TREE CONSULTANTS

ARBORICULTURAL REPORT

& Impact Assessment

to **BS 5837:2012** at:

Mexborough Road,
Bolton upon Dearne,
Rotherham,
S63 8NX

Prepared for:
PBA Applied Ecology Limited

Date: *July 2023*

Reference: *AWA5460*

Institute of Chartered Foresters
Registered Consultant

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Contents

1. Introduction

1.1 Instructions and Brief

1.1.1 We have been instructed by PBA Applied Ecology Limited to visit the site and prepare our findings in a report.

1.1.2 The report is required in accordance with BS 5837:2012 *Trees in relation to design, demolition and construction – Recommendations,* to provide detailed, independent, arboricultural advice on the trees present, in the context of potential development.

1.2 Survey Details

1.2.1 The survey took place during June 2023.

1.2.2 The trees were surveyed visually from the ground using "Visual Tree Assessment" techniques and in accordance with the guiding principles of British Standard 5837:2012.

1.2.3 Any additional off-site trees that could impact a new development design have been included in the tree survey parameters.

1.2.4 The tree positions were plotted on an Ordnance Survey map base-layer using enhanced GPS technology (1-2m accuracy) and laser distance measurer.

1.2.5 This report has been prepared by Mr Adam Winson, Chartered Arboriculturist, MSc, BSc (Hons), MICFor, MArborA, Principal and Director of AWA Tree Consultants Ltd.

1.2.6 The tree survey data collection was carried out by Miss Lucy Garbutt, MSc, BSc (Hons), Arboriculturist at AWA Tree Consultants.

1.2.7 Full qualifications and experience are included within **Appendix 1**. Explanatory details regarding the survey methodology are included within **Appendix 2**. A full explanation of the tree data can be found at **Appendix 3**. Full details of all the trees surveyed are found in **Appendix 4**. For tree locations please refer to the Tree Constraints Plan at **Appendix 5** and for detail of the impacts of the new development refer to the Tree Impacts Plan at **Appendix 6**.

2. The Site

2.1 Location and Description

2.1.1 The site is located on land just off Mexborough Road in Bolton upon Dearne, Rotherham.

2.1.2 The site comprises an operational sewerage works, with associated tanks, machinery, outbuildings and access road.

2.1.3 The approximate area of the survey is highlighted in the (2022 Google Earth) image below:

3. The Trees

3.1 Legal

3.1.1 The following advice is for guidance purposes only. Some trees are protected by legislation, and it is essential that the legal status of trees is established prior to carrying out works to them. Unauthorised work to protected trees could lead to prosecution, resulting in enforcement action such as fines or a criminal record. Tree Preservation Orders, Conservation Areas, Planning Conditions, Felling Licences or Restrictive Covenants legally protect many trees in the UK.

3.1.2 An online search was undertaken with Barnsley Metropolitan Borough Council on 06/07/23 to check whether any trees at the site are protected by a Tree Preservation Order or are located within a Conservation Area. As of this date no trees at the site are protected by a Tree Preservation Order or are within a Conservation Area.

3.1.3 Due to the large potential penalties for illegally carrying out work to protected trees, before authorising any tree works a further check should be made with the Local Planning Authority to confirm if any trees are covered by a Tree Preservation Order or are within a Conservation Area. If either applies, then statutory permission is required before any works can take place (unless such work is approved as part of full planning permission).

3.1.4 The Multi-Agency Geographical Information for the Countryside (MAGIC) website was used to search for areas of ancient woodlands listed on the Ancient Woodland (DEFRA 2021), and a check for catalogued Ancient and Veteran trees using the woodland trust ancient tree inventory (Woodland Trust 2021).

3.1.5 It was confirmed that there are no designated ancient woodlands or veteran trees within the survey area.

3.1.6 Trees provide a wide range of habitats for many species, some of which are legally protected such as bats, nesting birds, badgers and dormice. It is essential that appropriate care is taken to ensure that this legislation is not contravened.

3.1.7 When appointing a tree surgeon, only properly qualified and experienced companies should be used, who have adequate Public Liability and Employer's Liability Insurance.

3.1.8 All tree work should be carried out according to British Standard 3998:2010 Tree Work - Recommendations.

3.2 Tree Survey Results

3.2.1 The tree survey revealed 16 items of woody vegetation, comprised of 6 individual trees and 10 tree groups or hedges.

