

# M42 Junction 6 Improvement Scheme Number TR010027 Volume 6 6.3 Environmental Statement Appendix 8.2 Arboricultural Survey

Regulation 5(2)(a)

Planning Act 2008

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

January 2019



### Infrastructure Planning

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### **M42 Junction 6 Improvement**

Development Consent Order 201[-]

# 6.3 Environmental Statement Appendix 8.2 Arboricultural Survey

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## M42 Jct 6 Improvement Scheme Birmingham

### **Arboricultural Survey**

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### Contents

1	Introduction	3
2	Methodology	
_	•	
3	Results	5
4	Conclusions and Recommendations	9
Appe	ndix 1. Tree Survey Results – Table 1	.10
Table	2. Cascade Chart for the Quality Assessment	.30
Anne	ndix 2 Tree Constraints Plan	31



### 1 Introduction

- 1.1.1.1 This report presents the results of an Arboricultural Survey undertaken on land adjacent to the M42 and National Exhibition Centre, land South of Birmingham International Airport and on land surrounding and to the South of Bickenhill.
- 1.1.1.2 The Arboricultural Survey has been undertaken to inform development plans for the M42 Junction 6 Improvement Scheme.
- 1.1.1.3 The Arboricultural Survey included a Tree Constraints Survey which was conducted on 9<sup>th -</sup> 12<sup>th</sup> July and 1<sup>st</sup> October 2018 by James Stacey M.Arbor.A

Figure 1. Approximate boundary of the proposed development outlined in red (aerial imagery dated 2007).







### 2 Methodology

- 2.1.1.1 This arboricultural survey covers those trees or groups of trees which are considered relevant for the brief. During the survey all relevant individual trees and groups of trees located within and close to the boundary of the site were assessed. Trees with an estimated stem diameter of 75 mm or more that overhang the study area or are located within a distance of up to 12 times their estimated stem diameter were included in the survey.
- 2.1.1.2 The objective of the survey was to collect tree data relevant to the proposed works at the site and to categorise individual trees or tree groups in accordance with BS 5837:2012 'Trees in relation to design, demolition and construction Recommendations' based on their condition, quality and future potential.
- 2.1.1.3 The purpose of the categories within BS 5837:2012 is not to determine whether retention of trees is desirable, 'The purpose of the tree categorization method, which should be applied by the arboriculturist, is to identify the quality and value (in a non-fiscal sense) of the existing tree stock, allowing informed decisions to be made concerning which trees should be removed or retained in the event of the development occurring.' (BS 5837:2012, Section 4.5.2). This survey should therefore be regarded as an initial appraisal with observations recorded for trees within and adjacent to the site. Remedial tree works, foundation design and material specification are not covered within this report.
- 2.1.1.4 The location of the trees is shown within the attached Tree Constraints Plan (Appendix 2). A detailed inspection of the trees with respect to decay, defects and hazard is not included. The tree locations are as shown on the topographical drawing supplied.
- 2.1.1.5 The site survey was conducted on 9<sup>th</sup>-12<sup>th</sup> July and 1<sup>st</sup> October 2018 by James Stacey M.Arbor.A in accordance with the BS 5837:2012 methodology¹. The surveyors are appropriately qualified and experienced, having undertaken tree surveys for over 4 years and completed training courses in BS 5837:2012 survey methodology. Information collected during the survey included species, height, stem diameter, branch spread, height of crown clearance, age class, physiological condition, structural condition, estimated remaining contribution and category grade. The survey was made at ground level using visual assessment of the tree canopy and stem. No removal of vegetation, digging or drilling was undertaken during the survey and parts of the stems of some trees remained partly obscured by vegetation.
- 2.1.1.6 The TCP in Appendix 2 shows the positions, canopy spreads and Root Protection Areas RPA of the trees included within the survey. The RPA's have been calculated in accordance with Section 4.6 of BS 5837:2012. Although the RPA attempts to identify the area of each tree's root system which should be protected, the simplistic circles shown on the TCP does not take account of constraints such as buildings, land form, walls etc which may have restricted or influenced root development. Circular RPA's are considered to provide a reasonable guide to the extent of the likely rooting areas which should ideally be protected.
- 2.1.1.7 When considering the layout of the site and the retention of trees, proposals should generally be kept outside of both the RPA and the canopy spreads. However, it may be possible to encroach into these with access roads, footpaths and parking areas assuming the existing ground levels can be maintained and the appropriate construction methods are used. No liability can be accepted by Quants Environmental in respect of the trees or for events which happen after the time of the survey.

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<sup>&</sup>lt;sup>1</sup> British Standards Institution (BSI) BS 5837:2012. Trees in relation to design, demolition and construction – Recommendations. Published by BSI Standards Limited 2012. ISBN 978 0 58069917 7.



### 3 Results

- 3.1.1.1 The survey results are shown in Appendix 1 (Tree Survey Results Table 1) and Appendix 2 (Tree Constraints Plan). The trees included within this survey comprise of 72 individual trees, 110 tree groups, 44 hedgerow groups and 3 woodland groups
  - 12 individual trees were classified as Category A trees.
  - 5 tree groups were classified as Category A trees.
  - 3 woodland groups were classified as Category A trees.
  - 26 individual trees were classified as Category B trees.
  - 41 tree groups were classified as Category B trees.
  - 6 hedge groups were classified as Category B trees.
  - 29 individual trees were classified as Category C trees.
  - 63 tree groups were classified as Category C trees.
  - 38 hedge groups were classified as Category C trees.
  - 6 individual trees were classified as Category U trees.
  - 1 tree group was classified as Category U trees.
- 3.1.1.2 The proposal covers 3 main areas; the roundabout junction for Birmingham airport extending South through the village of Bickenhill and across agricultural land to Solihull Road, South of Solihull road covering land either side of the M42 and Land around junction 6 of the M42 and either side of the motorway North of the junction.
- 3.1.1.3 The land around the village of Bickenhill and South of the airport junction is mainly agricultural land of mixed use, including grass pasture and arable crop production. The village provides a small area of residential use, but the majority of the proposal area covers boundary trees and woodlands within open grass and arable fields. The species composition in this area comprises of mainly oak *Quercus robur*, ash *Fraxinus excelsior*, maple *Acer sp*, hawthorn *Crataegus monogyna*
- 3.1.1.4 Land to the South of Solihull Road is predominantly agricultural arable land with woodland plots immediately South of Solihull Road. This site is dissected by the M42 motorway which runs North/South through the central part. The species in this area consist of oak, *Quercus robur*, poplar *Populus sp*, maple *Acer sp*, hawthorn *Crataegus monogyna*, willow *Salix sp*, ash *Fraxinus excelsior*, birch *Betula pendula*, pine *Pinus sp* and blackthorn *Prunus spinosa*.



- 3.1.1.5 Land around junction 6 and to the North is of mixed use. The National Exhibition Centre (NEC) is located on the West of the M42 motorway and is heavily urbanised with mainly car parking facilities buffering the trees within the proposal area, shelter belts of trees separate the parking areas from the motorway. To the East the land is predominantly open common land with sporadic areas of self sown trees. To the South East of the Junction the land has mixed uses with industrial units and road intersection junctions. Trees are predominantly located on intersecting land which is unmanaged and generally derelict. Shelter belt planting is found around the junction to the East of the Motorcycle museum. Species in this area comprise predominantly of the pioneer species such as willow Salix sp, birch, Betula pendula, alder Alnus sp, in areas where self sown trees dominate. Other species include oak Quercus robur, ash Fraxinus excelsior, poplar Populus sp, cherry Prunus avium, maple Acer sp and hawthorn Crataegus monogyna in areas where trees have been planted as part of shelter belts or in agricultural land.
- 3.1.1.6 A TPO check of the overall proposal site was carried out through Solihull Metropolitan Borough Council which identified that there are no Tree Preservation Orders on any tree within the proposal area, however the large woodland of Barbers Coppice to the South of Bickenhill which borders the proposal area is covered by TPO order TPO/00270.
- 3.1.1.7 The Bickenhill Conservation Area covers the Northern part of the village and contains parts of G6, G7 and G8 within its boundary.
- 3.1.1.8 Site of Special Scientific Interest (SSSI) status is afforded to areas of land in which G4 and T11 T15 are located. The Wildlife Trusts Shadowbrook Meadows Nature Reserve is also designated as a SSSI.
- 3.1.1.9 The woodland groups of W2 and W3 in the Southern site along with Barbers Coppice which borders the proposal area are designated as Ancient Replanted Woodlands.
- 3.1.1.10 All woodland groups, W1-W3 and tree groups G62, G64, G65, G68, G33, G31 and part of G32 are designated as Priority Habitat for Deciduous Woodland.
- 3.1.1.11 T11 and T20 are both very large mature oak *Quercus robur* which exhibit good condition. Due to the size of both trees, with stem diameters in excess of 1000mm and good condition, both trees are of significant arboricultural note with potential cultural links to the site. These two trees are considered to be BS5837:2012 Category A1.
- 3.1.1.12 T38, T46, T58, T59, T60, T64, T70, T71, T72, G106, G107 and G108 are all large mature oak *Quercus robur* which are located along field boundaries within hedgerows. These trees exhibit a range of conditions but all are a substantial size and therefore age and are of cultural value to the local landscape. All are considered to be BS5837:2012 Category A3.
- 3.1.1.13 G101 is a group of mature trees consisting of a mix of species including lime *Tilia sp*, oak *Quercus robur*, ash *Fraxinus excelsior* and Norway maple *Acer platanoides*. All exhibit good condition and provide an area of mature tree canopy cover within the residential area of the village of Bickenhill. This group is considered to be BS5837:2012 Category A2.
- 3.1.1.14 W1 is a small woodland plot of mature trees. The central part of the woodland is very dense with multiple fallen trees and damaged limbs. There is very dense undergrowth indicating a lack of management of the woodland. W1 provides a large area of mature canopy cover and is a distinctive feature within a predominantly agricultural area with mainly flat open fields. W1 is designated as priority habitat for deciduous woodland. It is therefore considered to be BS5837:2012 Category A2.



- 3.1.1.15 W2 and W3 are both woodland plots located to the South of Solihull Road and either side of the M42 motorway. Both woodlands are designated as ancient replanted woodlands. The nature of tree growth is evident of this with the trees growing densely in planted rows. The woodland has not seen management in recent history and has become overgrown with multiple dead, dying and fallen trees within. Both woodland plots are also designated as priority habitat for deciduous woodland. Both provide a significant area of mature canopy cover in a predominantly flat agricultural landscape and are prominent features within the surrounding environment. They are considered to be BS5837:2012 Category A2.
- 3.1.1.16 T2-T4, T7-T9, T18-T19, T22-T26, T43, T45 and T51 are all mature trees of predominantly oak *Quercus robur* which are situated along boundary hedgerows. All exhibit generally good condition but do not have significant features of arboricultural note or cultural/landscape significance and are therefore considered to be BS5837:2012 Category B1.
- 3.1.1.17 T28, T39, T40, T42 and T66 are mature trees which are stand alone but form part of the wider landscape. None exhibit significant arboricultural features of note but are none the less good quality trees within the surrounding landscape. They are considered to be BS5837:2012 Category B2.
- 3.1.1.18 T56, T57, T61, T68 and T69 are trees which are in poor condition and show signs of significant decline. However, they do not exhibit features or the age to be considered veteran trees. Their poor condition does however provide good habitat features and they are therefore considered to be BS5837:2012 Category B3.
- 3.1.1.19 G6, G7, G11 and G12 are all hedgerow groups of trees. Each group consists of full trees with dense shrub understorey. Each group is situated along the carriageway of Catherine de Barnes Lane passing the village of Bickenhill. These tree groups provide a screen between the busy main road and the village and will provide a sound barrier from the traffic as well the noise from the nearby airport. The groups also provide wildlife corridors of canopy cover. They are considered to be BS5837:2012 Category B2.
- 3.1.1.20 G13, G16, G28, G29 and G30 are groups of predominantly oak *Quercus robur* exhibiting overall good condition. These trees are not however of significant size or form. They are all located along field boundary hedgerows and are considered to be BS5837:2012 Category B2.
- 3.1.1.21 G19 and G27 are groups of planted shelter belt trees along the North side of Solihull road and are situated either side of the M42. Both groups exhibit early mature trees which are in good condition and provide good screening from the road and are a good visual feature along the road side for approaches to the fly over bridge. Both are considered to be BS5837:2012 Category B2.
- 3.1.1.22 G20 is a group of mature trees along a field boundary to the south of W2. There are large mature trees within this group with some exhibiting damage and poor condition. One large ash *Fraxinus* excelsior contains large fungal brackets of *Inonotus hispidus* indication a high potential for failure. G20 is therefore considered to be BS5837:2012 Category B2.
- 3.1.1.23 G31-G33 are plantations of trees forming shelter belts and a woodland plot on the intersection junction to the East of the Motorcycle museum. These provide good visual impact along the road sides. There is considerable mature tree canopy cover and these groups are likely to host a range of habitats. They are considered to be BS5837:2012 Category B2.
- 3.1.1.24 G45-G49 are plantations of trees which are located around the roundabout junction of the A45 for the Airport. All have been planted and exhibit good condition and form and have good woodland structure in the larger groups. They provide good visual amenity around a busy road junction and will reduce noise pollution for the nearby village of Bickenhill. All are considered to be BS5837:32012 Category B2.



