TREE CONSULTANTS

ARBORICULTURAL REPORT
& Impact Assessment
to BS 5837:2012 at:

Cross Keys Lane,
Hoyland,
Barnsley
S74 0QA

Prepared for:
DPP Planning

Date: *April 2024*

Reference: *AWA5912*

Institute of Chartered Foresters
Registered Consultant

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Contents

1. Introduction

1.1 Instructions and Brief

1.1.1 We were instructed by DPP Planning 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 March 2024.

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 We have been provided with a topographical survey with tree positions plotted. Where surveyed trees were not included on the topographical survey the tree positions were plotted using enhanced GPS technology (1-2m accuracy) and laser distance measurer.

1.2.5 This report has been prepared by Adam Winson, Chartered Arboriculturist, MSc, BSc (Hons), MICFor, MArborA, Principle and Director of AWA Tree Consultants Ltd. The tree survey data collection was carried out by James Brown, BSc (Hons) Arboriculture, MArborA, PTI (Lantra), Arboriculturist at AWA Tree Consultants Ltd.

1.2.6 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 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 comprises a plot of land situated on Cross Keys Lane in Hoyland in the Metropolitan Borough of Barnsley, South Yorkshire. A residential property is situated to the north of the site and roads border the site's eastern, southern and western boundaries.

2.1.2 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 the 8th of April 2024 to check if trees at the site are protected by a Tree Preservation Order or are within a Conservation Area. As of this date no trees at the site are legally protected.

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 (ATI) (Woodland Trust 2021). It was confirmed that there are no designated ancient woodlands or veteran or ancient trees within the survey area.

3.1.5 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.

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

3.1.7 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 85 items of woody vegetation, comprised of 82 individual trees and 3 tree groups.

3.2.2 All of the surveyed trees and tree groups are retention category 'C' (explanatory details regarding the retention categories are included at Appendix 3).

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

3.2.2 T1 to T38 from a linear group of trees bordering the site's eastern boundary. T1 to T20 and T22 to T37 are semi mature Alders, T21 is a semi mature Cherry and T38 is a young shrubby Holly. Many of the trees appear to have had previous formative crown lifting works undertaken, with occasional old pruning wounds to their stems. Collectively the trees provide some screening between the site and the adjacent land.

3.2.3 T39 to T84 form a group of young to semi mature trees situated to the centre of the site. The group is predominantly comprised of Alder with several Birch and occasional Willow, Ash, Oak, Poplar and Rowan. Many of the trees are of relatively poor multiple stemmed form and many appear supressed due to their dense plantings. G54 forms a widespreading understorey group of predominantly young shrubby Hawthorn, Blackthorn and Hazel.

3.2.4 Many Ash trees in the wider region are being impacted by the fungal disease Ash Dieback. Once a tree is infected, the disease is usually fatal, either directly or indirectly. While the identified Ash trees at the site 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.

3.2.5 G85 forms an adjacent tree group situated in adjacent land beyond the site's northern boundary. The group is comprised predominantly of shrubby Hawthorn with occasional young to semi mature Alder. The tree group was only given a cursory inspection with measurements estimated and condition values indicative only.

3.2.6 The tree Root Protection Area (RPA) detailed on the Tree Constraints Plan at Appendix 5 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.

3.2.7 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.

3.2.8 The 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.

4. Arboricultural Impact Assessment

4.1 Proposed New Development

4.1.1 It is proposed to build a new Lidl store with associated access, landscaping and facilities. 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, 73 trees or tree groups will require removal to facilitate the development as they are situated in the footprint of the development or their retention and protection throughout the development is not suitable.

4.2.2 The trees or tree groups that require removal to facilitate the development are T1 to T70, T82, T83 and T84.

4.2.3 The trees or tree groups requiring removal have been identified in red on the attached Tree Impacts Plan at Appendix 6.

4.2.4 The trees that require removal are all young to semi mature trees of lower value, retention category 'C'.

4.2.5 While the collective removal of the trees will have some negative impact at the site in the short term, new tree plantings at the site will help mitigate for the tree removals and will improve the quality of site's tree cover in the longer term.

4.3 Indirect Impacts

4.3.1 The tree Root Protection Area (RPA) detailed on the Tree Plans at Appendix 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.

4.3.2 No significant negative indirect impacts on the retained trees have been identified.

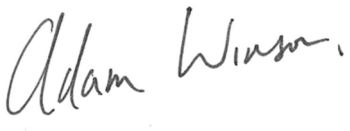
4.4 Protection of the Retained Trees

4.4.1 The retained trees may require protection by fencing in accordance with BS 5837: 2012, during the development phase. If required by the Local Planning Authority, an associated Arboricultural Method Statement, detailing protective fencing specifications and construction methods close to the retained trees can be 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*

8th April 2024

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Appendices

Appendix 1: Authors Qualifications & Experience

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.

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.