3.2.2 Of the surveyed trees: all 16 trees, tree groups and hedges are retention category 'C' (explanatory details regarding the retention categories are included at Appendix 3).

3.2.3 Full details of the surveyed trees, tree groups and hedges are provided in the attached tree data schedule at Appendix 4. General comments are provided below:

3.2.4 The significant tree cover at the site consists mainly of adjacent large woodland groups stretching along the boundaries. Within these groups are a mix of ages and species, with the occasional larger and more mature tree situated within these groups. All trees at the site are likely to be naturalised pioneer species that have established on the site.

3.2.5 Ash, Cherry, Willow, False Acacia, Elder and Hawthorn are the dominant species at the site, with a stretch of semi-mature Silver Birch within the adjacent property on the southern border.

3.2.6 The central areas of the site contain little of arboricultural significance, generally consisting of scrub and the occasional Ash sapling.

3.2.7 The sites most significant tree is Ash T14, a mature Ash within the boundary fence line of the site. Due to the scrub at the site, there was limited access at the base of the tree preventing a detailed inspection.

3.2.8 The row of Silver Birch along the southern boundary, G7, T8 and G10 appear to be in fair condition, with some dead standing stems and crowns which have low vigour. T8 especially had a particularly sparse crown, although access prevented detailed inspection. These Silver Birch provide moderate amenity to the site and surrounding area.

3.2.9 The remaining trees within the site are of particularly low value and should not pose any significant constraint on the development potential of the site.

3.2.10 Many Ash trees in the wider region are being impacted by Chalara or Ash dieback disease. Once a tree is infected, the disease is usually fatal, either directly or indirectly. While the identified Ash trees may continue to provide landscape and wildlife benefits for some time, their long-term prospects are likely to be limited as a result of Ash dieback.

3.2.11 Some trees were covered in dense Ivy or were inaccessible (as detailed in Appendix 4). In such cases measurements were estimated and the

condition values are indicative only.

3.2.12 The tree Root Protection Area (RPA) for each tree has been plotted as a polygon centred on the base of the stem. Due to the presence of roads, structures, topography (and past tree management) the RPA is likely to be a simplified representation of the tree roots actual morphology and disposition. However, detailed modifications to the shape of the RPA would largely be based on conjecture and so have been avoided.

3.2.13 Some lower value tree, hedge and shrub groups do not have RPAs detailed on tree plans. The detailed extent and spread of these low value groups, in conjunction with the tree schedule, is sufficient to assess the associated potential constraints.

3.3 Photographs

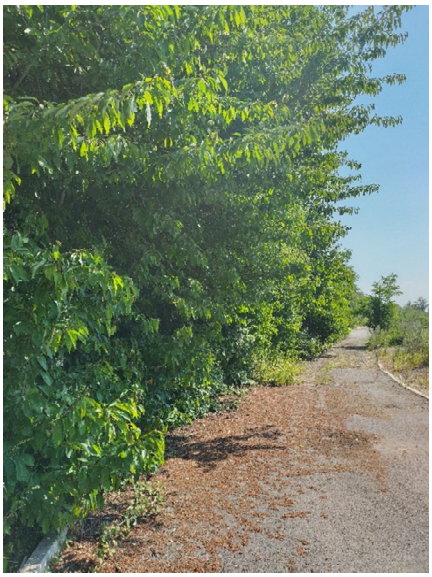


Photo 1: G1 from south west.


Photo 2: T6 from west.


Photo 3: G7 from north east.


Photo 4: T8 from north east.


Photo 5: T9 from north.


Photo 6: T14 from east.

4. Arboricultural Impact Assessment

4.1 Proposed New Development

4.1.1 It is proposed to build a new chemical storage tank, ferric dosing kiosk, fill point cabinet, fire hose reel cabinet, emergency shower and booster cabinet, all with associated hard standing at the base.

4.1.2 The development proposals have been provided by my client and inform this arboricultural impact assessment and the Tree Impacts Plan at Appendix 6.

4.2 Direct Impacts

4.2.1 From assessing the new development proposals, no trees, tree groups or hedges require removal or pruning to facilitate the development.

4.3 Indirect Impacts

4.3.1 The tree Root Protection Area (RPA) detailed on the Tree Plans at Appendices 5 and 6, has been used as a layout design tool, to inform on the area around a tree where the protection of the roots and soil structure is treated as a priority. As such, no significant negative indirect impacts have been identified.