- 3.1.1.25 G57 and G58 are hedgerow groups of trees which are planted evenly with understorey hedging of hawthorn *Crataegus monogyna* and blackthorn *Prunus spinosa* which has been managed to provide a good visual impact along the roadside. The evenly planted trees and the understorey hedging provides a wildlife corridor at multiple levels providing significant habitat. Both are considered to be BS5837:2012 Category B2.
- 3.1.1.26 G59 and G60 are groups of trees within the grass verge on the access road to the village of Bickenhill. All trees show good condition and have good visual amenity value for the village landscape. They are considered to be BS5837:2012 Category B2.
- 3.1.1.27 G61 and G110 are both rows of mature oak *Quercus robur* situated either side of Catherine de Barnes Lane at the Southern end of the road. All trees show relatively good condition with a small number of damaged trees. They provide good screening and a visual impact along the road forming an avenue of mature canopy. They are considered to be BS5837:2012 Category B2.
- 3.1.1.28 G62 G71 are all groups of trees located along the Western boundary to the M42 North of junction 6. All are shelter belt plantations of trees which separate the NEC from the motorway and provide good screening and sound barrier to the site. The trees also provide a visual impact along the side of the motorway. All groups show signs of lack of management and have dense growth and understorey. All are considered to be BS5837:2012 Category B2.
- 3.1.1.29 G79 is a small woodland copse located on land adjacent to the slip road from junction 6. The group contains many damaged trees but provides a good area of woodland habitat and is considered to be BS5837:2012 category B2.
- 3.1.1.30 G81 is a shelter belt of semi mature mixed species trees located along the M42 boundary providing a corridor of tree canopy and visual impact for the motorway. It is considered to be BS5837:2012 Category B2.
- 3.1.1.31 G86 is a group of mature trees situated along the Southern boundary of the common land East of the M42. These are mature trees providing good habitat and screening from the road. These trees are considered to be BS5837:2012 Category B2.
- 3.1.1.32 G93 is a group of 7 lombardy poplar *Populus nigra 'Italica'* which are located along the boundary to the railway. They provide good screening and noise deflection from the railway and a visual impact along the railway itself. The very tall nature of their growth provided a distinctive impact upon the local landscape. They are considered to be BS5837:2012.
- 3.1.1.33 G100 is a groups of mixed species trees consisting of birch *Betula pendula*, lime *Tilia sp* and maple *Acer sp*. They are located along the front boundary to the hotel and are all in good condition. They are considered to be BS5837:2012 Category B2.
- 3.1.1.34 G105 is a group of mature mixed species of trees located around a small pond. This small area of densely grown trees provides an area of good mixed habitat value in a predominantly agricultural surrounding landscape. It is considered to be BS5837:2012 Category B2.
- 3.1.1.35 H3, H10, H13, H29, H37 and H42 are all hedgerows which exhibit good condition and provide a significant visual and landscape amenity value to the local environment and are considered to be BS5837:2012 Category B2.
- 3.1.1.36 The remaining trees are all of lesser quality in terms of health and condition and do not provide significant impacts in terms of visual and landscape amenity and are therefore considered to be BS5837:2012 Category C.
- 3.1.1.37 T6, T10, T16, T30, T41, T52 and G36 are all trees which have either died or are in significant decline through disease and damage and are unlikely to survive more than 10 years. All are considered to be BS5837:2012 Category U.



### 4 Conclusions and Recommendations

- 4.1.1.1 During the survey 72 individual trees 110 tree groups, 44 hedgerow groups and 3 woodland groups were surveyed (refer to Appendices 2 and 3).
- 4.1.1.2 Many of the high value individual trees are old mature oaks which are located along field boundaries. Due to their size they are likely to be of considerable age and have particular cultural links to the history of the surrounding landscape.
- 4.1.1.3 The tree groups and hedgerow trees to the East along Catherine de Barnes Lane currently provide a screen from the busy road and will actively reduce the noise from the road and the adjacent nearby airport to the village of Bickenhill. The trees and vegetation here also currently provide visual amenity forming an avenue of tree canopy along the road.
- 4.1.1.4 The tree groups located along the M42 between the road and NEC provide a significant area of mature canopy cover in a predominantly urban landscape. These groups also provide a wildlife corridor through this heavily built up landscape.
- 4.1.1.5 The woodland groups to the South also provide large areas of mature canopy cover and are likely to support a range of habitats and eco systems.
- 4.1.1.6 It is recommended that where possible Category A trees and tree groups be retained and that the impact upon the tree groups is planned to a minimum.
- 4.1.1.7 It is also recommended that, where possible, trees and tree groups which currently provide screening and which also act as a noise barrier are retained, or the impact minimised, in order to provide continued benefits to the village.
- 4.1.1.8 When a proposed site plan is available, an Arboricultural Impact Assessment should be completed to determine the impact of the development on the trees on site. The information presented in this report should be used to inform the layout of the development. Further survey work may subsequently be required in order to inform the development and to guide mitigation options.
- 4.1.1.9 An Arboricultural Tree Protection Plan and Working Method Statement should be produced prior to works commencing on site. This should be informed by the Arboricultural Impact Assessment based on the final site layout. The Arboricultural Tree Protection Plan and Working Method Statement should cover detailed methods for construction and operation within any of the RPAs in order to minimise the potential for adverse effects on these trees, e.g. digging using hand tools and supervision by a suitably qualified arboriculturist, in accordance with BS5837:2012. During supervised work within the RPAs and canopies, if trees are considered to become unsafe (e.g. due to unavoidable severance of significant roots), such trees may need to be felled by a qualified tree surgeon. Any such loss of trees should be mitigated where practicable with replacement tree planting on site, to be agreed with the Local Planning Authority. The Arboricultural Tree Protection Plan and Working Method Statement should cover compensation planting as required.
- 4.1.1.10 Detailed methods for construction and operation should be developed in order to minimise the potential for adverse effects on trees.
- 4.1.1.11 Where appropriate, all the trees to be retained should be protected with a tree protection fence in line with BS5837:2012 current recommendations.
- 4.1.1.12 The loss of any trees should be mitigated where practicable with replacement tree planting on site, to be agreed with the Local Planning Authority. Any new landscaping should be maintained to promote longevity.



### Appendix 1. Tree Survey Results – Table 1

Tree/	Plan	Charica	Height	Cro	wn S	oread	(m)	Stem	Age	Physiological	Con disting	Management	EDO	Cat	Radius of	
Group Ref No.	Reference	Species	(m)	W	N	S	E	diameter (mm)	class	Condition	Condition	recommendations	ERC	Grade	Nominal Circle (m)	RPA SqM
T1	Sheet 7	Fraxinus excelsior	17.5	8.5	9	9	7.5	520	M	F	Mature ash in boundary. Some deadwood throughout crown and sparse leaf coverage.	Remove or retain as per development plans	20+	C1	6.24	122.34
T2	Sheet 8	Quercus robur	15.5	5.5	6	7	6	900	М	G	Boundary tree. Large crown. Good overall condition.	Retain where possible	30+	B1	10.8	366.48
Т3	Sheet 8	Quercus robur	17.5	6	6	5.5	6.5	840	M	G-F	Boundary tree, large crown, some deadwood throughout crown overall good condition	Retain where possible	30+	B1	10.08	319.25
T4	Sheet 8	Quercus robur	16.5	11	10	9	10	1000	M	G	Boundary tree with very large crown. Overall good condition.	Retain where possible	30+	B1	12	452.45
T5	Sheet 8	Salix caprea	4.5	2	2	2	2	120	SM	G	Small multi stemmed willow in corner of boundary. Good overall condition.	Remove or retain as per development plans	20+	C1	1.44	6.52
T6	Sheet 8	Quercus robur	12	4.5	4.5	4.5	4.5	620	M	P	Large oak on boundary fence. In significant decline with significant dead limbs.	Remove	<10	U	7.44	173.92
T7	Sheet 8	Quercus robur	14	7	8	8	4	750	M	G	Large mature oak on boundary.  Overall good condition.	Retain where possible	30+	B1	9	254.50
Т8	Sheet 8	Quercus robur	16.5	8	8.5	8.5	7.5	1100	М	G	Very large mature oak. Good overall condition.	Retain where possible	30+	B1	13.2	547.46
T9	Sheet 8	Quercus robur	12.5	5	4	5.5	4.5	600	M	G	Mature oak on field boundary. Some minor deadwood throughout. Overall good condition	Retain where possible	30+	B1	7.2	162.88
T10	Sheet 8	Quercus robur	10.5	6	6.5	5.5	5	650	M	P	Tree has significant bark damage through out main stem and scaffold limbs. Some significant cavities.	Remove	<10	U	7.8	191.16
T11	Sheet 6	Quercus robur	17	8	8	10	7.5	1270	M	G	Very large mature oak on field boundary at Edge of dense vegetation. Very large crown, Some deadwood and branch failure wounds but overall in good condition	Retain	30+	A1	15.24	729.75
T12	Sheet 6	Quercus robur	12	6		6	6	700		G	Large mature oak on edge of group of dense trees and shrubs.	Remove or retain as per development plans	30+	C1	8.4	221.70
T13	Sheet 7	Quercus robur	14	5		5		650		G	Large mature oak on boundary and adjacent to dense vegetation. Good overall condition	Remove or retain as per development plans	30+	C1	7.8	191.16
T14	Sheet 7	Quercus robur	11	8	6			1000		Р	Large oak tree in decline with large deadwood. Poor condition.	Remove or retain as per development plans	10+	C1	12	452.45
T15	Sheet 7	Quercus robur	12	8	8	8		800		P	Large mature oak with signs of decline and large sections of deadwood. Poor overall condition.	Remove or retain as per development plans	10+	C1	9.6	289.57
T16	Sheet 8	Fraxinus excelsior	7.5	3.5	3.5	3.5	3.5	600	M	Р	Major cavity and decay in main stem leading to past failure of main stem and upper tree. Re growth has formed from surviving lower branches and stem.	Remove	<10	U	7.2	162.88



Tree/	Plan		Height	Cro	wn Sp	read	(m)	Stem	Age	Physiological		Management		Cat	Radius of	
Group Ref No.	Reference	Species	(m)	W	N	s	E	diameter (mm)	class	Condition	Condition	recommendations	ERC	Grade	Nominal Circle (m)	RPA SqM
T17	Sheet 8	Quercus robur	16	4	6	7	5.5	880	M	F	Large oak with uneven crown. Loss of canopy on N side. Large damaged limb in upper crown.	Remove or retain as per development plans	20+	C1	10.56	350.38
T18	Sheet 8	Quercus robur	10	3	6	3.5	4.5	300	SM	G	Oak tree on boundary in good condition with no obvious defects.	Retain where possible	40+	B1	3.6	40.72
T19	Sheet 8	Quercus robur	10.5	5	6	6	4.5	600	M	G	Oak tree in boundary hedge with short wide crown. No obvious defects, overall good condition.	Retain where possible	30+	B1	7.2	162.88
T20	Sheet 8	Quercus robur	24	11	10	12	10	1200	M	G	Very large mature oak on corner of woodland copse. Minor deadwood throughout. Overall good condition.	Retain	30+	A1	14.4	651.53
T21	Sheet 8	Quercus robur	13.5	5.5	6	5	6.5	700	M	F	Mature oak in boundary hedge. Multiple woodpecker holes in large limbs with possibility for weakening in these areas.	Remove or retain as per development plans	20+	C1	8.4	221.70
T22	Sheet 8	Fraxinus excelsior	21	9	10	9	9	720	M	F	Large ash in boundary hedge Large wide crown with minor deadwood throughout. No significant concerns identified,	Retain where possible	30+	B1	8.64	234.55
T23	Sheet 8	Quercus robur	18	9	9	9	9	920	М	G	Large mature oak on boundary. No obvious defects.	Retain where possible	30+	B1	11.04	382.95
T24	Sheet 8	Quercus robur	11.5	6	6.5	7.5	7.5	850	М	G	Large mature oak, some minor deadwood throughout crown. Overall good condition.	Retain where possible	30+	B1	10.2	326.89
T25	Sheet 9	Quercus robur	14.5	6	6	8	8	790	М	G	Mature oak in boundary hedge. Some minor deadwood in crown. Overall good condition.	Retain where possible	30+	B1	9.48	282.37
T26	Sheet 9	Quercus robur	15	6.5	5.5	8	7	1060	М	G	Large wide crown, some minor deadwood, overall good condition.	Retain where possible	30+	B1	12.72	508.37
T27	Sheet 10	Quercus robur	13.5	7	7	7	7	840	M	F	Large mature oak in corner plot of land adjacent to M42. Some damage to bark on E side of stem and dead limbs in upper crown.	Remove or retain as per development plans	20+	C2	10.08	319.25
T28	Sheet 10	Quercus robur	18.5	10	10	10	10	1510	М	F	Very large old over mature oak tree. Significant deadwood within crown and crown coverage becoming sparse. Tree is potentially in senescence stage of life.	Retain where possible	20+	B2	18.12	1,031.63
T29	Sheet 10	Quercus robur	12	5	5	5	3	350	М	G	Oak tree located on M42 verge.	Remove or retain as per development plans	30+	C2	4.2	55.42
T30	Sheet 10	Dead	14.5	3	3	3	3	500		D	Dead tree in middle of field	Remove	Dead	U	6	113.11
T31	Sheet 10	Quercus robur	9.5	3.5	3.5	3.5	3.5	350	М	G	Oak tree located on M42 boundary.	Remove or retain as per development plans	30+	C2	4.2	55.42
T32	Sheet 9	Quercus robur	13.5	6	6	6	3	900	M	F	Large oak in corner of field adjacent to M42 boundary. Some deadwood on field side but overall exhibiting fair condition.	Remove or retain as per development plans	20+	C2	10.8	366.48



Tree/	Plan		Height	Cro	wn Sp	read	(m)	Stem	Age	Physiological		Management		Cat	Radius of	
Group Ref No.	Reference	Species	(m)	W	N	s	E	diameter (mm)	class	Condition	Condition	recommendations	ERC	Grade	Nominal Circle (m)	RPA SqM
T33	Sheet 9	Quercus robur	13	6	6	6	6	800	М	F	Large oak with large sections of deadwood and areas of dieback in upper crown.	Remove or retain as per development plans	20+	C2	9.6	289.57
T34	Sheet 9	Fraxinus excelsior	16	8	6	6	6	800		F-P	Large ash with significant dieback in upper crown and high quantity of deadwood.	Remove or retain as per development plans	10+	C2	9.6	289.57
T35	Sheet 9	Quercus robur	11	3.5	4.5	3	4	800	M	F	Large oak with multiple branch failures and deadwood. Overall fair condition with healthy leaf growth.	Remove or retain as per development plans	30+	C2	9.6	289.57
T36	Sheet 9	Fraxinus excelsior	18	8	8	8	8	900	М	F-P	Large ash with dieback in upper crown, significant deadwood and failed limbs.	Remove or retain as per development plans	10+	C2	10.8	366.48
T37	Sheet 3	Picea sp	10	3	3	3	3	280	М	G	Spruce tree located in hedge line. Exhibits good condition.	Remove or retain as per development plans	20+	C1	3.36	35.47
T38	Sheet 3	Quercus robur	18.5	10	8	11	9	1310	М	F	Very large tree with very wide crown. Large section of deadwood in central crown with possible cavity forming into main stem. Other deadwood throughout crown is normal for species and age.	Retain	30+	A3	15.72	776.45
T39	Sheet 3	Quercus robur	17	4.5	6	7	7	800		G	Mature oak tree in hedgerow, overall exhibits good health.	Retain where possible	30+	B2	9.6	289.57
T40	Sheet 3	Quercus robur	12	4	8	5	6.5	750	M	F	Mature oak in middle of field. Slightly uneven crown and there are presence of cavities at the base of the stem.	Retain where possible	20+	B2	9	254.50
T41	Sheet 3	Quercus robur	14	8	8	8	8	800	D	D	Standing dead tree which has been dead a long period of time as bark has fallen from majority of upper crown.	Remove	Dead	U	9.6	289.57
T42	Sheet 3	Quercus robur	12.5		5.5		7	810		F	Mature oak in centre of field, deadwood throughout crown.	Retain where possible	30+	B2	9.72	296.85
T43	Sheet 6	Fraxinus sp	15.3	3		3	4	300		G	Ash tree in hedge, overall good condition.	Retain where possible	30+	B1	3.6	40.72
T44	Sheet 6	Fraxinus excelsior	11	4.5	4.5	4.5	4.5	300	М	G	Single ash tree located in triangle of grass on road junction. Good condition.	Remove or retain as per development plans	30+	C1	3.6	40.72
T45	Sheet 1	Quercus robur	9.5	4	4	4	4	500	M	G	Mature oak tree which is short with a wide crown. Previously pruned to gain statutory clearance from over head power line.	Retain where possible	30+	B1	6	113.11
T46	Sheet 7	Quercus robur	13.5	6	6	6	6	1070		F	Large mature oak in relatively good health. Minor deadwood throughout crown which is normal for species at this age and size.	Retain	30+	A3	12.84	518.01
T47	Sheet 4	Betula pendula	13		2.5			230		G	Mature birch tree located at top off bank adjacent to hotel car park. Exhibits good health with no obvious defects.	Remove or retain as per development plans	20+	C1	2.76	23.93
T48	Sheet 4	Betula pendula	13				3	200		G	Mature birch within derelict ground adjacent to railway.	Remove or retain as per development plans	10+	C1	2.4	18.10