James Godfrey, *BA (Hons), FdSc Arboriculture and Tree Management, TechArborA, PTI (Lantra), QTRA Registered*
James has had extensive arboricultural experience working as an arborist within the public and private sector. While working at AWA, James completed his FdSc in Arboriculture and Tree Management, graduating with a distinction and was also awarded for achieving the highest overall mark in his year. James has used his arboricultural knowledge to inform and carry out accurate tree surveys and produce detailed reports that aim to balance appropriate tree retention with the requirements of landowners.

Joe Thomas, *MSci Biology, Award L4 Arboriculture, TechArborA, PTI (Lantra), QTRA Registered*
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 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.

Lucy Garbutt, *MSc Animal Behaviour, BSc (Hons) Biology, PTI (Lantra), 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.

Sophie Beckerman, *BA (Hons), Dip Arboriculture Level 4, PTI (Lantra), TechArborA*
Sophie has more than 10 years experience as a self employed arborist in the private sector working for a variety of companies. Her roles included assessing and managing jobs and as a team leader. Her experience ranges from working on large infrastructure tree works to domestic tree management, working with clients to achieve the desired outcomes for their trees to ensure their safety and longevity. She holds several practical NPTC qualifications in tree works. She has gained experience in tree management for conservation with Sheffield City Council Ranger service and The Wildlife Trust.

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.

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*	*Average Height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*
T1	Alder	*Alnus incana*	Semi-mature	7	1	250	No	2	3	3	3	3	No visual defects	Single stemmed. Vertical. Epicormic growths	Minor deadwood. Birds nest		Good	Good	20 to 40 yrs	Low	C	Removal required to facilitate development
T2	Alder	*Alnus incana*	Semi-mature	8	1	210	No	1.5	2	3	3	2	No visual defects	Single stemmed. Slight lean north east. Epicormic growths	Minor deadwood		Good	Good	>40 yrs	Low	C	Removal required to facilitate development
T3	Alder	*Alnus incana*	Semi-mature	11	1	200	No	1.5	2	2	3	3	No visual defects	Single stemmed. Vertical. Epicormic growths	Minor deadwood		Good	Good	>40 yrs	Low	C	Removal required to facilitate development
T4	Alder	*Alnus incana*	Semi-mature	10	1	170	No	1.5	2	3	2	2	No visual defects	Single stemmed. Slight lean north east. Epicormic growths	Minor deadwood		Good	Good	>40 yrs	Low	C	Removal required to facilitate development
T5	Alder	*Alnus incana*	Semi-mature	10	1	200	No	1.5	2	2	2	3	No visual defects	Single stemmed. Vertical. Old pruning wounds	Minor deadwood		Good	Good	>40 yrs	Low	C	Removal required to facilitate development
T6	Alder	*Alnus incana*	Semi-mature	11	1	180	No	1.5	3	3	1	2	No visual defects	Single stemmed. Vertical. Bark damage. Old pruning wounds	Minor deadwood		Good	Good	>40 yrs	Low	C	Removal required to facilitate development

	Tree Species			Measurements				Crown (m)					Tree Condition							Value		Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Diameter (mm)*	*Estimated*	*Average Height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*
T7	Alder	*Alnus incana*	Semi-mature	10	1	190	No	1.5	2	3	1	1	No visual defects	Single stemmed. Vertical. Epicormic growths	Minor deadwood		Good	Good	>40 yrs	Low	C	Removal required to facilitate development
T8	Alder	*Alnus incana*	Semi-mature	10	1	180	No	1.5	2	3	1	3	No visual defects	Single stemmed. Vertical. Old pruning wounds	Minor deadwood		Good	Good	>40 yrs	Low	C	Removal required to facilitate development
T9	Alder	*Alnus incana*	Semi-mature	10	1	170	No	1.5	2	2	2	3	No visual defects	Single stemmed. Vertical	Minor deadwood		Good	Good	>40 yrs	Low	C	Removal required to facilitate development
T10	Alder	*Alnus incana*	Semi-mature	10	1	170	No	1.5	3	3	2	2	No visual defects	Single stemmed. Slight lean north east. Epicormic growths. Old pruning wounds	Minor deadwood		Good	Good	>40 yrs	Low	C	Removal required to facilitate development
T11	Alder	*Alnus incana*	Semi-mature	10	1	130	No	1.5	2	1	1	2	No visual defects	Single stemmed. Vertical. Epicormic growths	Minor deadwood		Good	Good	>40 yrs	Low	C	Removal required to facilitate development