4.3.2 The design of the new development has considered the trees crown position in relation to the development. Some shade from trees may be beneficial. In particular, deciduous trees give shade in summer but allow access to sunlight in winter. However, the design proposals avoid excessive shading, and give adequate provision for future tree growth.

4.3.3 The buildability of the proposed development has been assessed in terms of access, adequate working space and provision for the storage of materials, including topsoil, in relation to the trees.

4.4 Suitable Mitigation

4.4.1 The development of the site provides an excellent opportunity to undertake new tree planting throughout the site as part of a soft landscaping scheme. As such, suitable new tree planting has the potential to improve the sites tree cover.

4.5 Protection of the Retained Trees

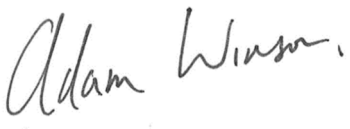
4.5.1 The retained trees will require protection by fencing in accordance with BS 5837: 2012, during the development phase.

4.5.2 An associated Arboricultural Method Statement, detailing protective fencing specifications and construction methods close to the retained trees is provided.

5. Signature

I trust this report provides all the required information.

Signed



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Adam Winson, *Chartered Arboriculturist, MSc, BSc (Hons), MICFor, ACIEEM*

10th July 2023

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Appendices

Appendix 1: Authors Qualifications & Experience

Mr Adam Winson, *Chartered Arboriculturist, MSc, BSc (Hons), MICFor, MArborA, ACIEEM, QTRA Registered*
Adam is the company Director and Principal Consultant. He has a mix of the highest-level academic qualifications and relevant work experience. He has worked within the tree care profession for over 20 years and was awarded an MSc in Arboriculture and Urban Forestry, with distinction. Adam is a Chartered Arboriculturist and a Registered Consultant with the Institute of Chartered Foresters, a Professional Member of the Arboricultural Association and he has original research published by the UK Forestry Commission. His work ranges from individual expert tree inspections to managing trees on major multimillion pound housing developments and infrastructure projects. His work often involves trees with preservation orders or litigation, and he has appeared as a tree expert, at planning appeal hearings up to the crown court. Adam has also undertook locum Tree Officer work for several local authorities.

Mr James Brown, *BSc (Hons) Arboriculture, MArborA, PTI (Lantra), QTRA Registered*
James has a BSc (Hons) in Arboriculture, attaining first class honours, as well as being awarded the Institute of Chartered Foresters student award. He is a Professional Member of the Arboricultural Association, an Associate of the Institute of Chartered Foresters, and he is working towards becoming a Chartered Arboriculturist. James joined AWA in 2016, he has several years' experience as an Arboricultural Consultant, he previously worked in Europe's largest container tree nursery and he has experience of local authority Tree Officer work.

Dr Felicity Stout, *PhD, MA, BA (Hons), Cert Ed Forestry, TechArborA, PTI (Lantra)*
Felicity has worked in the tree care profession for the last 10 years. She has a Certificate in Higher Education in Forestry, with a focus on Urban Forestry. She has practical arboricultural contractor experience and is a qualified and experienced social forestry practitioner. Felicity has a PhD in History, with a particular interest in the history of woodland and tree management and she has work published in The Arboricultural Journal on this subject. As well as working at AWA Felicity is the Tree Conservation Officer for the Peak District National Park Authority.

Mr James Godfrey, *BA (Hons), Dip Forestry and Arboriculture Level 4, Cert Arb L3, TechArborA, QTRA Registered*
James has extensive arboricultural experience working as a team leader within the public and private sector. By achieving a Distinction Star in the Extended Diploma in Forestry and Arboriculture, James was able to use his knowledge to inform and carry out appropriate maintenance that ensured the long term wellbeing of trees across the UK. During his time at Darlington Borough Council, James provided on site assessment and the management of the remedial works required to ensure safe and suitable retention of trees that provide a multitude of benefits to the urban environment. Currently, James is completing a Foundation Degree in Arboriculture and Tree Management, while working at AWA.

Mr Joe Thomas, *MSci Biology, Award L4 Arboriculture, TechArborA*
Joe achieved a first class degree in biology with an integrated Masters (MSci) from the University of Sheffield. Additionally, he has a Level 4 Award in Arboriculture. Joe joined AWA in 2022 after an Urban Forestry role with the Sheffield and Rotherham Wildlife Trust and Sheffield City Council, where he gained a variety of experience in different aspects of the arboriculture sector.