Tree/	Plan	Charles	Height	Cro	wn Sp	oread	(m)	Stem	Age	Physiological	Con distant	Management	EDO	Cat	Radius of	
Group Ref No.	Reference	Species	(m)	W	N	s	Е	diameter (mm)	class	Condition	Condition	recommendations	ERC	Grade	Nominal Circle (m)	RPA SqM
T49	Sheet 4	Betula pendula	13	3	3	3	3	200	М	G	Mature birch within derelict ground adjacent to railway.	Remove or retain as per development plans	10+	C1	2.4	18.10
T50	Sheet 4	Salix sepulcralis	14	7	5	5	4	470	M	G	Large mature willow on top of bank adjacent to railway. Large wide crown, No obvious defects identified.	Remove or retain as per development plans	20+	C1	5.64	99.95
T51	Sheet 5	Acer platanoides	12	5	4	5	5.5	360	М	G	Large mature maple in grassed area in good condition	Retain where possible	30+	B1	4.32	58.64
T52	Sheet 5	Sorbus aucuparia	6.5	2.5	2.5	2	0.5	160	M	P	Small suppressed rowan with over 50% dead crown		<10	U	1.92	11.58
T53	Sheet 5	Sorbus aucuparia	5	2.5	1.5	1	1.5	110	M	F	Small rowan with some deadwood and damaged limbs	Remove or retain as per development plans	10+	C1	1.32	5.47
T54	Sheet 5	Acer platanoides	12	4.5	5	6	5.5	430	M	F	Large mature maple with deadwood throughout lower crown.	Remove or retain as per development plans	20+	C1	5.16	83.66
T55	Sheet 5	Alnus glutinosa	11.5	2	3.5	3	4	280	М	G	Mature alder in grassed area in good condition and health.	Remove or retain as per development plans	20+	C1	3.36	35.47
											Mature oak in hedgerow growing closely adjacent to neighbour tree. Deadwood within crown and uneven crown due to close neighbour, Both trees form one					
T56	Sheet 8 Sheet 8	Quercus robur  Quercus robur	12		5.5	5	5	630		F	large crown.  Mature oak in hedgerow growing closely adjacent to neighbour tree. Deadwood within crown and uneven crown due to close neighbour, Both trees form one large crown.	Retain where possible  Retain where possible	30+	B3 B3	7.56	179.58 191.16
T58	Sheet 8	Quercus robur	17.5	7	5.5		5.5			F	Large mature oak in hedge line, large stem diameter indicating tree is approx 200-250 years old and possible original hedgerow planting as per acts. Large sections of deadwood within crown, especially on S side.	Retain	30+	A3	12	452.45
130	Officer 0	Quercus robui	17.5	,	0.0		3.3	1000	IVI	1	Large mature oak in hedge line, large stem diameter indicating tree is approx 200-250 years old and possible original hedgerow planting	Netain	301	AS	12	432.40
T59	Sheet 8	Quercus robur	13	6	6	6.5	5.5	830	М	G	as per acts.	Retain	30+	А3	9.96	311.69
T60	Sheet 8	Quercus robur	21	12	11	7	8.2	920	М	G	Large mature oak with very large crown and stem diameter indicating tree is approx 200-250 years old and possibly pre dates enclosure acts. Cultural significance.  Deadwood within crown but over all good condition.	Retain	30+	A3	11.04	382.95
T61	Sheet 8	Quercus robur	12	7.5	3	7	5.5	690	M	F	Mature oak growing within the crown of T60 and therefore suppressed in height and crown spread, Large section of deadwood in N side of crown.	Retain where possible	30+	B3	8.28	215.41



Tree/	Plan	Species	Height	Cro	wn Sp	oread	(m)	Stem diameter	Age	Physiological	Condition	Management	ERC	Cat	Radius of Nominal	
Group Ref No.	Reference	Species	(m)	W	N	s	E	(mm)	class	Condition		recommendations	ERC	Grade	Circle (m)	RPA SqM
T62	Sheet 8	Quercus robur	10	3	2.5	4.5	3.5	530	M	Р	Tree is in decline with crown undergoing significant retrenchment. Large sections of deadwood in outer crown.	Remove or retain as per development plans	10+	C3	6.36	127.09
T63	Sheet 9	Fraxinus excelsior	15	6	5.5	7	5.5	560	M	F	Mature ash in hedgerow with die back throughout crown and deadwood. Tree in early decline	Remove or retain as per development plans	10+	C2	6.72	141.89
T64	Sheet 9	Quercus robur	15.7	6.5	7	7.5	8.5	910	M	G	Mature oak with large wide crown and large stem diameter indicating approx 200-250 years old and possibly predating enclosure acts. Cultural significance.	Retain	30+	A3	10.92	374.67
T65	Sheet 9	Fraxinus excelsior	16.5	4.5	2.5	9	5.5	650	M	P	Mature ash with large tear out wound on S side of stem with cavity which extends axially up into upper stem. Reaction wood produced but decay is progressing with North secondary stem having previously failed.	Remove	10+	C3	7.8	191.16
T66	Sheet 9	Populus nigra	32	13	11	16	12	1270	М	G	Very large poplar with very large wide crown. No obvious defects and no significant features of arboriculture note.	Retain where possible	10+	B2	15.24	729.75
T67	Sheet 9	Fraxinus excelsior	12.5	6	4.5	6.5	6	1020	M	Р	Mature tree in late stages of decline, with multiple large extensive decay cavities and over 50% of crown is dead. Tree is not of of a significant size to indicate veteran status, simply a decayed damaged tree. Good habitat however.	Remove or retain as per development plans	<10	C3	12.24	470.73
T68	Sheet 9	Quercus robur	13.5	5.5	5.5	4.5	5	590	М	F	Mature oak in hedgerow. Fungal bracket of Inonotus obliqus on E of stem. Minor deadwood in crown.	Retain where possible	20+	B3	7.08	157.50
											Mature oak on field edge. Uneven crown due to suppression from neighbouring larger tree. Large sections of deadwood throughout					
T69	Sheet 9	Quercus robur	11			7.5	5.5	570		F	crown.  Mature oak in hedgerow, no obvious defects, overall good health, potentially old tree pre	Retain where possible	20+	B3	6.84	147.00
T70	Sheet 9 Sheet 9	Quercus robur  Quercus robur	13		4.5	7.5	5.5	1210		G F-P	dating enclosure act,  Fungal bracket of Inonotus dryadeus at base of tree, old brackets, no new growth at time of inspection	Retain Retain	30+	A3	9.96	311.69
T72	Sheet 9	Quercus robur	12			8.5	7.5	920		F	Large mature oak in hedgerow, potentially old tree to pre date enclosure acts. original boundary tree. Dense ivy at base around stem making inspection difficult.	Retain	30+	A3	11.04	382.95



Tree/	roup Plan Species		Height	Cro	wn Sp	oread	(m)	Stem	Age	Physiological	Condition	Management	ERC	Cat	Radius of	
Ref No.	Reference	Species	(m)	W	N	S	Е	diameter (mm)	class	Condition	Condition	recommendations	ERC	Grade	Nominal Circle (m)	RPA SqM
G1	Sheet 7	Fraxinus excelsior, Quercus robur	4	1.5	1.5	1.5	1.5	90	SM	G	Group of young trees on fence line to sports ground.	Remove or retain as per development plans	40+	C2	1.08	3.66
G2	Sheet 7	Crataegus sp, Acer sp, Salix sp,	10	3.5	3.5	3.5	3.5	200	М	G-F	Group of mature trees on boundary fence of sports ground. Managed laterally to 2m only. Some damaged and snapped branches within group.	Remove or retain as per development plans	20+	C2	2.4	18.10
G3	Sheet 6	Sambuccus nigra	4.5	3		3	3	200	М	F	Group of elder growing against embankment on lower ground.	Remove or retain as per development plans	20+	C2	2.4	18.10
G4	Sheet 6	Prunus sp, Crataegus sp, Sambuccus sp Ulmus sp, Quercus sp,	6	3	3	3	3	200	M	F	Very large group of mixed species with dense undergrowth of blackthorn. Access difficult.	Remove or retain as per development plans	30+	C2	2.4	18.10
<b>G</b> 5	Sheet 6	Fraxinus sp, Ulmus sp. Crataegus sp, Prunus sp, Acer sp,	4-6	2	2	2	2	200	Y-SM	G	Group of young to semi mature trees along public footpath on field boundaries. No concerns identified, overall good health.	Remove or retain as per development plans	30+	C2	2.4	18.10
G6	Sheet 6	Fraxinus sp, Acer sp, Crataegus sp,	15	4	4	4	4	350	M	F-G	Boundary line of mature trees, mixed species. Exhibiting some good condition with some deadwood and dieback throughout. Dense undergrowth.	Retain where possible	20+	B2	4.2	55.42
G7	Sheet 6	Robinia sp, Taxus sp, Acer sp.	12		4	4	4	350-400	М	F-G	Group of 9 trees in garden of property. Mostly good condition with robinia showing some cavities and poor condition.	Retain where possible	30+	B2	4.5	63.63
G8	Sheet 6	Acer sp, Chamaecyparis sp, Ulmus sp, Fraxinus sp.	11	2.5	2.5	2.5	2.5	400	M	G	Line of boundary trees adjacent to road side. Overgrown and unmanaged and impeding road. Mostly exhibiting good condition.	Remove or retain as per development plans	30+	C2	4.8	72.39
G9	Sheet 6	Populus sp, Pinus sp, Fraxinus sp, Acer sp.	15	3	3	3	3	450	M	G	Group of mature poplar trees with pine and smaller understorey species. Dense boundary vegetation. Adjacent to road and junction. Overall good condition.	Remove or retain as per development plans	20+	C2	5.4	91.62
G10	Sheet 6	Quercus sp, Crataegus sp, Acer sp, Fraxinus sp.	10.5	3.5	3.5	3.5	3.5	400	M	G	Boundary trees adjacent to road. Mixed species, all exhibiting good condition.  Group of predominantly oak trees	Remove or retain as per development plans	30+	C2	4.8	72.39
G11	Sheet 7	Quercus sp, Acer sp. Aesculus sp, Prunus sp, Fraxinus sp	10	5	5	5	5	350-400	M	G	with a mix of smaller trees and dense understorey on road side adjacent to garden centre entrance.  Overall exhibiting good condition.	Retain where possible	30+	B2	4.5	63.63



Tree/	Plan		Height	Cro	wn Sp	oread	(m)	Stem	Age	Physiological		Management		Cat	Radius of	
Group Ref No.	Reference	Species	(m)	W	N	S	E	diameter (mm)	class	Condition	Condition	recommendations	ERC	Grade	Nominal Circle (m)	RPA SqM
G12	Sheet 7	Populus sp, Pinus sp, Fraxinus sp, Prunus sp, Acer sp, Salix sp	12	3.5,	3.5	3.5	3.5	300-400	M	G	Dense shelter belt of trees on road edge surrounding corner plot of land. Mature trees with dense blackthorn understorey. All exhibiting good condition.	Retain where possible	30+	B2	4.2	55.42
G13	Sheet 8	Quercus robur	18	8	8	8	8	700	M	F-G	Group of 3 oak in boundary hedge. centre is largest tree. All exhibit good health with no obvious defects.	Retain where possible	30+	B1	8.4	221.70
		Fraxinus sp, Quercus sp,									Group of large mature trees on boundary. Varying degrees of damage throughout group with snapped and failed limbs and deadwood throughout. Poplars exhibit the majority of damage. Large trees reaching end of useful	Remove or retain as per				
G14	Sheet 8	Quercus sp, Acer sp, Fraxinus sp, Salix sp, Corylus	22	8	8	8	8	800	M	F	life. Group of trees surrounding small pond. Mature trees with dense understorey along pond edge. Deadwood throughout with varying	Remove or retain as per	10+	C2	9.6	289.57
G15	Sheet 8	sp, Crataegus sp.	17	6	6	6	6	600	M	F	degrees of damage.  Group of 4 oak trees in boundary	development plans	20+	C2	7.2	162.88
G16 G17	Sheet 8	Quercus robur  Quercus robur	16	7	7	7	7	700 650	M	G	hedge line. Overall good condition.  Group of oak trees in hedge line. End trees are smaller and are suffering significant dieback. Central trees have some damage and deadwood wood.	Retain where possible  Remove or retain as per development plans	20+	B2 C2	7.8	221.70 191.16
G18	Sheet 9	Fraxinus sp, Sambuccus sp, Crataegus sp, Prunus sp	7.5	3	3	3	3	150-200	М	F	Group of trees around small pond. Varying degrees of damage but overall fair condition.	Remove or retain as per development plans	20+	C2	2.1	13.86
G19	Sheet 9	Quercus sp, Acer sp, Betula sp, Pinus sp	10			5	5		М	G	Shelter belt of trees along road /field edge. Dense understorey. Mostly in good condition.	Retain where possible	30+	B2	3.6	40.72
G20	Sheet 10	Fraxinus sp, Quercus sp, Prunus sp	20	5	5	5	5	400-800	M	F	Group of large - medium trees along edge of field. Largest ash has large Inonotus bracket.	Possible removal of large ash	30+	B2	7.2	162.88
G21	Sheet 10	Prunus spinosa	4	2	2	2	2	150	M	G	Dense blackthorn hedging	Remove or retain as per development plans	30+	C2	1.8	10.18
G22	Sheet 10	Betula sp, Acer sp, Fraxinus sp, Crataegus sp	4	2.5	2.5	2.5	2.5	100-200	SM-M	G	Small self sown trees growing along boundary fence line between field and M42. All young trees, no obvious defects identified.	Remove or retain as per development plans	20+	C2	1.8	10.18
G23	Sheet 10	Quercus sp, Crataegus sp, Prunus sp	4.5			3	3	150-200	M	F	Small group of hawthorn trees on boundary with M42	Remove or retain as per development plans	20+	C2	2.1	13.86
G24	Sheet 10	Crataegus monogyna	4	1.5	1.5	1.5	1.5	150	M	F	Group of 3 hawthorn trees along fence line to M42 boundary.	Remove or retain as per development plans	30+	C2	1.8	10.18