	Tree Species			Measurements				Crown (m)					Tree Condition							Value		Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Diameter (mm)*	*Estimated*	*Average Height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*
T12	Alder	*Alnus incana*	Semi-mature	11	1	190	No	1.5	2	1	1	3	No visual defects	Single stemmed. Vertical. Old pruning wounds. Epicormic growths	Minor deadwood		Good	Good	>40 yrs	Low	C	Removal required to facilitate development
T13	Alder	*Alnus incana*	Semi-mature	11	1	210	No	1.5	3	3	2	2	No visual defects	Single stemmed. Vertical	Minor deadwood		Good	Good	>40 yrs	Low	C	Removal required to facilitate development
T14	Alder	*Alnus incana*	Semi-mature	11	1	190	No	1.5	3	3	1	2	No visual defects	Single stemmed. Vertical	Minor deadwood		Good	Good	>40 yrs	Low	C	Removal required to facilitate development
T15	Alder	*Alnus incana*	Semi-mature	10	1	220	No	1.5	3	3	2	3	No visual defects	Single stemmed. Vertical. Epicormic growths. Staining. Bark damage	Minor deadwood	Black staining to stem, possible *Phytophthora sp.* symptoms	Fair	Good	20 to 40 yrs	Low	C	Removal required to facilitate development
T16	Alder	*Alnus incana*	Semi-mature	10	1	210	No	1.5	2	2	2	2	No visual defects	Single stemmed. Vertical. Epicormic growths	Minor deadwood		Good	Good	>40 yrs	Low	C	Removal required to facilitate 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*	*Average Height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*
T17	Alder	*Alnus incana*	Semi-mature	10	1	210	No	2	3	2	1	2	No visual defects	Single stemmed. Slight lean north east. Epicormic growths. Bark damage	Minor deadwood		Good	Good	>40 yrs	Low	C	Removal required to facilitate development
T18	Alder	*Alnus incana*	Semi-mature	10	1	180	No	1.5	2	1	2	3	No visual defects	Single stemmed. Vertical. Epicormic growths. Old pruning wounds	Minor deadwood		Good	Good	>40 yrs	Low	C	Removal required to facilitate development
T19	Alder	*Alnus incana*	Semi-mature	11	1	210	No	1.5	2	1	2	3	No visual defects	Single stemmed. Vertical. Old pruning wounds	Minor deadwood		Good	Good	>40 yrs	Low	C	Removal required to facilitate development
T20	Alder	*Alnus incana*	Semi-mature	11	1	220	No	1.5	2	2	3	3	No visual defects	Single stemmed. Vertical. Old pruning wounds	Minor deadwood		Good	Good	>40 yrs	Low	C	Removal required to facilitate development
T21	Cherry	*Prunus sp.*	Semi-mature	12	1	240	No	2	4	3	4	3	No visual defects	Single stemmed. Slight lean south	Minor deadwood	Northern stem appears to have been historically damaged. Southern stem now dominant.	Good	Good	>40 yrs	Low	C	Removal required to facilitate 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*	*Average Height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*
T22	Alder	*Alnus incana*	Semi-mature	11	1	210	No	1.5	3	2	1	3	No visual defects	Single stemmed. Vertical. Epicormic growths. Old pruning wounds. Bark damage	Minor deadwood		Good	Good	>40 yrs	Low	C	Removal required to facilitate development
T23	Alder	*Alnus incana*	Semi-mature	10	1	220	No	1.5	3	1	2	3	No visual defects	Single stemmed. Vertical. Epicormic growths. Old pruning wounds	Minor deadwood		Good	Good	>40 yrs	Low	C	Removal required to facilitate development
T24	Alder	*Alnus incana*	Semi-mature	10	1	170	No	1.5	3	3	2	1	No visual defects	Single stemmed. Vertical	Minor deadwood		Good	Good	>40 yrs	Low	C	Removal required to facilitate development
T25	Alder	*Alnus incana*	Semi-mature	11	1	160	No	1.5	2	2	1	3	No visual defects	Single stemmed. Vertical	Minor deadwood		Good	Good	>40 yrs	Low	C	Removal required to facilitate development
T26	Alder	*Alnus incana*	Semi-mature	12	1	270	No	1.5	3	3	3	4	No visual defects	Single stemmed. Vertical. Epicormic growths. Old pruning wounds	Minor deadwood		Good	Good	>40 yrs	Low	C	Removal required to facilitate development

	Tree Species			Measurements				Crown (m)					Tree Condition							Value		Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Diameter (mm)*	*Estimated*	*Average Height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*
T27	Alder	*Alnus incana*	Semi-mature	11	1	270	No	1.5	3	3	4	4	No visual defects	Single stemmed. Vertical. Epicormic growths	Minor deadwood		Good	Good	>40 yrs	Low	C	Removal required to facilitate development
T28	Alder	*Alnus incana*	Semi-mature	10	1	210	No	1.5	3	3	3	3	No visual defects	Single stemmed. Vertical. Old pruning wounds	Minor deadwood		Good	Good	>40 yrs	Low	C	Removal required to facilitate development
T29	Alder	*Alnus incana*	Semi-mature	10	1	170	No	1.5	3	3	2	3	No visual defects	Single stemmed. Vertical. Old pruning wounds	Minor deadwood		Good	Good	>40 yrs	Low	C	Removal required to facilitate development
T30	Alder	*Alnus incana*	Semi-mature	8	1	180	No	1.5	3	2	2	3	No visual defects	Single stemmed. Vertical	Minor deadwood	Telephone line to east	Good	Good	>40 yrs	Low	C	Removal required to facilitate development
T31	Alder	*Alnus incana*	Semi-mature	11	1	230	No	1.5	4	3	2	3	No visual defects	Single stemmed. Slight lean north east	Minor deadwood		Good	Good	>40 yrs	Low	C	Removal required to facilitate development
T32	Alder	*Alnus incana*	Semi-mature	10	1	240	No	1.5	3	4	2	2	No visual defects	Single stemmed. Vertical. Old pruning wounds	Minor deadwood	Telephone line to east	Good	Good	>40 yrs	Low	C	Removal required to facilitate development