Mr James Boyle, *HND Level 5 Arboriculture and Urban Forestry, Dip Arboriculture Level 4, TechArborA*
Jim joined AWA in 2022, after having worked within the tree care profession for several years, alongside studying at college and university. During this time, he gained a wealth of experience and several professional and practical NPTC qualifications in the tree care industry. Jim has studied Arboriculture and Urban Forestry at Merrist Wood College in Surrey, Plumpton College in Sussex and University of Highlands and Islands in the Scottish Highlands, where he achieved a distinction in the Higher National Diploma Level 5.

Miss Lucy Garbutt, *MSc Animal Behaviour, BSc (Hons) Biology, CIEEM membership*
Lucy graduated with a masters degree in Animal Behaviour from the UK's highest rated university, St Andrews of Scotland, immediately following the completion of her BSc degree in Biology from Lancaster University. Lucy has experience in botany and plant science and moved into arboriculture after previous experience of protected species and botanical surveys with a large environmental consulting company.

Appendix 2: Survey Methodology and Limitations

The survey was undertaken in accordance with British Standard 5837:2012 *Trees in relation to design, demolition and construction – Recommendations.* The trees were assessed objectively and without reference to any proposed site layout. The trees were surveyed from the ground using 'Visual Tree Assessment' (VTA) methodology. VTA is appropriate and is endorsed by industry guidance. It is used by arboriculturists to evaluate the structural integrity of a tree, relying on observation of trees biomechanical and physiological features. Measurements are obtained using a diameter tape, clinometer, laser distometer and loggers tape. Where this is not practical measurements are estimated. Tree groups have been identified in instances as defined in BS 5837:2012. Shrubs and insignificant trees may have been omitted from the survey.

This report represents a BS 5837:2012 tree survey and should not be accepted as a detailed tree safety inspection report; however, tree related hazards are recorded and commented upon where observed, yet no guarantee can be given as to the absolute safety or otherwise of any individual tree. All recommended tree work must be to BS 3998:2010 - '*Tree Work: Recommendations'*.

The findings and recommendations contained within this report are valid for a period of twelve months from the date of survey. The author shall not be responsible for events which happen after this time due to factors which were not apparent at the time, and the acceptance of this report constitutes an agreement with these guidelines and terms.

Appendix 3: Explanation of Tree Descriptions

HEIGHT of the tree is measured from the stem base in metres. Where the ground has a significant slope the higher ground is selected.

CROWN HEIGHT is an indication of the average height at which the crown begins and includes information of the first significant branch and direction of growth.

STEM DIAMETER is measured at 1.5 metres above (higher) ground level. Where the tree is multi-stemmed at this point; the diameter is measured close to ground level or else a combined stem diameter is calculated.

CROWN SPREAD is measured from the centre of the stem base to the tips of the branches in all four cardinal points.

AGE CLASS of the tree is described as young, semi-mature, early-mature, mature, or over-mature.

PHYSIOLOGICAL CONDITION is classed as good, fair, poor, or dead. This is an indication of the health of the tree and takes into account vigour, presence of disease and dieback.

STRUCTURAL CONDITION is classed as good, fair or poor. This is an indication of the structural integrity of the tree and takes into account significant wounds, decay and quality of branch junctions.

LIFE EXPECTANCY is classed as; less than 10 years, 10-20 years, 20-40 years, or more than 40 years. This is an indication of the number of years before removal of the tree is likely to be required.

Retention Categories

A (marked in green on Appendix 5) = retention most desirable. These trees are of very high quality and value with a good life expectancy.

B (marked in blue on Appendix 5) = retention desirable. These trees are of good quality and value with a significant life expectancy.

C (marked in grey on Appendix 5) = trees which could be retained. These trees are of low or average quality and value, and are in adequate condition to remain until new planting could be established.

U (marked in red on Appendix 5) = trees unsuitable for retention. These trees are in such a condition that any existing value would be lost within 10 years.