Tree/	Plan	Cassiss	Height	Cro	wn S	pread	(m)	Stem	Age	Physiological	Condition	Management	ERC	Cat	Radius of	
Group Ref No.	Reference	Species	(m)	W	N	S	E	diameter (mm)	class	Condition	Condition	recommendations	ERC	Grade	Nominal Circle (m)	RPA SqM
G25	Sheet 10	Acer sp, Fraxinus sp, Crataegus sp	3	1	1	1	1	110	Υ	G	Group of small young trees on M42 verge boundary.	Remove or retain as per development plans	30+	C2	1.32	5.47
G26	Sheet 10	Fraxinus sp, Acer sp,	8.5	3	4	4	4	400	М	G	Group of mature trees located on verge of M42 boundary.	Remove or retain as per development plans	20+	C2	4.8	72.39
007	Sheet 9,	Acer sp, Fraxinus sp, Crataegus sp, Sorbus sp, Quercus	40.40					050 450			Shelter belt of trees adjacent to road and field and near to M42. Dense understorey growth and				4.0	<b>55.40</b>
G27	Sheet 10	sp	10-12	3	3	3	3	250-450	М	G	unmanaged.	Retain where possible	30+	B2	4.2	55.42
G28	Sheet 8	Quercus sp, Prunus sp, Populus sp, Fraxinus sp	20	8	8	8	8	600- 1000	M	F	Large trees along boundary of property. Mostly in fair condition, large wilde crown on ash and oak.	Retain where possible	30+	B2	9.6	289.57
G29	Sheet 7, Sheet 8	Quercus robur	15	6	6	6	6	400-600	M	F	Groups of large oak trees growing within hedge line. Some deadwood and dieback throughout.	Retain where possible	30+	B2	6	113.11
G30	Sheet 8	Fraxinus sp, Alnus sp, Quercus sp	12	5	5	5	5	400	M	G	Group of trees growing within hedge, all similar size and in good condition.	Retain where possible	30+	B2	4.8	72.39
G31	Sheet 3	Quercus sp, Fraxinus sp	21.5	6	6	6	6	600-800	M	F	Shelter belt of large mature trees, mixture of ash and oak. Trees are situated along either side of drainage ditch. Trees exhibit various conditions with some damaged limbs and deadwood throughout group. 1 ash was identified with Inonotus brackets.	Retain where possible	30+	B2	8.4	221.70
G32	Sheet 3	Fraxinus sp, Betula sp, Crataegus sp, Picea sp, Castanea sp,	17.5	5	5	5	5	200-400	M	G	Shelter belt of mature mixed species trees. Dense growth with little space between trees making crowns and stems narrow Dense undergrowth.	Retain where possible	30+	B2	3.6	40.72
G33	Sheet 3	Acer sp, Fraxinus sp, Crataegus sp, Castanea sp, Betula sp, Alnus sp, Quercus sp,	16.5							G	Mature mixed species woodland located on central plot of land at junction. Ground forms a mound which the woodland copse is situated on. Very dense stocking with little space between stems and dense understorey. Woodland has not been managed. Overall exhibits good condition, with no significant defects identified.	Possible thinning of woodland.	30+	B2	3.6	40.72
	Oncot 0	αισισίους σρ,	10.5					200 400	141		doroto idontinod.	Remove or retain as per	301		3.0	70.12
G34	Sheet 3	Prunus spinosa	3	2	2	2	2	90	М	G	Dense blackthorn shrub	development plans	30+	C2	1.08	3.66
G35	Sheet 3	Fraxinus excelsior	17	7	7	7	7	600	M	G	Group of 2 mature ash trees located on boundary fence line. Large wide crowns with minor deadwood throughout.	Retain where possible	20+	B2	7.2	162.88
G36	Sheet 3	Fraxinus excelsior	12.5	4	4	4	4	400	M	Р	Group of 3 ash trees. 1 is dead and the remaining trees show significant decline and dieback.	Remove	<10	U	4.8	72.39



Tree/	Plan	Chasina	Height	Cro	wn Sp	oread	(m)	Stem	Age	Physiological	Condition	Management	FDC	Cat	Radius of	
Group Ref No.	Reference	Species	(m)	W	N	s	E	diameter (mm)	class	Condition	Condition	recommendations	ERC	Grade	Nominal Circle (m)	RPA SqM
G37	Sheet 3	Quercus robur	13	7	7	7	7	900	M	F	Group of 3 mature oaks in field. All are showing dieback in upper crown which is retrenchment of the crowns as the trees age. This results in significant sections of deadwood throughout the canopies. No other obvious defects identified.	Retain	30+	A3	10.8	366.48
												Remove or retain as per				
G38	Sheet 3	Salix sp	11	3	3	3	3	100-300	М	G	Group of willows on field edge.	development plans	20+	C2	2.4	18.10
G39	Sheet 5	Robinia sp, Betula sp, Prunus sp, Salix sp, Aesculus sp, Acer sp	8.5	3.5	3.5	3.5	3.5	150-200	SM-M	G	Roadside woodland copse of juvenile trees. Dense planting, has not been managed, dense understorey.	Remove or retain as per development plans	30+	C2	2.1	13.86
G40	Sheet 5	Robinia sp, Acer sp, Prunus sp, Aesculus sp, Corylus sp	10	4	4	4	4	150-200	SM-M	G	Roadside woodland planting, dense growth and has not been managed. Dense understorey. High mix of species, all relatively juvenile.	Remove or retain as per development plans	30+	C2	2.1	13.86
G41	Sheet 5	Acer sp, Fraxinus sp, Tilia sp, Prunus sp	9.5	4	4	4	4	150-300	SM-M	G	Woodland copse on embankment. Trees nearest roundabout are largest in group with trees to the East younger and smaller. Possible management of this copse as not as dense as previous.	Remove or retain as per development plans	30+	C2	2.7	22.91
G42	Sheet 5	Acer sp, Fraxinus sp, Quercus sp, Prunus sp, Tilia sp	10	4	4	4	4	300	М	G	Small copse of trees on embankment at roadside. Dense understorey	Remove or retain as per development plans	30+	C2	3.6	40.72
G43	Sheet 5	Populus sp, Pinus sp, Corylus sp, Aesculus sp, Salix sp, Fraxinus sp, Crataegus sp	12	3	3	3	3	200-300	M	G	Shelter belt of trees along edge of footpath, trees located in embankment. Heavy mix of species. Unmanaged, very dense woodland.	Remove or retain as per development plans	30+	C2	3	28.28
G44	Sheet 5	Acer sp, Fraxinus sp, Prunus sp, Tilia sp, Populus sp	10				3			G	Very densely planted woodland roadside copse, has not been managed and is very overgrown, difficult to access. Very dense understorey.	Remove or retain as per development plans	30+	C2	2.4	18.10
G45	Sheet 5	Quercus sp, Pinus sp, Prunus sp	10	4	4	4	4	200-400	M	G	Small group of trees planted on roundabout. All planted at same time and in tight groups, similar to adjacent groups. Mixed native species. Overall good condition.	Retain where possible	30+	B2	3.6	40.72
G46	Sheet 5	Quercus sp, Pinus sp, Prunus sp	10	4	4	4	4	200-400	M	G	Small group of trees planted on roundabout. All planted at same time and in tight groups, similar to adjacent groups. Mixed native species. Overall good condition.	Retain where possible	30+	B2	3.6	40.72



Tree/ Group	Plan	Species	Height	Cro	own Sp	oread	(m)	Stem diameter	Age	Physiological	Condition	Management	ERC	Cat	Radius of Nominal	
Ref No.	Reference	Species	(m)	W	N	S	Е	(mm)	class	Condition	Condition	recommendations	LIKO	Grade	Circle (m)	RPA SqM
G47	Sheet 5	Quercus sp, Pinus sp, Prunus sp	10	4	4	4	4	200-400	M	G	Small group of trees planted on roundabout. All planted at same time and in tight groups, similar to adjacent groups. Mixed native species. Overall good condition.	Retain where possible	30+	B2	3.6	40.72
		Quercus sp, Pinus									Small group of trees planted on roundabout. All planted at same time and in tight groups, similar to adjacent groups. Mixed native					
G48 G49	Sheet 5 Sheet 5	Sp, Prunus sp  Quercus sp, Pinus sp, Prunus sp, Acer	10	4	4	4	4	200-400	M	G G	species. Overall good condition.  Mixed species of trees planted in interior section of land on roundabout. similar age to G45 - G48 and probably planted at same time as part of landscaping. Over all exhibit good condition.	Retain where possible  Retain where possible	30+	B2 B2	3.6	40.72
G50	Sheet 5	Aesculus sp, Acer sp, Robinia sp, Crataegus sp, Fraxinus sp	6	2		2	2	150		G	Mixed species planting on island East of roundabout on road side. Mostly juvenile trees with some older hawthorn scrub. Overall good condition.	Remove or retain as per development plans	30+	C2	1.8	10.18
G51	Sheet 5	Populus sp, Fraxinus sp, Aesculus sp, Prunus sp, Picea sp, Pinus sp	15	4	4	4	4	200-400	М	G	Road side woodland planting, mix of species which have varying heights and growth form. Dense planting with dense understorey.	Retain where possible	30+	B2	3.6	40.72
G52	Sheet 5	Fraxinus sp, Betula sp, Prunus sp	8	2.5	2.5	2.5	2.5	150	Υ	G	Mixed species planting of young juvenile trees along road side. All exhibit good condition.	Remove or retain as per development plans	30+	C2	1.8	10.18
G53	Sheet 5	Prunus sp, Acer sp, Pinus sp, Robinia sp, Crataegus sp, Corylus sp	10	4	4	4	4	200-400	M	F	Dense woodland planting at road side and up embankment. Multiple dead stems within woodland. Dense understorey. Woodland has not been managed.	Remove or retain as per development plans	30+	C2	3.6	40.72
G54	Sheet 5	Prunus sp, Fraxinus sp, Crataegus sp, Acer sp	8	3	3	3	3	300	M	G	Road side planting of mostly cherry, with larger ash tree near flyover. Open planting with sparse undergrowth.	Remove or retain as per development plans	30+	C2	3.6	40.72
G55	Sheet 5	Acer sp, Betula sp, Populus sp, Robinia sp, Ulmus sp	11	4	4	4	4	200-300	M	F	Dense mixed species woodland on embankment to road. Dense understorey, woodland has not been managed.	Remove or retain as per development plans	30+	C2	3	28.28
G56	Sheet 5	Corylus sp, Quercus sp, Acer sp, Crataegus sp, Prunus sp, Ulmus sp, Betula sp	12	4	4	4	4	200-300	M	F	Dense mixed woodland copse on embankment to road. Very dense undergrowth and closely planted trees. Copse has not been managed.	Remove or retain as per development plans	30+	C2	3	28.28



Tree/	Plan		Height	Cro	wn Sp	oread	(m)	Stem	Age	Physiological		Management		Cat	Radius of	
Group Ref No.	Reference	Species	(m)	W	N	S	E	diameter (mm)	class	Condition	Condition	recommendations	ERC	Grade	Nominal Circle (m)	RPA SqM
G57	Sheet 5	Acer sp, Tilia sp, Crataegus sp, Robinia sp, Pinus sp, Quercus sp	10-12	4	4	4	4	200-400	М	G	Road side screen group of trees, mixed species and all showing relatively good health overall.	Retain where possible	30+	B2	3.6	40.72
G58	Sheet 5	Acer sp, Tilai sp, Crataegus sp, Robinia sp, Pinus sp, Quercus sp, Carpinus sp, Prunus sp	10-12	4	4	4	4	200-400	M	G	Road side screen group of mixed species, very dense blackthorn understorey. All exhibiting good health	Retain where possible	30+	B2	3.6	40.72
		Fraxinus sp,									Crown of 9 mature trace on gross					
G59	Sheet 6	Sorbus sp, Pinus sp, Prunus sp	12	4	4	4	4	150-400	M	G	Group of 8 mature trees on grass verge, all in good condition	Retain where possible	30+	B2	3.3	34.22
G60	Sheet 6	Alnus sp, Fraxinus sp, Tilia sp, Prunus sp, Sorbus sp	10-14	4	4	4	4	200-500	М	F-G	Line of 8 trees growing along grass verge adjacent to road. Rowan shows some signs of decline, all others exhibit good health overall.	Retain where possible	20+	B2	4.2	55.42
											Line of mature oak trees along boundary hedge line adjacent to road. Some minor deadwood throughout but overall in good					
G61 G62	Sheet 8 Sheet 1	Fagus sp, Acer sp, Pinus sp, Betula sp, Sorbus sp, Quercus sp, Prunus sp,	10-15	3.5	3.5	3.5	3.5	200-300	M	G	condition.  Woodland shelter belt screen adjacent to M42. Clear path along centre of woodland with dense planting either side. Management of W side has resulted in dense lower growth providing solid screen.	Retain where possible	30+	B2 B2	3	28.28
G63	Sheet 1	Populus sp  Acer sp, Crataegus sp	3-4			1.5				G	Overall good condition.  Small self sown trees growing along embankment of M42 verge, sporadically located along length of G2.	Retain where possible  Remove or retain as per development plans	20+	C2	1.2	4.52
G64	Sheet 1	Picea sp, Sambucus	8			2.5				G	Group of spruce trees beneath pylon and along M42 boundary. Dense bramble undergrowth and some small elder within group.	Remove or retain as per development plans	20+	C2	3	28.28
G65	Sheet 1, Sheet 2	Acer sp, Prunus sp, Quercus sp, Populus sp, Aesculus sp	13-15	5	5	5	5	200-400		F-G	Woodland screen on raised embankment adjacent to M42. Un managed section of woodland, with dense blackthorn understorey on both E and W woodland edges. Some dead stems and damaged trees throughout.	Retain where possible	30+	B2	3.6	40.72
G66	Sheet 1	Betula sp, Acer sp, Quercus sp	4	2	2	2	2	150		G	Small group of trees on M42 verge. Grown between 2 woodland screen group and have developed due to lack of competition for light.	Remove or retain as per development plans	20+	C2	1.8	10.18