	Tree Species			Measurements				Crown (m)					Tree Condition							Value		Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Diameter (mm)*	*Estimated*	*Average Height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*
T33	Alder	*Alnus incana*	Semi-mature	11	1	180	No	1.5	3	3	2	1	No visual defects	Single stemmed. Slight lean north east	Minor deadwood	Telephone line to east	Good	Good	>40 yrs	Low	C	Removal required to facilitate development
T34	Alder	*Alnus incana*	Semi-mature	9	1	140	No	1.5	3	3	2	1	No visual defects	Single stemmed. Slight lean north east. Bark damage	Minor deadwood	Telephone line to east	Good	Good	>40 yrs	Low	C	Removal required to facilitate development
T35	Alder	*Alnus incana*	Semi-mature	11	1	230	No	1.5	3	2	2	3	No visual defects	Single stemmed. Vertical. Old pruning wounds	Minor deadwood		Good	Good	>40 yrs	Low	C	Removal required to facilitate development
T36	Alder	*Alnus incana*	Semi-mature	11	1	260	No	1.5	3	3	2	3	No visual defects	Single stemmed. Vertical. Old pruning wounds. Bark damage	Minor deadwood		Good	Good	>40 yrs	Low	C	Removal required to facilitate development
T37	Alder	*Alnus incana*	Semi-mature	10	1	240	No	1.5	3	3	3	3	No visual defects	Single stemmed. Slight lean east	Minor deadwood		Good	Good	>40 yrs	Low	C	Removal required to facilitate development
T38	Holly	*Ilex aquifolium*	Young	5	1	80	No	0	1	1	1	2	No visual defects	Single stemmed. Slight lean east	Minor deadwood		Good	Good	20 to 40 yrs	Low	C	Removal required to facilitate development

	Tree Species			Measurements				Crown (m)					Tree Condition							Value		Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Diameter (mm)*	*Estimated*	*Average Height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*
T39	Goat Willow	*Salix caprea*	Semi-mature	9	5	150, 200, 150, 90, 180	No	0.5	5	6	4	3	Exposed roots	Multiple stemmed at base. Slight lean north east. Old pruning wounds. Tight unions. Minor cavities. Minor decay. Partially included bark	Minor deadwood. Minor snapouts		Good	Fair	20 to 40 yrs	Low	C	Removal required to facilitate development
T40	Ash	*Fraxinus excelsior*	Semi-mature	10	1	210	No	1.5	2	3	3	3	No visual defects	Single stemmed. Vertical	Minor dieback. Minor deadwood. Minor snapouts	Minor dieback in crown	Fair	Good	10 to 20 yrs	Low	C	Removal required to facilitate development
T41	Oak	*Quercus robur*	Semi-mature	8	1	170	No	2.5	2	3	2	1	No visual defects	Single stemmed. Slight lean north east	Minor deadwood		Good	Good	>40 yrs	Low	C	Removal required to facilitate development
T42	Birch	*Betula pendula*	Semi-mature	7.5	2	120, 110	No	1.5	3	3	3	2	No visual defects	Twin stemmed at 1m. Slight lean north east. Epicormic growths. Tight unions	Minor deadwood		Good	Good	20 to 40 yrs	Low	C	Removal required to facilitate development

	Tree Species			Measurements				Crown (m)					Tree Condition							Value		Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Diameter (mm)*	*Estimated*	*Average Height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*
T43	Alder	*Alnus incana*	Semi-mature	6	3	120, 140, 80	No	2	2	3	3	2	No visual defects	Multiple stemmed at 0.5m. Slight lean north east. Bark damage. Tight unions	Minor deadwood	Large bark wounds at base	Fair	Fair	20 to 40 yrs	Low	C	Removal required to facilitate development
T44	Alder	*Alnus incana*	Semi-mature	7	1	220	No	1.5	3	3	2	2	No visual defects	Single stemmed. Slight lean north east. Epicormic growths. Stubs	Minor deadwood	Significant snapout at base	Fair	Fair	20 to 40 yrs	Low	C	Removal required to facilitate development
T45	Alder	*Alnus incana*	Semi-mature	6.5	2	170, 130	No	2	2	3	2	3	No visual defects	Twin stemmed at 0.5m. Vertical. Epicormic growths	Minor deadwood. Minor snapouts		Fair	Fair	20 to 40 yrs	Low	C	Removal required to facilitate development
T46	Alder	*Alnus incana*	Semi-mature	6.5	3	130, 110, 50	No	2	2	2	2	2	No visual defects	Twin stemmed at 0.5m. Vertical. Epicormic growths	Minor deadwood. Minor snapouts		Fair	Fair	20 to 40 yrs	Low	C	Removal required to facilitate development
T47	Rowan	*Sorbus sp.*	Semi-mature	6.5	2	130, 60	Yes	2	2	3	2	2	No visual defects	Twin stemmed at 1m. Slight lean east	Minor deadwood		Good	Good	10 to 20 yrs	Low	C	Removal required to facilitate development
T48	Alder	*Alnus incana*	Semi-mature	7	1	240	No	2	3	3	3	3	No visual defects	Single stemmed. Vertical. Epicormic growths	Minor deadwood. Minor snapouts		Fair	Good	20 to 40 yrs	Low	C	Removal required to facilitate development

