops, Marsh Lane, North Somercotes, Lincolnshire, LN11 7NT
 Client: Ian Topliss
 Brief: BS5837 Survey

Surveyor: Andrew Hudson
 Assessment Date: 15th October 2021
 Viewing Conditions: Clear / Sunny

Category Grading and Definition

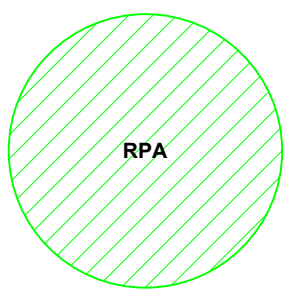
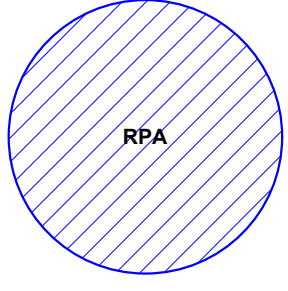
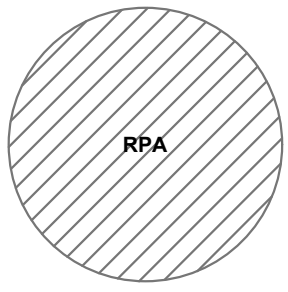
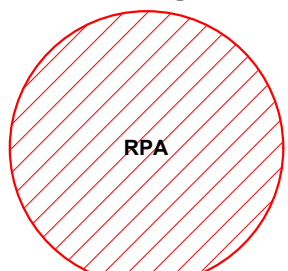
- Trees of high quality with an estimated remaining life expectancy of at least 40 years
- Trees of low quality with an expected remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm
- Trees of moderate quality with an estimated remaining life expectancy of at least 20 years
- Trees in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years

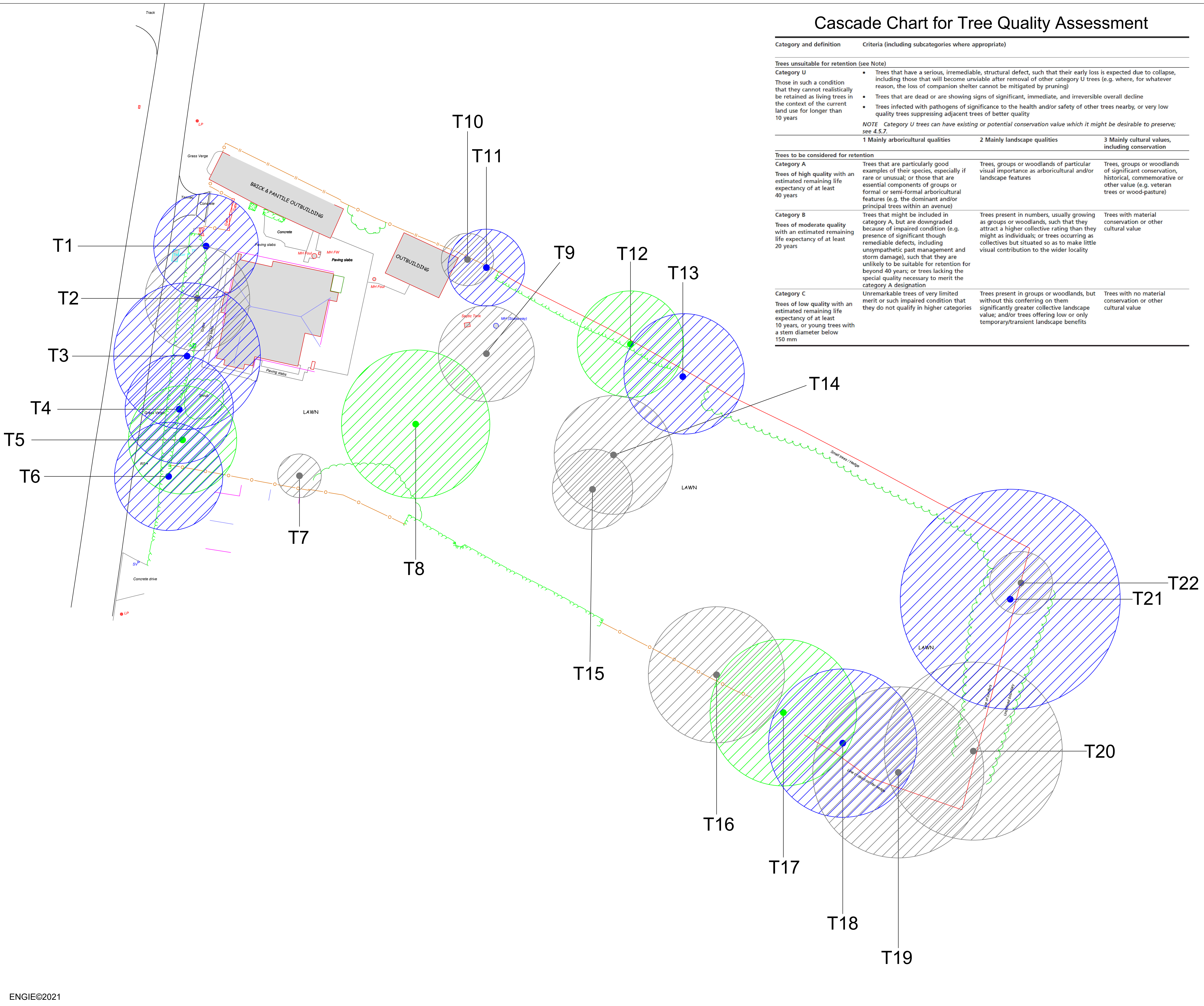
Tree No.	Species	Age Class	Stem Diameter (cm)	RPA (m ²)	Stem No.	Height (m)	Crown Spread (m)	Physiological Condition	Structural Condition	Comments	Management Recommendations	Remaining Contribution (yrs)	Category Grading
T19	Sycamore	Mature	82 (over ivy)	9.8	1	14	N4, E4, S4, W3	Poor	Fair	Single stem up to approx 3m, from here the tree develops it's main structural scaffold limbs. Main stem and canopy structure heavily colonised by ivy growth. This restricts visual inspection. Die back and sparseness of canopy. Basal area visual inspection restricted by ivy and household waste. Major/minor dead wood present.	In context with the current land use sever ivy at base and remove first 6m, clear around basal area. Re-inspect. Should development occur management should be reconsidered in context with the proposed land use.	10	C1
T20	Poplar	Mature	85 (over ivy)	10.2	1	15	east into site 4m	Fair	Fair	Access restricted due to dense ground vegetation and garden debris. Main stem and lower canopy colonised by ivy growth. This restricts visual inspection. Historically tree appears to have lost several branches/limbs resulting in a smaller canopy structure. Biased to the east side. Minor dead wood present.	In context with the current land use sever ivy at base and remove first 6m, clear around basal area. Re-inspect. Should development occur management should be reconsidered in context with the proposed land use.	10	C1
T21	Poplar	Over Mature	105	12.6	1	22	N6, E5, S8, W8	Good	Good	Large spreading tree with good form and good vigour. Single stem up to approx 3m. From here the tree develops it's main structural scaffold limbs. Ground around basal area has been made up with a significant amount of rubble/garden waste. Visual inspection of basal area is not possible. Low laterally spreading limb at approx 2m east side main stem. Minor dead wood present.	In context with the current land use, clear around basal area. Re-inspect. Should development occur management should be reconsidered in context with the proposed land use.	20	B1
T22	Ash	Semi-Mature	30	3.6	1	11	North into site 6m	Good	Fair	Historically twin stemmed, catastrophic failure of the east side stem. Callous repair growth is good with no signs of active decay. Self set tree. Forks at approx 2m, here the tree develops it's main canopy structure.	In context with the current land use no works recommended. Should development occur management should be reconsidered in context with the proposed land use.	10	C1