Tree/ Group	Plan	Species	Height	Cro	wn Sp	oread	(m)	Stem diameter	Age	Physiological	Condition	Management	ERC	Cat	Radius of Nominal	
Ref No.	Reference	Species	(m)	W	N	S	E	(mm)	class	Condition	Condition	recommendations	EKC	Grade	Circle (m)	RPA SqM
G67	Sheet 2	Fraxinus sp, Quercus sp, Acer sp	6	2	2	2	2	150	SM	G-F	Small groups of self sown trees on M42 verge.	Remove or retain as per development plans	20+	C2	1.8	10.18
G68	Sheet 2	Acer sp, Prunus sp, Quercus sp, Populus sp, Aesculus sp, Betula sp	13-15	5	5	5	5	200-400	M	F-G	Woodland screen on raised embankment adjacent to M42. Un managed section of woodland, with dense blackthorn understorey on both E and W woodland edges. Some dead stems and damaged trees throughout.	Retain where possible	30+	B2	3.6	40.72
G69	Sheet 2, Sheet 3	Pinus sp, Picea sp, Acer sp, Populus sp, Fraxinus sp, Corylus sp, Crataegus sp, Quercus sp	15	5	5	5	5	200-300	M	G	Wood screen adjacent to M42 slip road. Very dense growth with dense understorey and hawthorn edging.	Retain where possible	30+	B2	3	28.28
G70	Sheet 4	Prunus sp, Fraxinus sp, Acer sp	15-17	6	6	6	6	200-350	М	G	Group of mature trees on edge of car park. Trees are located at bottom of bank with road at the top. Good spacing and little understorey. Overall good condition.	Retain where possible	30+	B2	3.3	34.22
G71	Sheet 4	Acer sp, Fraxinus	14	5			5		M	G	Narrow woodland screen at Edge of car park adjacent to road. Trees on car park side have been managed laterally to height of 4m creating a dense woodland edge screen.  Overall exhibits good condition.	Retain where possible	30+	B2	3	28.28
G72	Sheet 4	Acer sp, Fraxinus sp, Sambucus sp	6-8		2	2	2	100		G	Scrub vegetation with small self set trees	Remove or retain as per development plans	20+	C2	1.2	4.52
G73	Sheet 3	Crataegus sp, Prunus sp, Acer sp, Fraxinus sp	8-10	2.5	2.5	2.5	2.5	100-200	Y	G	Woodland copse of young trees, very dense growth and very dense understory. Unmanaged plot of woodland.	Remove or retain as per development plans	30+	C2	1.8	10.18
G74	Sheet 3	Populus nigra	15	3	3	3	3	200-300	M	G	Group of poplars along boundary fence of haulage depot. Good overall condition.	Remove or retain as per development plans	20+	C2	3	28.28
G75	Sheet 3	Prunus sp, Fraxinus sp, Crataegus sp, Corylus sp	5-10	2	2	2	2	100-200	SM-M		Dense blackthorn shrubbery with ash trees growing within. Very dense growth. Overall exhibits good health.	Remove or retain as per development plans	30+	C2	1.8	10.18
G76	Sheet 3	Fraxinus sp, Betula sp, Crataegus sp, Prunus sp	10	2.5	2.5	2.5	2.5	100-200	SM	G	Group of young trees with dense hawthorn and blackthorn understorey. Unmanaged ground.	Remove or retain as per development plans	20+	C2	1.8	10.18
G77	Sheet 3	Crataegus sp, Corylus sp, Prunus sp, Fraxinus sp	10	3	3	3	3	100-200	SM-M	F-G	Densely overgrown area adjacent to road, very dense understorey. Majority is hawthorn, blackthorn shrub with trees within. Some	Remove or retain as per development plans	20+	C2	1.8	10.18



Tree/	Plan	O a a si a a	Height	Cro	wn Sp	oread	(m)	Stem	Age	Physiological	0	Management	- FDO	Cat	Radius of	
Group Ref No.	Reference	Species	(m)	w	N	S	E	diameter (mm)	class	Condition	Condition	recommendations	ERC	Grade	Nominal Circle (m)	RPA SqM
											damage throughout. Unmanaged land.				()	
070	Chart 2	Crataegus sp, Corylus sp, Prunus sp, Fraxinus sp,	40					400,000	CMM	F.O.	Densely overgrown area adjacent to road, very dense understorey. Majority is hawthorn, blackthorn shrub with trees within. Some damage throughout. Unmanaged	Remove or retain as per	00.	00	10	40.40
G78	Sheet 3 Sheet 2,	Betulus sp  Quercus sp, Salix sp, Betula sp, Sambucus sp,	10	3	3	3	3	100-200	SM-M	F-G	land.  Woodland plot on unmanaged derelict land adjacent to M42 slip road. Some damage throughout but overall fail condition. Dense	development plans	20+	C2	1.8	10.18
G79	Sheet 3	Fraxinus sp	15	5	5	5	5	200-600	М	F-G	woodland and understorey.	Retain where possible	30+	B2	4.8	72.39
G80	Sheet 2, Sheet 3	Crataegus sp, Prunus sp	6-8	2	2	2	2	100-200	M	G	Very dense hawthorn and blackthorn shrub. Has not been managed and is heavily overgrown.	Remove or retain as per development plans	20+	C2	1.8	10.18
G81	Sheet 1	Acer sp, Quercus sp, Fraxinus sp	10	4	4	4	4	200	М	G	Shelter belt of trees along M42 verge and embankment. Overall good condition.	Retain where possible	30+	B2	2.4	18.10
G82	Sheet 2	Alnus sp, Crataegus sp, Acer sp, Fraxinus sp, Quercus sp	10	4	4	4	4	200-300	M	G	Self set trees sporadically located along verge of M42. All exhibit good condition.	Remove or retain as per development plans	20-30+	C2	3	28.28
G83	Sheet 2	Crataegus sp, Salix	5	3	3	3	3	100-200	М	G	Hawthorn and willow scrub along embankment of drain.	Remove or retain as per development plans	20+	C2	1.8	10.18
G84	Sheet 2	Prunus sp, Crataegus sp, Betula sp, Alnus sp, Acer sp, Ulmus sp	5-8			4	4	200-300	М	G	Very dense blackthorn and hawthorn scrub with trees situated within. Located along boundary fence. Overall good condition exhibited.	Remove or retain as per development plans	30+	C2	3	28.28
G85	Sheet 2	Fraxinus sp, Acer sp, Crataegus sp	4-6	3	3	3	3	100-150	Y-M	G	Mix of young trees located along M42 verge. Sporadically located.	Remove or retain as per development plans	30+	C2	1.5	7.07
G86	Sheet 2, Sheet 3	Quercus sp, Crataegus sp, Prunus sp	12-14	5	5	5	5	200-500	SM-M	G	Group of oak trees with hawthorn and blackthorn understorey, mixture of ages of oak, indicating self seeding trees. Overall good condition.	Retain where possible	30+.	B2	4.2	55.42
G87	Sheet 3	Fraxinus sp, Betula sp	10-12	2	2	2	2	180	SM	G	Shelter belt of trees along embankment adjacent to road. Semi mature trees with understorey of blackthorn.	Remove or retain as per development plans	30+	C2	2.16	14.66
G88	Sheet 2, Sheet 3	Picea sp, Quercus sp, Betula sp, Prunus sp, Pinus sp, Acer sp, Larix sp, Sorbus sp	13-15	4	4	4	4	200-400	SM	G	Group of trees located along embankment, steep sided embankment with trees on top and at bottom verge adjacent to road.	Remove or retain as per development plans	30+	C2	3.6	40.72



Tree/	Plan		Height	Cro	wn Sp	oread	(m)	Stem	Age	Physiological		Management		Cat	Radius of	
Group Ref No.	Reference	Species	(m)	W	N	s	Е	diameter (mm)	class	Condition	Condition	recommendations	ERC	Grade	Nominal Circle (m)	RPA SqM
G89	Sheet 3	Prunus avium	11	4	4	4	4	200-300	М	F-P	Group of mainly cherry trees located on top of bank. Some dead and dying trees within group, self sown trees with mainly poor form and dense ivy colonisation.	Remove or retain as per development plans	10+	C2	3	28.28
G90	Sheet 3	Quercus sp, Larix sp, Sorbus sp, Fraxinus sp, Alnus sp, Betula sp, Pinus sp	10-15	5	5	5	5	200-300	SM	G	Mixed species group of trees adjacent to trailer park entrance. No obvious defects or concerns identified, low understorey cover.	Remove or retain as per development plans	30+	C2	3	28.28
G91	Sheet 2, Sheet 3	Quercus sp, Sorbus sp, Prunus sp, Crataegus sp, Betula sp	11-13	4	4	4	4	200-300	SM	G	Small group of semi mature trees adjacent to trailer park entrance. No concerns identified.	Remove or retain as per development plans	30+	C2	3	28.28
G92	Sheet 2, Sheet 3	Prunus sp, Crataegus sp, Acer sp	9	3	3	3	3	100-300	Y-SM	F-G	Shelter belt group of trees along embankment adjacent to roundabout. Planted trees of mixed age and size, smaller trees in central part with some dead and dying within due to suppression.	Remove or retain as per development plans	30+	C2	2.4	18.10
G93	Sheet 4	Populus nigra 'Italica'	18.5	2	2	2	2	620	M	G	Line of 9 lombardy poplar trees along boundary fence to railway.  No obvious defects, good screen from railway.	Retain where possible	10+	B2	7.44	173.92
G94	Sheet 4	Picea sp	10-15	3.5		3.5	3.5	200-300	М	F	Small group of spruce trees with smaller mixed understorey species. Exhibiting overall good health, but located in derelict area and unmanaged form has resulted.	Remove or retain as per development plans	20+	C2	3	28.28
G95	Sheet 4	Betula sp, Crataegus sp	13		3.5			150		G	Group of self sown birch trees in derelict ground.	Remove or retain as per development plans	20+	C2	1.8	10.18
G96	Sheet 4	Betula sp, Alnus sp, Salix	12	3	3	3	3	180	M	G	Group of self sown trees on derelict section of ground adjacent to railway.	Remove or retain as per development plans	20+	C2	2.16	14.66
G97	Sheet 4	Cupressocyparis sp	11-14	3	3	3	3	200	M	F	Line of Cypress trees forming screen from railway. Crowns one sided with over all fair condition.	Remove or retain as per development plans	10+	C2	2.4	18.10
G98	Sheet 4	Salix sp	11-13	4	4	4	4	200- 300*	M	F	Group of willows along boundary to railway and top of embankment. Very dense bramble undergrowth making access to stems difficult. No obvious defects identified.	Remove or retain as per development plans	10+	C2	3	28.28
G99	Sheet 4	Pinus sp, Prunus sp , Salix sp	6-9	3		3	-	100-300		F	Mixed hedgerow of trees and shrubs along boundary of hotel car park and derelict land. Overgrown with self sown trees within. Unmanaged section of hedgerow.	Remove or retain as per development plans	20+	C2	2.4	18.10
G100	Sheet 4	Acer sp, Betula sp, Tilia sp	11	4	4	4	4	300	M	G	Line of mature trees along hotel boundary fence adjacent to road	Retain where possible	30+	B2	3.6	40.72



Tree/ Group	Plan	Species	Height	Cro	wn Sp	oread	(m)	Stem diameter	Age	Physiological	Condition	Management	ERC	Cat	Radius of Nominal	
Ref No.	Reference	Species	(m)	W	N	s	E	(mm)	class	Condition	Condition	recommendations	ERC	Grade	Circle (m)	RPA SqM
											and footpath. Well spaced planted trees in good condition.				()	- Jan
		Tilia sp, Acer sp, Quercus sp,									Group of mature trees on grass verge at corner of junction. 7 trees in group all with large crowns. Good condition and health exhibited with					
G101	Sheet 5	Fraxinus sp	17	7	7	7	7	450-500	М	G	no obvious defects.	Retain	30+	A2	5.7	102.08
0.400	21							4.50			Line of trees forming screen along fence line to rear of G101. All tall narrow stems/crowns due to dense planting. Overall exhibits good					
G102	Sheet 5	Acer sp, Tilia sp	13	2.5	2.5	2.5	2.5	150	SM	G	health and condition.  Group of large cypress trees at	Retain where possible	20+	B2	1.8	10.18
G103	Sheet 5	Cupressocyparis sp	15.5	3.5	3.5	3.5	3.5	350-400	М	G	edge of G56 and adjacent to footpath. No obvious defects identified.	Remove or retain as per development plans	20+	C2	4.5	63.63
		Fraxinus sp, Salix									Mixed species screen of trees along boundary fence. Most stems located on M42 side of fence.	Domovo or retain as nor				
G104	Sheet 9	sp, Acer sp, Prunus sp	11-20	6	6	6	6	200-600	М	F	Mostly exhibiting good to fair condition.	Remove or retain as per development plans	20+	C2	4.8	72.39
		Quercus sp, Salix									Small group of trees around a dried pond. Some trees with failed limbs and stems. Smaller self sown trees					
G105	Sheet 9	sp, Fraxinus sp	10-12	4	4	4	4	100-300	М	F	within group.	Retain where possible	20+	B2	2.4	18.10
G106	Sheet 8	Quercus sp, Fraxinus sp, Crataegus sp	20	9	6	8.5	8.5	700-900	M	F-P	Group of mature trees mainly oak and ash situated within hollow in field. 1x ash and 1x oak have significant decay fungi colonisation with fresh brackets at time of survey. Location of decay fungi on both and the size of each tree could lead to significant failure.	Remove ash and oak with decay fungi.	20+	A3	9.6	289.57
0407	Sheet 8,		47.5	_	_		_	000 000		0.5	Group of 5 mature oaks along boundary hedge line. All of equal size and age. All have deadwood within crowns with some large sections. Damaged and failed limbs throughout. Overall good to fair	D. A. C.		40	40.0	000.00
G107	Sheet 9	Quercus robur	17.5	7	7	7	7	800-900	М	G-F	condition.  Group of 3 mature oaks of similar	Retain	30+	A3	10.2	326.89
0400	Oh s at 0	Overnous and	47.5		_	_	_	000 000			size and age, All along boundary hedge line and exhibit overall good condition with little deadwood and	Datain	20.5	40	10.0	202.22
G108	Sheet 8	Quercus robur	17.5	7	7	7	/	800-900	M	G	damage.  Hedgerow trees with dense	Retain	30+	A3	10.2	326.89
G109	Sheet 9, Sheet 10	Acer sp, Crataegus sp, Ulmus sp	8-11	4	A	4	4	150-250	М	F	hawthorn understorey in places. Multiple damaged trees within hedgerow though these are smaller suppressed trees within the group and are suppressed. Mainly native self sown species with multi stems and poor form in places.	Remove or retain as per development plans	20+	C2	2.4	18.10