	Tree Species			Measurements				Crown (m)					Tree Condition							Value		Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Diameter (mm)*	*Estimated*	*Average Height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*
T49	Alder	*Alnus incana*	Semi-mature	7.5	3	100, 130, 210	No	2	3	3	3	3	No visual defects	Multiple stemmed at base. Vertical. Epicormic growths	Minor deadwood. Minor snapouts		Fair	Good	20 to 40 yrs	Low	C	Removal required to facilitate development
G50	Alder. Rowan	*Alnus sp. Sorbus sp.*	Semi-mature	7	4	110, 130, 180, 60	No	2	2	4	3	3	No visual defects	Multiple stemmed at base. Vertical. Epicormic growths. Bark damage. Snapped stems	Minor deadwood	Alder and Rowan forming one crown. Several snapped stems.	Fair	Good	20 to 40 yrs	Low	C	Removal required to facilitate development
T51	Alder	*Alnus incana*	Semi-mature	7	3	160, 80, 120	No	2	3	3	3	3	No visual defects	Multiple stemmed at base. Vertical. Stubs	Minor deadwood. Minor snapouts		Fair	Fair	20 to 40 yrs	Low	C	Removal required to facilitate development
T52	Alder	*Alnus incana*	Semi-mature	7	3	130, 180, 140	No	1.5	3	3	1	2	No visual defects	Multiple stemmed at 0.5m. Slight lean north	Minor deadwood		Fair	Fair	20 to 40 yrs	Low	C	Removal required to facilitate development
T53	Alder	*Alnus incana*	Semi-mature	7	5	50, 110, 140, 130, 110	No	2	3	2	2	3	No visual defects	Multiple stemmed at base. Vertical	Minor deadwood. Minor snapouts		Fair	Fair	20 to 40 yrs	Low	C	Removal required to facilitate development

	Tree Species			Measurements				Crown (m)					Tree Condition						Value		Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Diameter (mm)*	*Estimated*	*Average Height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*
G54	Hawthorn. Blackthorn. Hazel. Currant. Ash. Alder. Birch. Willow. Oak	*Crataegus sp. Prunus sp. Corylus sp. Ribes sp. Fraxinus sp. Alnus sp. Betula sp. Salix sp. Quercus sp.*	Young	5	10	30	No	0	See plan				No visual defects	Single and Multiple stemmed	Minor deadwood	Dense group of shrubby young predominantly Hawthorn with occasional Blackthorn, Hazel and Currant and occasional young Ash, Alder, Oak, Birch and Willow. Sporadic at northern end.	Fair	Fair	20 to 40 yrs	Low	C	Removal required to facilitate development
T55	Alder	*Alnus incana*	Semi-mature	8	6	80	No	2	3	3	3	3	No visual defects	Multiple stemmed at base. Vertical. Stubs	Minor deadwood		Fair	Fair	20 to 40 yrs	Low	C	Removal required to facilitate development
T56	Birch	*Betula pendula*	Semi-mature	9	1	150	No	1.5	2	2	2	2	No visual defects	Single stemmed. Slight lean north east	Minor deadwood		Good	Good	20 to 40 yrs	Low	C	Removal required to facilitate development
T57	Oak	*Quercus robur*	Semi-mature	7.5	1	150	No	2	3	3	3	3	No visual defects	Single stemmed. Vertical	Minor deadwood		Good	Good	>40 yrs	Low	C	Removal required to facilitate development
T58	Birch	*Betula pendula*	Young	6.5	1	80	No	3	2	2	1	1	No visual defects	Single stemmed. Slight lean east	Minor deadwood		Good	Good	20 to 40 yrs	Low	C	Removal required to facilitate development