	Tree Species			Measurements				Crown (m)					Tree Condition						Value		Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Diameter (mm)*	*Estimated*	*Crown height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*
G1	Cherry, Willow, Hawthorn, Elder and False acacia	*Prunus sp., Salix sp., Crataegus monogyna, Sambucus nigra, Robinia pseudoacacia*	Semi-mature	10	10	150	Yes	0	See plans				Limited access around base. On verge	Multiple stemmed. Epicormic growths. Old pruning wounds. Stubs. Partially included bark. Tight union	Old pruning wounds. Overhanging into site	Behind boundary fencing with some stems growing through fence. Continues off site.	Good	Good	>40 yrs	Low	C	No works required to facilitate the development.
G2	False acasia and Elder	*Robinia pseudoacacia, Sambucus nigra*	Young	1.5	10	70	Yes	0	See plans				Limited access around base	Twin stemmed at 0.5m. Vertical	Normal		Good	Good	>40 yrs	Low	C	No works required to facilitate the development.
G3	Cherry, Willow, Hawthorn, Elder and False acacia	*Prunus sp., Salix sp., Crataegus monogyna, Sambucus nigra, Robinia pseudoacacia*	Semi-mature	10	10	150	Yes	0	See plans				Limited access around base. On verge	Multiple stemmed. Epicormic growths. Old pruning wounds. Stubs. Partially included bark. Tight union	Old pruning wounds. Overhanging into site	Behind boundary fencing with some stems growing through fence. Continues off site.	Good	Fair	>40 yrs	Low	C	No works required to facilitate the development.
G4	Cherry, Willow, Hawthorn, Elder and False acacia	*Prunus sp., Salix sp., Crataegus monogyna, Sambucus nigra, Robinia pseudoacacia*	Semi-mature	10	10	150	Yes	0	See plans				Limited access around base. On verge	Multiple stemmed. Epicormic growths. Old pruning wounds. Stubs. Partially included bark. Tight union	Old pruning wounds. Overhanging into site	Behind boundary fencing with some stems growing through fence. Continues off site.	Good	Good	>40 yrs	Low	C	No works required to facilitate the development.
G5	Cherry, Willow, Hawthorn, Elder and False acacia	*Prunus sp., Salix sp., Crataegus monogyna, Sambucus nigra, Robinia pseudoacacia*	Semi-mature	10	10	150	Yes	0	See plans				Limited access around base. On verge	Multiple stemmed. Epicormic growths. Old pruning wounds. Stubs. Partially included bark. Tight union	Old pruning wounds. Overhanging into site	Behind boundary fencing with some stems growing through fence. Continues off site.	Good	Good	>40 yrs	Low	C	No works required to facilitate the development.

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	Tree Species			Measurements				Crown (m)					Tree Condition						Value		Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Diameter (mm)*	*Estimated*	*Crown height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*
T6	Ash	*Fraxinus excelsior*	Early-mature	16	10	100	Yes	1	5	5	5	5	Limited access around base	Multiple stemmed at base. Vertical. Epicormic growths. Old pruning wounds. Stubs. Partially included bark. Tight union	Normal	Self set Ash on boundary possibly adjacent, with understorey preventing detailed inspection.	Good	Good	20 to 40 yrs	Low	C	No works required to facilitate the development.
G7	Silver Birch	*Betula pendula*	Semi-mature	10	10	200	Yes	2	See plans.				Limited access around base. On verge	Multiple stemmed. Epicormic growths. Old pruning wounds. Stubs. Partially included bark. Tight union	Old pruning wounds. Overhanging into site	Linear group of Silver Birch on the other side of the boundary fence.	Good	Good	20 to 40 yrs	Moderate	C	No works required to facilitate the development.
T8	Silver Birch	*Betula pendula*	Semi-mature	8	1	130	Yes	2	2.5	3	2.5	3	Limited access around base. On verge	Single stemmed. Vertical. Epicormic growths. Old pruning wounds. Stubs	Old pruning wounds. Overhanging into site. Major dieback. Moderate deadwood. Low vigour	Single Silver Birch within G7 with very little live crown left. In adjacent property preventing detailed inspection.	Poor	Fair	10 to 20 yrs	Moderate	C	No works required to facilitate the development.
T9	Ash	*Fraxinus excelsior*	Semi-mature	3	2	60, 90	No	0.5	1.5	1.5	1.5	1.5	No visual defects	Twin stemmed at 0.5m. Vertical. Partially included bark	Normal	Self set Ash likely to outgrow this location. Stems in contact with metal frame some tight included bark around frame. Hard standing to the east.	Good	Fair	10 to 20 yrs	Low	C	No works required to facilitate the development.