Tree/ Group	Plan	Species	Height	Cro	wn S	oread	(m)	Stem diameter	Age	Physiological	Condition	Management	ERC	Cat	Radius of Nominal	
Ref No.	Reference	Species	(m)	W	N	S	Е	(mm)	class	Condition	Condition	recommendations	ERC	Grade	Circle (m)	RPA SqM
		Quercus sp,									Group of mature oak with semi mature oak and hawthorn as understorey growth. Mostly in good to fair condition. One oak has large limb failure and resultant large				, ,	
G110	Sheet 8	Crataegus sp	11-13	5	5	5	5	700-800	М	F	cavity wound in main union.	Retain where possible	20+	B2	9	254.50
H1	Sheet 7	Acer sp, Fagus sp, Ulmus sp, Prunus sp	8.5- 10.5	3	3	3	3	200	M	F	Mature unmanaged boundary hedge line. Some dead and damaged stems within. All forming mature tree form.	Remove or retain as per development plans	30+	C2	2.4	18.10
H2	Sheet 7	Corylus sp, Crataegus sp, Salix sp, Acer sp	2-5	1.5	1.5	1.5	1.5	100	M	G-F	Mature mixed species hedge, managed to a low height.	Remove or retain as per development plans	30+	C2	1.2	4.52
НЗ	Sheet 7	Prunus sp, Sorbus sp, Acer sp, Tilia sp, Ulmus sp, Crataegus sp	9	3	3	3	3	250	М	G	Mature boundary hedge adjacent to public footpath and road. Managed laterally to 2.5m over path. No obvious concerns.	Retain where possible	30+	B2	3	28.28
H4	Sheet 7	Acer sp, Crataegus sp, Prunus sp	3.5	2	2	2	2	90		G	Boundary hedge adjacent to public footpath and road. Managed to recorded height and width. Good overall condition.	Remove or retain as per development plans	30+	C2	1.08	3.66
H5	Sheet 7	Crataegus mongyna	3.5			1.5		90		G	Managed boundary hedge along edge of sports ground. Good overall condition.	Remove or retain as per development plans	30+	C2	1.08	3.66
Н5а	Sheet 8	Crataegus sp, Acer sp, Quercus sp	2	1	1	1	1	80	M	G	Boundary hedge, maintained to low height. Good condition. Some gaps.	Remove or retain as per development plans	30+	C2	0.96	2.90
H6	Sheet 8	Crataegus	2	1	1	1	,	80	M	G	Mature managed boundary hedge. Trees located within hedge.	Remove or retain as per development plans	30+	C2	0.96	2.90
H7	Sheet 6	mongyna Crataegus sp, Fraxinus sp, Prunus sp,	2-3	1	1	1	1	80			Mixed species boundary hedge.  Managed to recorded height.	Remove or retain as per development plans	30+	C2	0.96	2.90
H8	Sheet 6	Crataegus sp, Fraxinus sp,	2.5-5		1.5	1.5	1.5		SM-M		Boundary hedge, managed by flail, 50% has not been reduced in height.	Remove or retain as per development plans	30+	C2	1.08	3.66
110	Chart 2	Acer sp, Prunus sp,	4.0		0.5	0.5	0.5	000	M	0.5	Hedgerow group of trees with very dense undergrowth of blackthorn and hawthorn. Hedge line is managed in parts but not all and is high in some places. Overall	Remove or retain as per	20.	00		40.40
H9 H10	Sheet 6 Sheet 7	Corylus sp,  Quercus sp, Crataegus sp, Prunus sp, Acer sp, Tilia sp.	9-10	2.5	2.5	2.5	2.5	200 350-400		G-F	exhibits good condition.  Hedge line group of trees of varying sizes and ages. Mixed species.  Mature trees with standard form and dense hedging understorey of hawthorn and blackthorn. Overall exhibiting good condition	development plans  Retain where possible	30+	C2 B2	2.4	18.10 63.63
H11	Sheet 7	X Cupressocyparis leylandii	3.5	1	1	1	1	90		G G	Cypress hedge in front of property in good condition.	Remove or retain as per development plans	20+	C2	1.08	3.66



Tree/	Plan		Height	Cro	wn Sp	oread	(m)	Stem	Age	Physiological		Management		Cat	Radius of	
Group Ref No.	Reference	Species	(m)	W	N	s	E	diameter (mm)	class	Condition	Condition	recommendations	ERC	Grade	Nominal Circle (m)	RPA SqM
H12	Sheet 7	Prunus spinosa Crataegus mongyna, Acer campestre	2.5	1	1	1	1	90	М	G	Hedge line boundary to garden centre. Good condition and managed.	Remove or retain as per development plans	30+	C2	1.08	3.66
		Acer sp, Fraxinus sp, Crataegus sp, Alnus sp, Populus									Mixed species hedge line with trees and shrubs. Trees dominate boundary line with blackthorn and hawthorn understory. Dense growth in places. Overall exhibits good					
H13	Sheet 6	sp, Sorbus sp	3-9	3.5	3.5	3.5	3.5	300	М	G	condition.	Retain where possible	30+	B2	3.6	40.72
H14	Sheet 8	Crataegus mongyna	2-3	1	1	1	1	90	M	Н	Field boundary hedge adjacent to road.	Remove or retain as per development plans	30+	C2	1.08	3.66
H15	Sheet 8	Acer sp, Tilia sp, Sorbus sp, Crataegus sp	6-8	3	3	3	3	200	М	G	Boundary hawthorn hedge with regular trees spaced along length. Trees have compact crowns and are in overall good condition.	Remove or retain as per development plans	30+	C2	2.4	18.10
H16	Sheet 8	Crataegus sp, Corylus sp	2	1	1	1	1	90	М	G	Boundary hedge, good condition, some gaps in hedge along length.	Remove or retain as per development plans	30+	C2	1.08	3.66
H17	Sheet 8	Crataegus mongyna	2	1	1	1	1	90	M	G	Boundary hedge in good condition.	Remove or retain as per development plans	30+	C2	1.08	3.66
H18	Sheet 8	Crataegus mongyna, Prunus spinosa	2	1	1	1	1	90	М	G	Boundary hedge, good overall condition. Some small gaps along length.	Remove or retain as per development plans	30+	C2	1.08	3.66
H19	Sheet 8, Sheet 9	Crataegus sp, Ilex sp, Prunus sp	2	1	1	1	1	90	М	G	Boundary hedge with some gaps. Overall good condition.	Remove or retain as per development plans	30+	C2	1.08	3.66
H20	Sheet 8	Crataegus sp, Ilex sp, Prunus sp	2	1	1	1	1	90	М	G	Boundary hedge. Overall good condition.	Remove or retain as per development plans	30+	C2	1.08	3.66
H21	Sheet 9	Prunus spinosa Crataegus mongyna	2	1	1	1	1	90	М	G	Boundary hedge adjacent to road. Good condition.	Remove or retain as per development plans	30+	C2	1.08	3.66
H23	Sheet 10	Crataegus sp, Fraxinus sp, Prunus sp	2-4	1.5	1.5	1.5	1.5	100	SM-M	G	Boundary mixed species hedge with small trees forming along length.	Remove or retain as per development plans	30+	C2	1.2	4.52
H24	Sheet 10	Prunus sp, Crataegus sp, Sambuccus sp	4.5			2	2	120		F	Boundary hedge, managed laterally to reduce width along East boundary. Height not managed. Southern boundary section, not managed and has 2 dead trees within.	Remove dead trees and any other damaged/dangerous trees.	30+	C2	1.44	6.52
H25	Sheet 9	Crataegus sp, Fraxinus sp, Acer sp,	5-8	2	2	2	2	150-200	M	F	Self set trees located along M42 verge boundary.	Remove or retain as per development plans	20+	C2	2.1	13.86
H26	Sheet 9	Crataegus sp, Fraxinus sp,	6	2	2	2	2	150-200	M	F	Boundary hedge on M42 verge side. Managed laterally on field side but not in height.	Remove or retain as per development plans	30+	C2	2.1	13.86
H27	Sheet 8, Sheet 9	Crataegus mongyna	2	1	1	1	1	90	М	G	Boundary hawthorn hedge, managed to height and width recorded.	Remove or retain as per development plans	30+	C2	1.08	3.66



Tree/				Cro	wn Sp	oread	(m)	Stem							Radius	
Group Ref No.	Plan Reference	Species	Height (m)					diameter (mm)	Age class	Physiological Condition	Condition	Management recommendations	ERC	Cat Grade	Nominal Circle	RPA
H28	Sheet 8	Crataegus sp, Acer sp, Prunus sp	2-5	2.5	N 2.5	S 2.5	2.5	100-200	M	G	Boundary hedge with mixed species. Regular full trees growing within hedge.	Remove or retain as per development plans	30+	C2	(m) 1.8	SqM 10.18
H29	Sheet 7, Sheet 8	Crataegus sp, Alnus sp, Salix sp, Quercus sp, Fraxinus sp	8	4	4	4	4	200-300	SM	G	Hedge with mixed species, unmanaged and left to grow and has full tree form. All relatively young juvenile trees.	Retain where possible	40+	B2	3	28.28
H30	Sheet 3	Crataegus mongyna	5	3	3	3	3	100	М	G	Boundary hedge which has not been managed	Remove or retain as per development plans	30+	C2	1.2	4.52
H31	Sheet 3	Ulmus sp, Crataegus sp, Alnus sp	5	2	2	2	2	100-200	M	F	irregularly spaced individual trees with hawthorn and bramble understorey along fence line.	Remove or retain as per development plans	20+	C2	1.8	10.18
	01 10	Crataegus									Mature hawthorn hedge between	Remove or retain as per			4.00	
H32 H33	Sheet 3 Sheet 3	mongyna Crataegus sp, Sambuccus sp	2.5	1.5	1.5	1.5	1.5	90	M	G	fields.  Mixed species boundary hedge line. has been managed previously through flail.	Remove or retain as per development plans	30+	C2 C2	1.08	3.66
H34	Sheet 7	Fraxinus sp, Crataegus sp, Prunus sp, Acer sp	8	3.5	3.5	3.5	3.5	100-300	M	F	Mixed species hedge line which runs along public footpath and field boundary. Hedge has not been managed and has various dead stems and deadwood through out, with some dieback of outer canopy of trees.	Remove or retain as per development plans	30+	C2	2.4	18.10
H35	Sheet 6	Crataegus sp, Sambuccus sp	6-8	5	5	5	5	220	М	F	Mature hedge row which has not been managed and has grown wide. Very dense growth and understorey. Some dead stems and dead trees throughout but overall in fair condition.	Remove or retain as per development plans	30+	C2	2.64	21.90
H36	Sheet 5	Prunus spinosa	2.5	2	2	2	2		М	G	Blackthorn hedge along field boundary and grass verge.	Remove or retain as per development plans	30+	C2	1.08	3.66
H37	Sheet 5, Sheet 6	Tilia sp, Fraxinus sp, Prunus sp, Sorbus sp, Acer sp, Quercus sp, Corylus sp	8-10	3.5	3.5	3.5	3.5	200-300	M	G	Hedge row of mature mixed species trees with blackthorn understorey. All planted along fence line. Overall good condition.	Retain where possible	30+	B2	3	28.28
												Remove or retain as per				
H38	Sheet 6	Prunus spinosa  Crataegus sp, Acer	2.5	2	2	2	5	350	M	G F	Mature blackthorn boundary hedge.  Hedge line of trees which has been left unmanaged. Wide crown growth and dense understorey growth.	Remove or retain as per	30+	C2	1.08	3.66 55.42
H39 H40	Sheet 6	sp, Quercus sp  Quercus sp, Fraxinus sp, Acer sp, Crataegus sp, Prunus sp	8-12	3.5	3.5			200-300	M	F-G	Boundary line of trees forming large hedgerow. Mixed species throughout, has not been managed and has dense understorey. Overall exhibit good health with minor deadwood located throughout.	Remove or retain as per development plans	30+	C2	3.6	40.72
H41	Sheet 1	Crataegus mongyna	2	1	1	1	1	80	M	G	Mature managed hawthorn hedge around parking areas.	Remove or retain as per development plans	30+	C2	0.96	2.90



Tree/ Group	Plan Reference	Species	Height (m)	Cro	own Sp	pread	(m)	Stem diameter	Age class	Physiological Condition	Condition	Management recommendations	ERC	Cat Grade	Radius of Nominal	RPA
Ref No.			(***)	W	N	s	E	(mm)							Circle (m)	SqM
H42	Sheet 7	Quercus sp, Alnus sp, Crataegus sp, llex sp, Acer sp	18	5		5	5	400-600	М	F	Hedge line of large mature trees growing along roadside and adjacent to property. One tree has over 50% of the crown dead. Remaining trees exhibiting fair to good health.	Retain where possible	30+	B2	7.2	162.88
H43	Sheet 7, Sheet 8	Prunus sp, Crataegus sp, Fraxinus sp	2	1	1	1	1	80	М	G	Mixed species hedge which is regularly managed to recorded size.	Remove or retain as per development plans	30+	C2	0.96	2.90
W1	Sheet 8	Mixed species. Aesculus sp, Fraxinus sp, Quercus sp, Salix sp,	20	5	5	5	5	400-600	M	F-G	Unmanaged woodland, various failed trees which have fallen or hung up, multiple trees with failed parts/limbs. Dense understorey.	Retain	30+	A2	7.2	162.88
W2	Sheet 10	Mixed species, Quercus sp, populus sp, Fraxinus sp, Betula sp, Pinus sp, Crataegus sp	20	5	5	5	5	400-600	M	F	Mature woodland adjacent to M42. Unmanaged woodland plot with numerous dead trees and damaged dying trees. Very dense understorey. Some large poplars in centre of woodland. Oak dominates. Some have poor form due to dense growth and suppression.	Retain	40+	A2	7.2	162.88
W3	Sheet 10	Mixed species, Quercus sp, Populus sp, Fraxinus sp, Betula sp, Pinus sp, Crataegus sp	20	5		5	5	400-600	M	F	Mature woodland adjacent to M42. Unmanaged woodland plot with numerous dead trees and damaged dying trees. Very dense understorey. Oak dominates. Some have poor form due to dense growth and suppression.	Retain	40+	A2	7.2	162.88



### Key:

Tree/ Group Ref No. – tree/group number, to be recorded on tree survey plan where necessary.