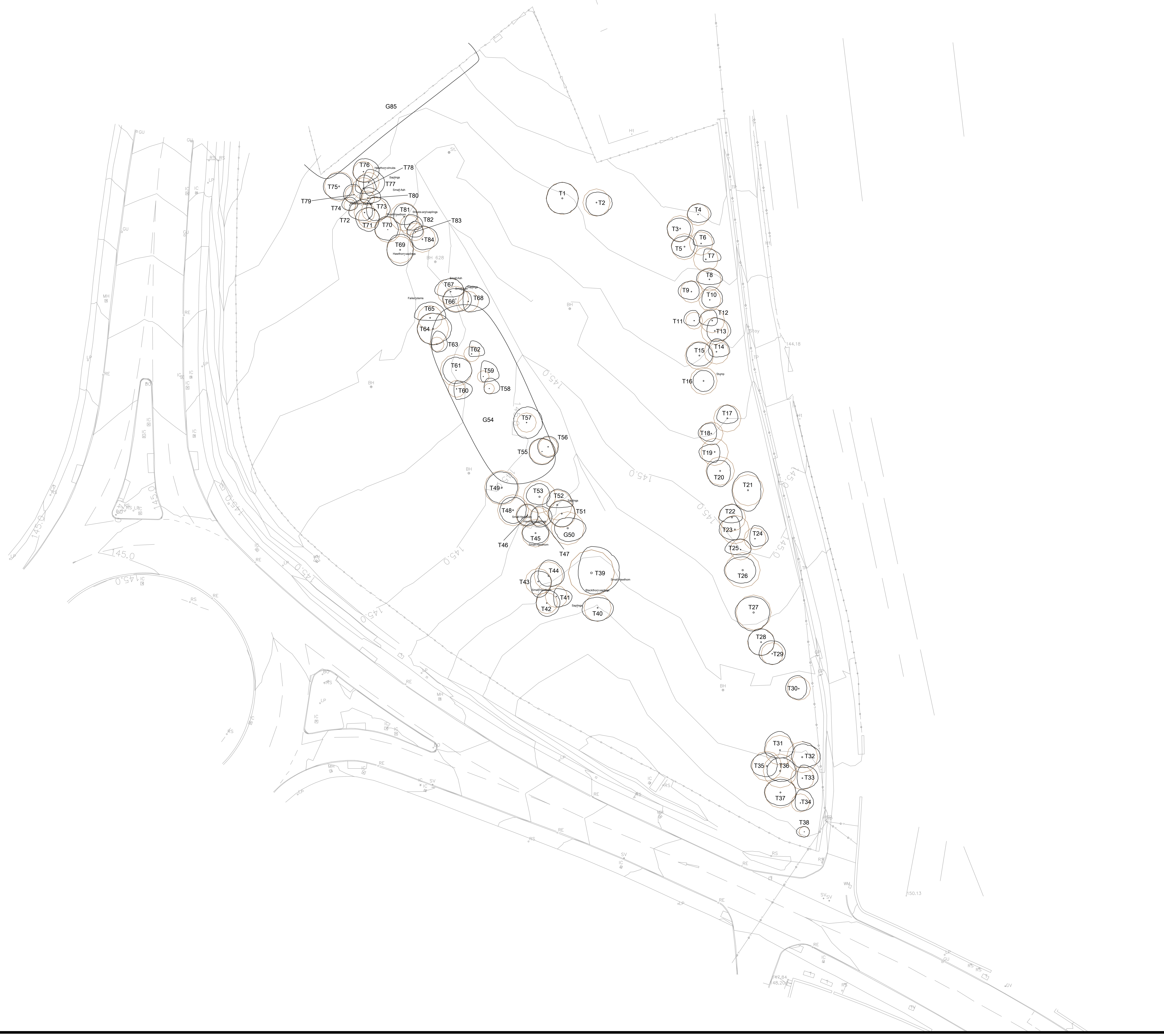
	Tree Species			Measurements				Crown (m)					Tree Condition							Value		Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Diameter (mm)*	*Estimated*	*Average Height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*
T59	Birch	*Betula pendula*	Young	6	1	90	No	2.5	3	3	1	1	No visual defects	Single stemmed. Significant lean north east. Epicormic growths	Minor deadwood		Good	Fair	20 to 40 yrs	Low	C	Removal required to facilitate development
T60	Alder	*Alnus incana*	Semi-mature	6.5	1	130	No	3	2	3	2	1	No visual defects	Single stemmed. Slight lean north east. Epicormic growths	Minor deadwood. Minor snapouts		Good	Fair	20 to 40 yrs	Low	C	Removal required to facilitate development
T61	Alder	*Alnus incana*	Semi-mature	8	6	100	No	1.5	3	3	3	3	No visual defects	Multiple stemmed at base. Vertical. Epicormic growths	Minor deadwood		Fair	Fair	20 to 40 yrs	Low	C	Removal required to facilitate development
T62	Birch	*Betula pendula*	Semi-mature	8	1	120	No	2	3	3	1	1	No visual defects	Single stemmed. Slight lean north east	Minor deadwood		Good	Good	20 to 40 yrs	Low	C	Removal required to facilitate development
T63	Birch	*Betula pendula*	Semi-mature	8	1	110	No	2	3	2	2	1	No visual defects	Single stemmed. Slight lean north east. Epicormic growths	Minor deadwood		Good	Good	20 to 40 yrs	Low	C	Removal required to facilitate development
T64	Alder	*Alnus incana*	Semi-mature	7.5	3	150, 140, 130	No	1.5	3	4	3	3	No visual defects	Multiple stemmed at 0.5m. Vertical. Tight unions	Minor deadwood		Fair	Fair	20 to 40 yrs	Low	C	Removal required to facilitate development