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	Tree Species			Measurements				Crown (m)					Tree Condition						Value		Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Diameter (mm)*	*Estimated*	*Crown height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*
G10	Silver Birch	*Betula pendula*	Semi-mature	10	1	150	Yes	2	See plans.				Limited access around base. On verge	Multiple stemmed. Epicormic growths. Old pruning wounds. Stubs. Partially included bark. Tight union	Old pruning wounds. Overhanging into site	Linear group of Silver Birch on the other side of the boundary fence.	Fair	Fair	20 to 40 yrs	Moderate	C	No works required to facilitate the development.
T11	Ash	*Fraxinus excelsior*	Semi-mature	11	2	150, 180	Yes	1.5	2.5	3	2.5	3	Soil compaction	Twin stemmed at base. Vertical. Partially included bark. Tight union	Minor deadwood	Self set Ash cracking the tarmac. Behind fence, preventing detailed inspection.	Fair	Fair	20 to 40 yrs	Low	C	No works required to facilitate the development.
T12	Ash	*Fraxinus excelsior*	Semi-mature	11	1	200	Yes	1.5	2.5	3	2.5	3	Soil compaction	Twin stemmed at base. Vertical. Partially included bark. Tight union	Minor deadwood	Self set Ash cracking the tarmac. Behind fence, preventing detailed inspection.	Fair	Fair	20 to 40 yrs	Low	C	No works required to facilitate the development.
G13	Ash	*Fraxinus excelsior*	Early-mature	14	10	150	Yes	1.5	See plans.				Limited access around base. On verge	Multiple stemmed. Epicormic growths. Old pruning wounds. Stubs. Partially included bark. Tight union	Old pruning wounds. Overhanging into site	Large mature Ash trees on railway banking. Fence and access prevented detailed inspection. Some deadwood in crown. Ash sapling understory .	Fair	Fair	20 to 40 yrs	Moderate	C	No works required to facilitate the development.
T14	Ash	*Fraxinus excelsior*	Mature	17	2	350, 400	Yes	1.5	7	6	6	7	Limited access around base	Twin stemmed at 1m. Vertical. Epicormic growths. Partially included bark. Tight union	Minor deadwood. Minor dieback	Large mature Ash tree within boundary fence. Limited access at base prevented detailed inspection.	Fair	Fair	20 to 40 yrs	Low	C	No works required to facilitate the development.

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	Tree Species			Measurements				Crown (m)					Tree Condition						Value		Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Diameter (mm)*	*Estimated*	*Crown height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*
G15	Elder and Hawthorn	*Sambucus nigra, Crataegus monogyna*	Semi-mature	1.5	10	70	Yes	0	See plans.				Limited access around base. On verge	Multiple stemmed. Epicormic growths. Old pruning wounds. Stubs. Partially included bark. Tight union	Old pruning wounds. Overhanging into site	Elder and Hawthorn scrub on railway embankment .	Fair	Fair	20 to 40 yrs	Low	C	No works required to facilitate the development.
G16	Elder and Hawthorn	*Sambucus nigra, Crataegus monogyna*	Semi-mature	2.5	10	70	Yes	0	See plans.				Limited access around base. On verge	Multiple stemmed. Epicormic growths. Old pruning wounds. Stubs. Partially included bark. Tight union	Old pruning wounds. Overhanging into site	Elder and Hawthorn scrub on railway embankment .	Fair	Fair	20 to 40 yrs	Low	C	No works required to facilitate the development.

G1
G2
G3
G4
G5
G5
G7
G10
G13
G13
G15
G16
T6
T8
T9
T11
T12
T14
Elder
Elder
Elder
Elder
Elder
Elder
Elder and Ash
Stem
Stem
Stem
Stem
Dogrose