Cascade Chart for Tree Quality Assessment

Category and definition	Criteria (including subcategories where appropriate)		
Trees unsuitable for retention (see Note)			
Category U Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years	<ul style="list-style-type: none"> Trees that have a serious, irreparable, structural defect, such that their early loss is expected due to collapse, including those that will become unusable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality <p><i>NOTE: Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.</i></p>		
	1 Mainly arboricultural qualities	2 Mainly landscape qualities	3 Mainly cultural values, including conservation
Trees to be considered for retention			
Category A Trees of high quality with an estimated remaining life expectancy of at least 40 years	Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality	Trees with material conservation or other cultural value
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	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits	Trees with no material conservation or other cultural value

Appendix "B" Category and Definition

- CAT "A"**
 RPA
Trees of high quality with an estimated remaining life expectancy of at least 40yrs
- CAT "B"**
 RPA
Trees of moderate quality with an estimated remaining life expectancy of at least 20yrs
- CAT "C"**
 RPA
Trees of low quality with an estimated remaining life expectancy of at least 10yrs, or young trees with a stem diameter below 150mm
- CAT "U"**
 RPA
Those trees in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10yrs



ALL NECESSARY DIMENSIONS SHALL BE CHECKED ON SITE BEFORE ANY WORK IS PUT IN HAND. DO NOT SCALE.

REVISIONS			
Letter	Amendment	Drawn	Date

ARBORICULTURAL CONSULTANCY



New Oxford House
2, George Street
Grimby
North East Lincolnshire
DN31 1HB
Tel: 01472 324271

CLIENT	Ian Topliss		
PROJECT	Residential Development Tree Tops, Marsh Lane, North Somercotes		
TITLE	Tree Constraints Plan		
DRAWN	AH	CHECKED	APPROVED
DATE	4th Nov 2021	ORIGINAL SIZE A1 (594 x 841)	SCALE 1:200
FILE REF	AH-EQUANS	DRAWING No. TCP_01_051121_AH	REVISION NO.