	Tree Species			Measurements				Crown (m)					Tree Condition							Value		Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Diameter (mm)*	*Estimated*	*Average Height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*
T65	Alder	*Alnus incana*	Semi-mature	7	3	140, 100, 80	No	2	3	3	1	3	No visual defects	Multiple stemmed at 0.5m. Vertical	Minor deadwood		Fair	Fair	20 to 40 yrs	Low	C	Removal required to facilitate development
T66	Alder	*Alnus incana*	Semi-mature	8	6	80	No	2	2	3	3	3	No visual defects	Multiple stemmed at base. Vertical	Minor deadwood. Minor snapouts		Fair	Fair	20 to 40 yrs	Low	C	Removal required to facilitate development
T67	Alder	*Alnus incana*	Semi-mature	8	5	160, 60, 60, 80, 60	No	1.5	3	3	1	3	No visual defects	Multiple stemmed at base. Vertical	Minor deadwood. Minor snapouts		Fair	Fair	20 to 40 yrs	Low	C	Removal required to facilitate development
T68	Poplar	*Populus alba*	Semi-mature	10	1	160	No	2	3	4	2	1	No visual defects	Single stemmed. Significant lean north east	Minor deadwood		Good	Fair	20 to 40 yrs	Low	C	Removal required to facilitate development
T69	Alder	*Alnus incana*	Semi-mature	8	2	170, 120	No	1.5	3	3	3	3	No visual defects	Twin stemmed at 0.5m. Vertical. Epicormic growths. Tight unions	Minor deadwood		Good	Fair	20 to 40 yrs	Low	C	Removal required to facilitate development
T70	Alder	*Alnus incana*	Semi-mature	8	6	80	No	1.5	3	2	2	3	No visual defects	Multiple stemmed at 0.5m. Vertical. Epicormic growths	Minor deadwood		Good	Fair	20 to 40 yrs	Low	C	Removal required to facilitate development

	Tree Species			Measurements				Crown (m)					Tree Condition							Value		Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Diameter (mm)*	*Estimated*	*Average Height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*
T71	Alder	*Alnus incana*	Semi-mature	7.5	2	80, 140	No	1.5	2	2	3	3	No visual defects	Twin stemmed at 0.5m. Vertical. Epicormic growths	Minor deadwood		Good	Fair	20 to 40 yrs	Low	C	No works required
T72	Alder	*Alnus incana*	Semi-mature	8	2	140, 80	No	1.5	3	2	2	3	No visual defects	Twin stemmed at base. Vertical. Epicormic growths	Minor deadwood		Good	Fair	20 to 40 yrs	Low	C	No works required
T73	Alder	*Alnus incana*	Semi-mature	8	2	170, 100	No	1.5	3	3	2	2	No visual defects	Twin stemmed at 0.5m. Slight lean north east. Bark damage	Minor deadwood		Good	Fair	20 to 40 yrs	Low	C	No works required
T74	Alder	*Alnus incana*	Young	5	1	90	No	2	2	2	1	2	No visual defects	Single stemmed. Slight lean north east. Epicormic growths	Minor deadwood		Good	Good	20 to 40 yrs	Low	C	No works required
T75	Alder	*Alnus incana*	Semi-mature	8	5	160, 60, 90, 100, 70	No	1.5	3	3	3	3	No visual defects	Multiple stemmed at 0.5m. Vertical. Bark damage	Minor deadwood	Twine wrapped around stem	Good	Fair	20 to 40 yrs	Low	C	No works required
T76	Oak	*Quercus robur*	Semi-mature	7	1	160	No	1.5	3	3	2	2	No visual defects	Single stemmed. Slight lean north east	Minor deadwood		Good	Good	>40 yrs	Low	C	No works required

	Tree Species			Measurements				Crown (m)					Tree Condition							Value		Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Diameter (mm)*	*Estimated*	*Average Height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*
T77	Oak	*Quercus robur*	Semi-mature	8	1	160	No	2	3	3	3	1	No visual defects	Single stemmed. Slight lean north east	Minor deadwood		Good	Good	20 to 40 yrs	Low	C	No works required
T78	Alder	*Alnus incana*	Semi-mature	7.5	2	150, 70	No	4	3	3	1	2	No visual defects	Twin stemmed at 0.5m. Vertical. Stubs	Minor deadwood. Minor snapouts		Good	Fair	20 to 40 yrs	Low	C	No works required
T79	Alder	*Alnus incana*	Semi-mature	8	1	140	No	3	2	2	2	2	No visual defects	Single stemmed. Vertical. Epicormic growths. Stubs	Minor deadwood		Good	Good	20 to 40 yrs	Low	C	No works required
T80	Oak	*Quercus robur*	Semi-mature	8	1	110	No	1.5	2	3	1	2	No visual defects	Single stemmed. Vertical. Bark damage	Minor deadwood	Long bark wound to western side of stem	Good	Good	>40 yrs	Low	C	No works required
T81	Alder	*Alnus incana*	Semi-mature	7.5	3	150, 130, 90	No	3	3	3	2	2	No visual defects	Multiple stemmed at 0.5m. Vertical	Minor deadwood		Good	Good	20 to 40 yrs	Low	C	No works required
T82	Alder	*Alnus incana*	Semi-mature	8	1	150	No	2	2	3	1	1	No visual defects	Single stemmed. Slight lean north east. Epicormic growths. Bark damage	Minor deadwood		Fair	Good	20 to 40 yrs	Low	C	Removal required to facilitate development