NORTH

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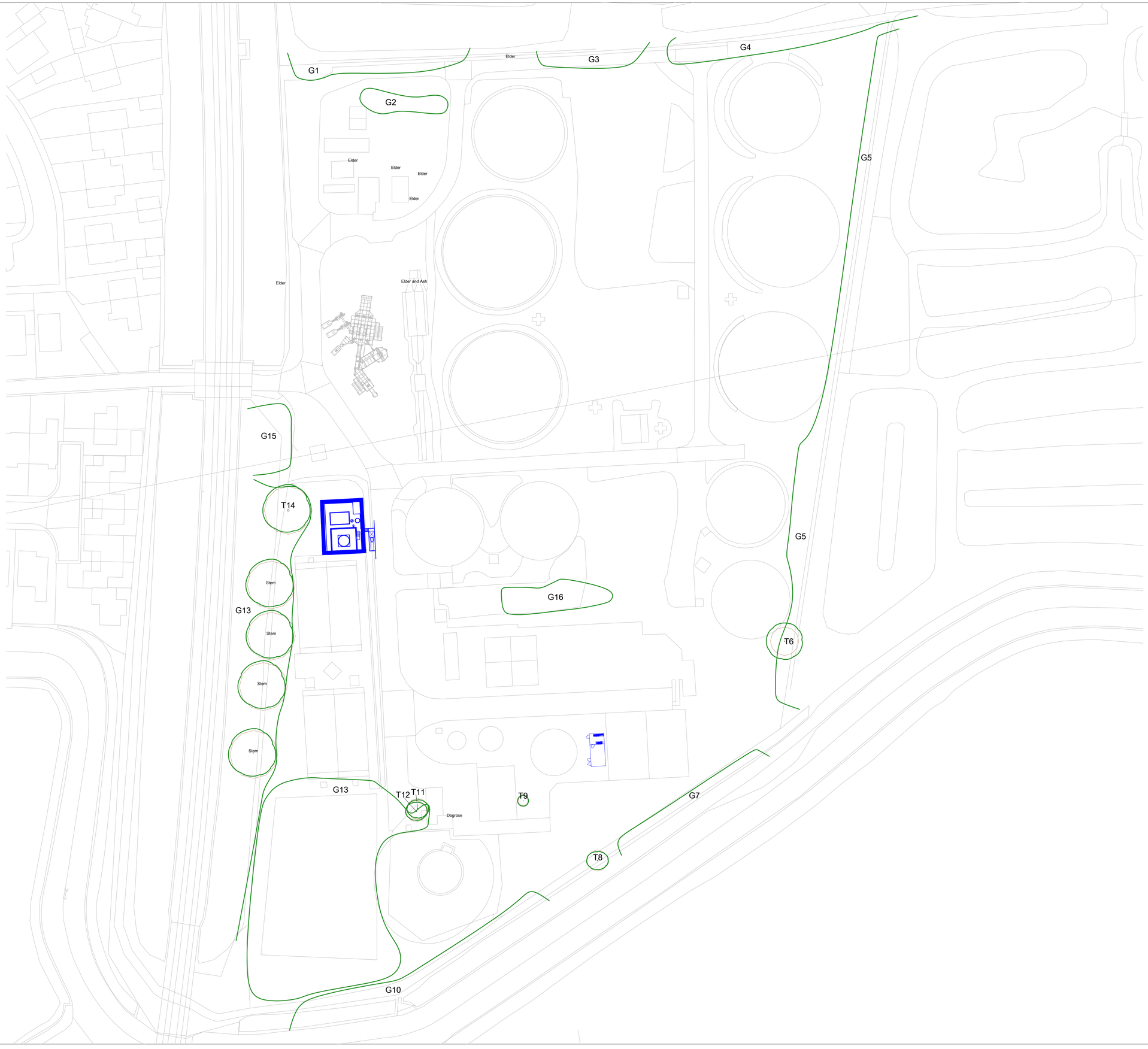
Appendix 5:
Tree Constraints Plan

Mexborough Road, Bolton upon Dearne, Rotherham, S63 8NX
Ref: AWA5460

BRITISH STANDARD 5837:2012
RETENTION CATEGORIES
Definitions of these categories can be found in Appendix 2 of the report.

SCALE: 1:500 PAPER: A1

	CATEGORY A: HIGH VALUE RETENTION MOST DESIRABLE
	CATEGORY B: MODERATE VALUE RETENTION DESIRABLE
	CATEGORY C: LOWER VALUE COULD BE RETAINED
	CATEGORY U: UNSUITABLE FOR RETENTION
	RPA: ROOT PROTECTION AREA
	TREE STEM



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Appendix 6:
Tree Impacts Plan

Mexborough Road, Bolton upon Dearne, Rotherham, S63 8NX
Ref: AWA5450

BRITISH STANDARD 5837:2012

SCALE: 1:500 PAPER: A1

	TREE TO BE RETAINED
	TREE TO BE REMOVED
	RPA: ROOT PROTECTION AREA
	TREE STEM