Species - common and scientific names where possible.

Height – overall height of tree in metres.

Stem Dia – stem diameter, in millimetres at 1.5m above adjacent ground level (on sloping ground to the taken on the upslope of the tree base) or immediately above the roof flare for multi-stemmed trees.

Branch spread – in meters taken at the four cardinal points to derive an accurate representation of the crown (to be recorded on the tree survey plan where necessary).

Height of cc - height of crown clearance - in meters above adjacent ground level to inform on ground clearance, crown stem ratio and shading.

Age class – young (Y), young mature (YM), mature (M), over mature (OM) and veteran (V).

Physiological condition – e.g. good (G), fair (F), poor (P) and dead (D).

Structural condition – e.g. collapsing, the presence of decay and any physical defect.

Management recommendations – including further investigations of suspected defects that require more detailed assessment and potential wildlife habitat.

ERC – estimated remaining contribution – in years e.g. less than 10, 10-20, 20-40, more than 40.

Cat grade – category grade – U or A to C, to be recorded in plan on the tree survey plan where possible.

RPA – Root protection area calculated from BS5837:2012 Trees in Relation to Design, Demolition and Construction – Recommendations in sq/m. Where indicated, dimensions of radius of circle or sides of square based around centre point of trunk calculated for design purposes.



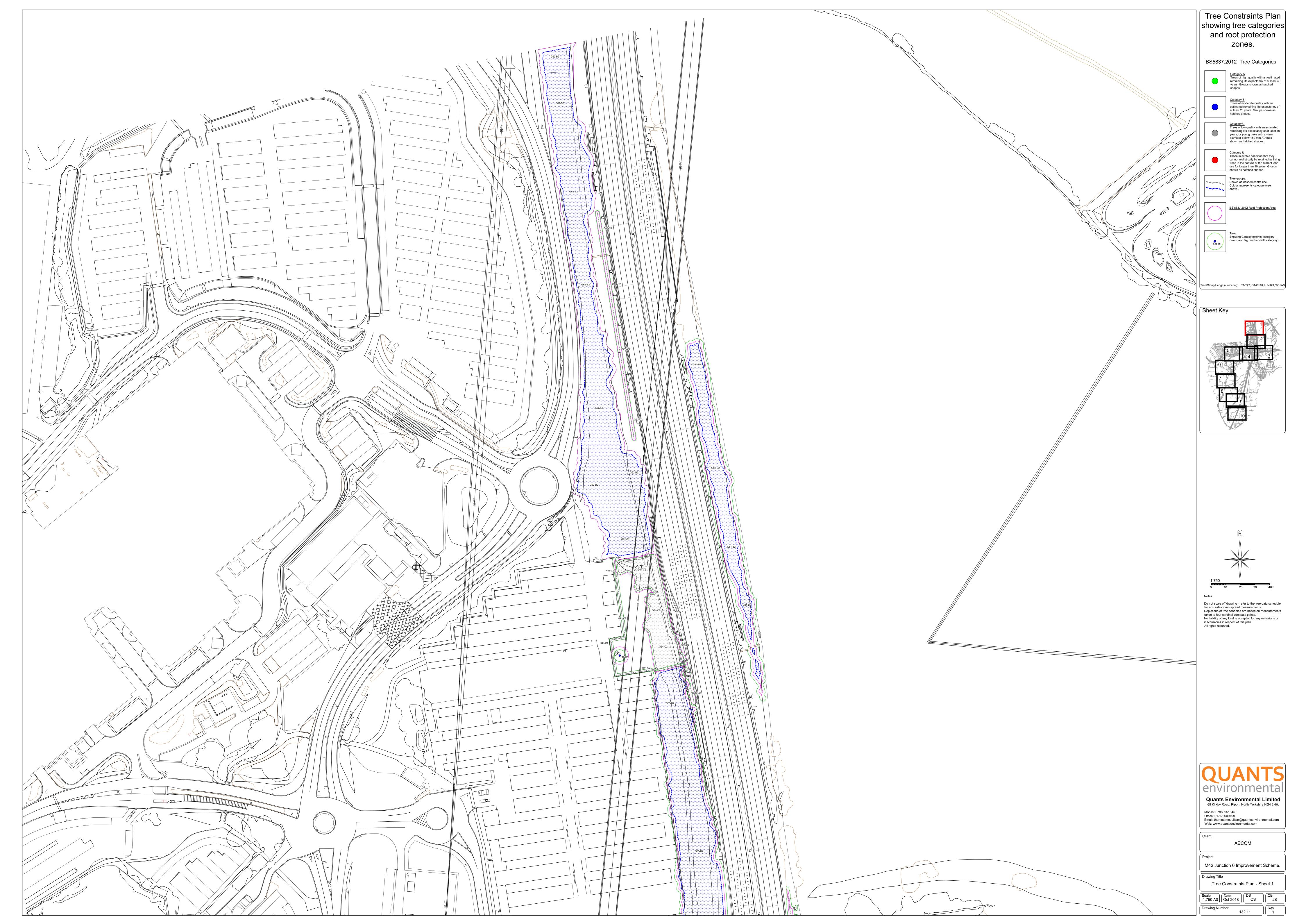
### Table 2. Cascade Chart for the Quality Assessment<sup>2</sup>

Category and definition	Criteria (including subcategories where appropriate)			Identification plan	on
Trees unsuitable for retention					
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.	Trees that have serious, irremediable, structural defect, such that their early los where, for whatever reason, the loss of companion shelter cannot be mitigated by the structural defect, such that their early los where, for whatever reason, the loss of companion shelter cannot be mitigated by the structure of the significant, immediate or irreversible. Trees infected with pathogens of significance to the health and/or safety of other Note: Category U trees can have existing or potential conservation value which it	by pruning).  e overall decline.  trees nearby, or very low quality trees supressing adjacent trees		See Table 2	
	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 arboricultual and/or landscape features	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran or trees or wood pasture).	See Table 2	
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 were 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 groups or woodlands, such that they attract a higher collective rating than they might attract 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.	See Table 2	
Category C  Trees of low quality with an estimated remaining life expectancy of at east 10 years, or young trees with a stem diameter of <150mm.	Unremarkable trees of very limited merit or such impaired condition that they 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.	See Table 2	

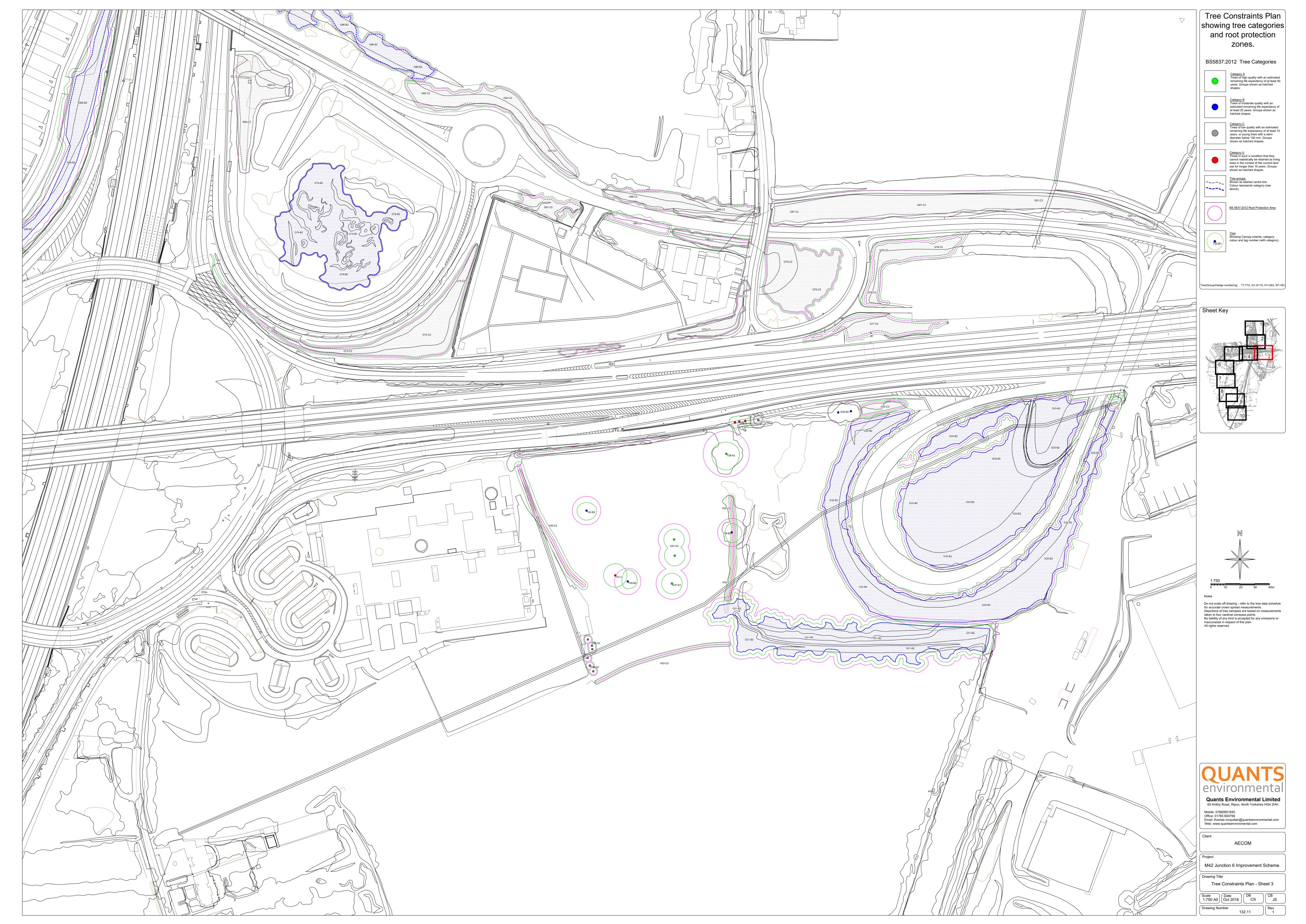
<sup>&</sup>lt;sup>2</sup> The British Standards Institute 2012, Page 9 – Table 1.

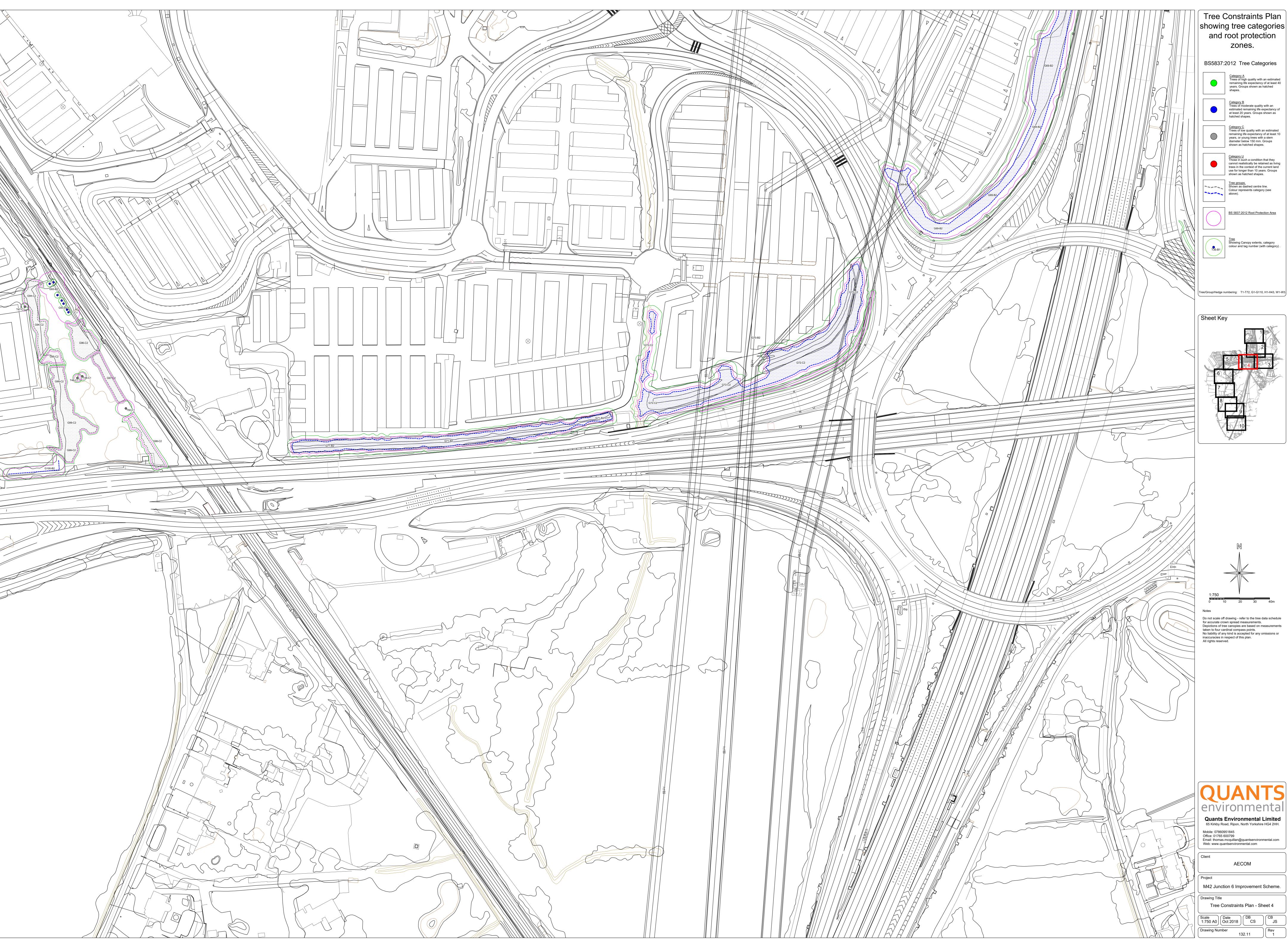


### Appendix 2. Tree Constraints Plan





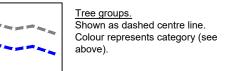




Tree Constraints Plan showing tree categories and root protection

BS5837:2012 Tree Categories

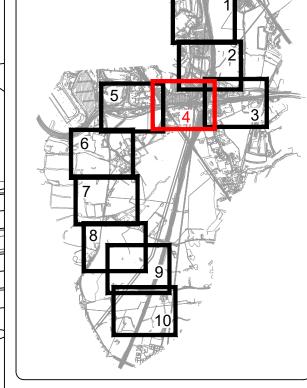
Category B
Trees of moderate quality with an
estimated remaining life expectancy of
at least 20 years. Groups shown as
hatched shapes.