	Tree Species			Measurements				Crown (m)					Tree Condition							Value		Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Diameter (mm)*	*Estimated*	*Average Height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*
T83	Alder	*Alnus incana*	Semi-mature	7.5	2	90, 100	No	2	2	2	1	2	No visual defects	Twin stemmed at 0.5m. Vertical. Epicormic growths. Stubs	Moderate dieback. Minor deadwood. Minor snapouts	Significant dieback in crown	Poor	Fair	10 to 20 yrs	Low	C	Removal required to facilitate development
T84	Alder	*Alnus incana*	Semi-mature	8	2	170, 110	No	2	3	3	2	2	No visual defects	Twin stemmed at 0.5m. Vertical. Stubs. Bark damage	Minor deadwood		Good	Good	20 to 40 yrs	Low	C	Removal required to facilitate development
G85	Hawthorn. Alder	*Crataegus sp. Alnus sp.*	Semi-mature	7	10	80	Yes	1	See plan				Limited access around base	Single and Multiple stemmed	Minor deadwood	Adjacent, no access. Young to semi mature tree group. Predominantly shrubby Hawthorn with occasional Alder. Sporadic.	Fair	Fair	20 to 40 yrs	Low	C	No works required



TREE CONSULTANTS

Appendix 5:
Tree Constraints Plan

Cross Keys Lane, Hoyland, Barnsley
Ref: AWA5912

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

SCALE: 1:500 PAPER: A2

	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

PLANT AREA LOCATION TBC BY CLIENT. DETAILED DESIGN BY M&E ENGINEERS

PROPOSED SERVICE AREA SUBJECT TO TRACKING BY HIGHWAYS ENGINEERS. DETAILED DESIGN OF SERVICE RAMP BY STRUCTURAL ENGINEERS

EXISTING FRENCH DRAIN

ASSUMED SITE BOUNDARY

PROPOSED LAYOUT SUBJECT FINAL LEVEL STRATEGY

PROPOSED PEDESTRIAN ACCESS/FOOT BRIDGE. SUBJECT TO FINAL LEVEL STRATEGY, RETAINING WALL MAY BE REQUIRED TO EITHER SIDE. DETAILED DESIGN BY OTHERS

PROPOSED PARKING AND TURNING ZONES SUBJECT TO TRACKING BY HIGHWAYS ENGINEERS

EXISTING TREES/VEGETATION WITHIN SITE TO BE REMOVED WHERE REQUIRED SUBJECT TO ARBORICULTURAL ADVICE AND LPA APPROVAL

PROPOSED PEDESTRIAN ACCESS SUBJECT TO FINAL LEVEL STRATEGY, RETAINING WALL MAY BE REQUIRED TO EITHER SIDE. DETAILED DESIGN BY OTHERS

LAYOUT SUBJECT TO TRACKING BY HIGHWAY ENGINEERS

EXISTING JUNCTION RETAINED SUBJECT TO FURTHER REVIEW BY HIGHWAYS ENGINEERS AND LPA APPROVAL (INDICATIVE ONLY). IMPROVEMENT WORKS & DETAILED DESIGN BY HIGHWAY ENGINEERS/OTHERS

PROXIMITY OF REAR PROPERTY

PROPOSED LANDSCAPE BUFFER ZONE SUBJECT TO ARBORICULTURAL REVIEW

EXISTING PERIMETER TREES/VEGETATION TO BE REMOVED WHERE REQUIRED SUBJECT TO ARBORICULTURAL ADVICE AND LPA APPROVAL

PROPOSED ACCESS JUNCTION AT 4% GRADIENT SUBJECT TO FURTHER REVIEW BY HIGHWAYS ENGINEERS AND LPA APPROVAL

A6135

CROSS KEYS LANE

SHEFFIELD ROAD

LIDL BBS
ECO 2020.2
FFL+145.60

PLANT

1:3 LANDSCAPE EMBANKMENT

2.4 x 90m visibility splay

2.4 x 90m (tan) visibility splay

NORTH

AWA TREE CONSULTANTS

Appendix 6:
Tree Impacts Plan

Cross Keys Lane, Hoyland, Barnsley
Ref: AWA5912

BRITISH STANDARD 5837:2012

SCALE: 1:500 PAPER: A2

	TREE/ TREE GROUP/ HEDGE TO BE RETAINED
	TREE/ TREE GROUP/ HEDGE TO BE REMOVED
	RPA: ROOT PROTECTION AREA
	TREE STEM