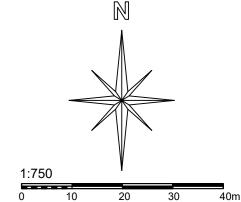






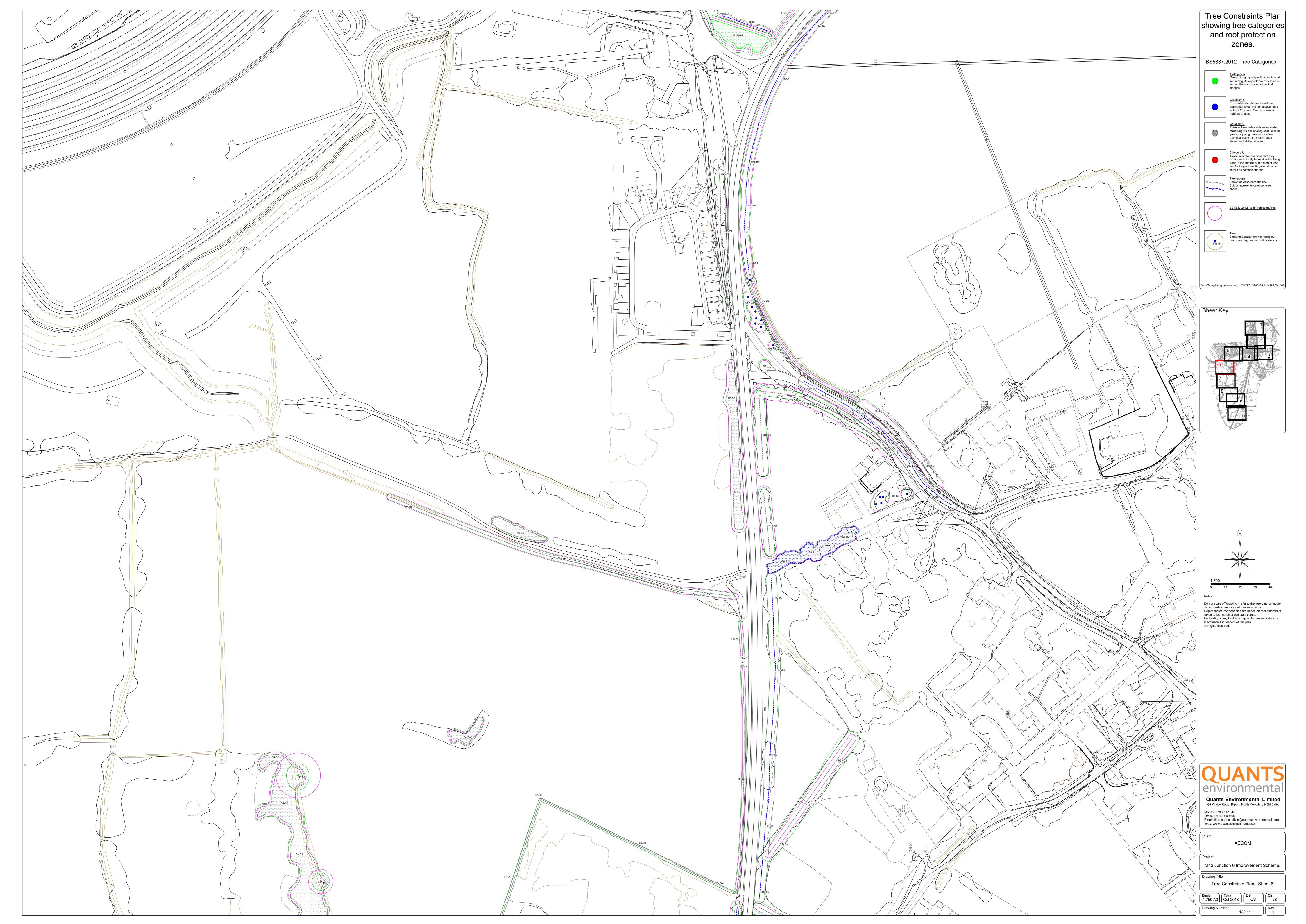




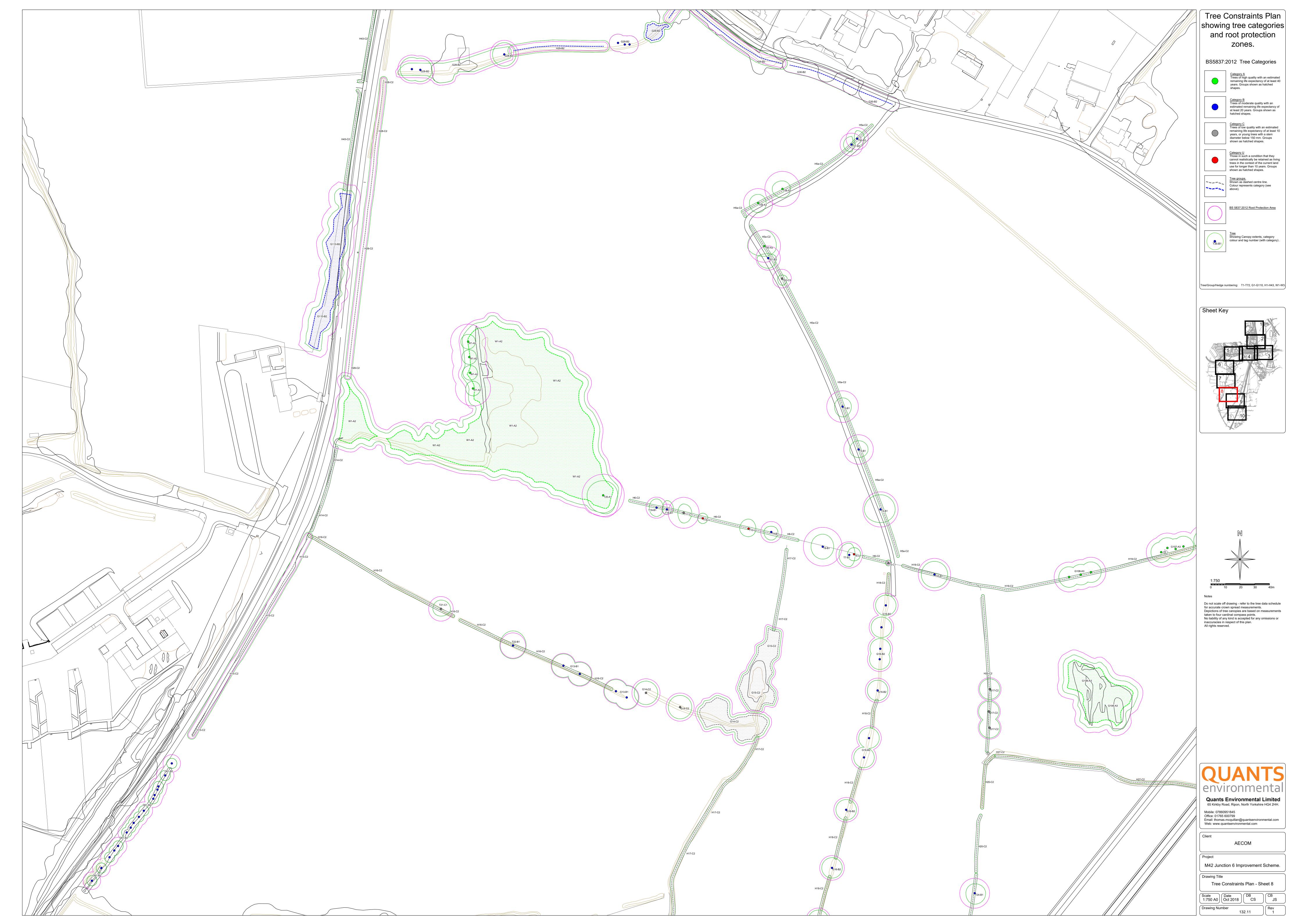


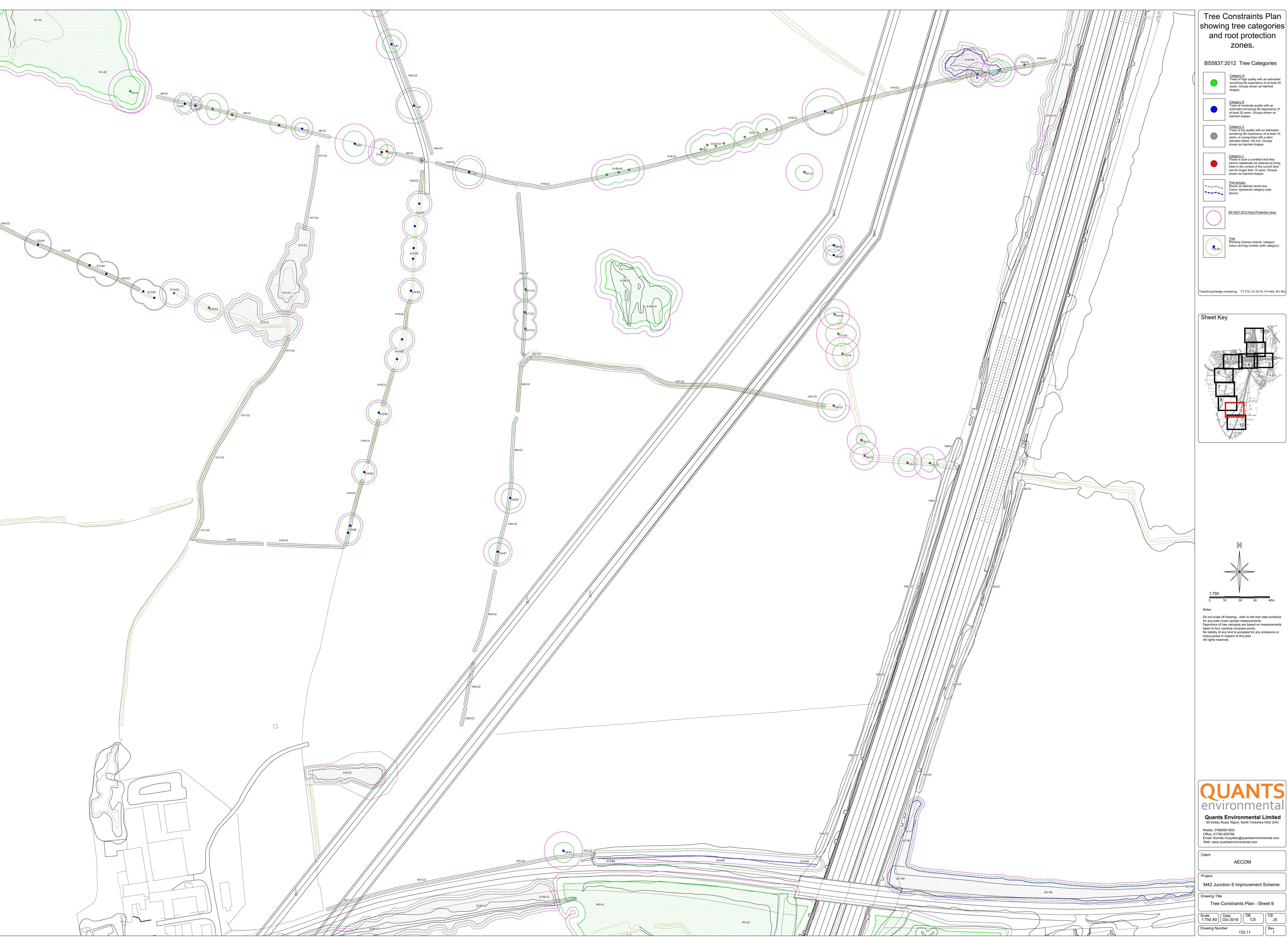
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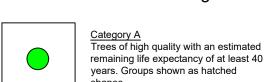


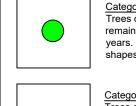




Tree Constraints Plan showing tree categories and root protection zones.

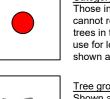
BS5837:2012 Tree Categories



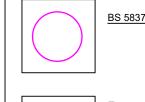


Category B
Trees of moderate quality with an estimated remaining life expectancy of at least 20 years. Groups shown as hatched shapes.

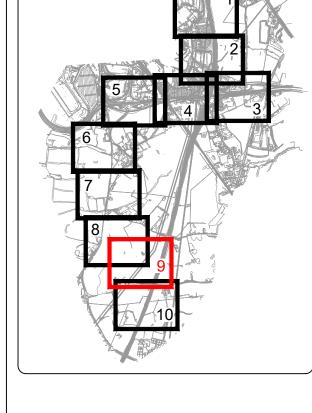
Category C
Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm. Groups shown as hatched shapes.

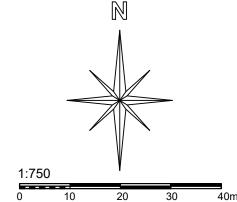


Tree groups.
Shown as dashed centre line.
Colour represents category (see above).



BS 5837:2012 Root Protection Area





Do not scale off drawing - refer to the tree data schedule for accurate crown spread measurements.

Depictions of tree canopies are based on measurements taken to four cardinal compass points.

No liability of any kind is accepted for any omissions or inaccuracies in respect of this plan.

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AECOM

M42 Junction 6 Improvement Scheme.

Tree Constraints Plan - Sheet 9

Scale 1:750 A0 Date CS JS

