ACTIVE ARBORIST

Safe and graceful trees, a beautiful garden and a stable house

Advice and reports on trees in relation to: Safety, amenity, health, subsidence/heave, insurance claims, mortgage applications, planning applications, wildlife habitats, environmental improvements, litigation.

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Client:	**Morgan Ashurst plc** **Pavillion Court** **Green Lane** **Garforth** **Leeds** **LS25 2AF**
Site:	**Barnsley LIFT – Tranche 3 - Darton** **Darton Council Offices** **Huddersfield Road** **Darton** **S75 5NB**
Report:	**Tree Condition Survey**
Reference No:	**AA/4479/02.09**
Date:	**Instructions Received:** **13.01.09** **Site Visits:** **14.01.09 & 16.01.09** **Report Completed:** **03.02.09**

Contents

Object

To consider the condition of trees growing on and adjacent to the site with regard to safety and amenity, and categorise them for suitability for retention when the site is developed.

Also to briefly consider the implications that the proposed development may have on the trees.

Observations

The site is situated in a suburban area of varied style and age of housing.

The plot is roughly triangular and the land slopes up to the south corner.

Along the south end of the south east boundary, the land is retained above Churchfield Lane by a rock face and steep banking.

Existing buildings on the site include the council office block, a disused detached house and a garage block all with an access driveway and asphalt parking areas as shown on the topographical survey.

Level changes within the site are accommodated with a retaining wall around the south and east of the office building.

There is a wide grass verge to the north, bordering Huddersfield Road and shrubs adjacent to the driveway and parking areas have been trimmed. The remainder of the site is overgrown with grass, brambles and tree saplings.

Statutory Tree Protection

Trees can be subject to Statutory Protection which should be revealed on a Local Authority Search (e.g. Tree Preservation Order, Conservation Area, Planning Condition). With certain exceptions, any work to protected trees requires the consent of the Local Authority before work commences.

On this site a felling licence would be required from the Forestry Commission if trees were removed prior to obtaining planning consent.

Tree Survey

The trees growing within the site were all inspected in sufficient detail from ground level.

Offsite trees were viewed from within the site and all data were estimated.

The Tree Data collected is presented at Appendix A.

Arboricultural Implications

The site layout I have seen shows the proposed building to the east side of the plot with car parking and access around the north and west.

A section of the screen currently growing along the north side of the existing driveway will need to be removed for car parking space.

Shrubs and a Holly tree will require to be removed for the new site entrance.

Trees along the east boundary to Churchfield Lane will not tolerate development within their root zones within the site as their rooting to the east is already limited by the rock face and steep banking. It will be preferable to remove these and replant with species more suitable for the situation.

The group of trees and shrubs in the centre of the site will need to be removed to accommodate the building and car park.

Several trees were found to have defects and are therefore unsuitable for retention – these are shown in red on the Tree Location plan.

The trees and significant groups of shrubs that will need to be removed for safety reasons and to accommodate the proposed development include:

0635
G2
0636
0637
G3 – west end
0641
G4
0643
0645
0646
0648
0651? – Possible retention with particular care
0652? – Possible retention with particular care
0653
0654
0655
0656
G8
0659
0660
G9
0661

The driveway and car parking spaces encroach into the root zones of several other trees. These trees should only be retained if a no dig construction method can be employed and a porous surfacing used. Care will be required adjacent to tree numbers 0657, 0658, OT2 and OT3 which are growing in soil currently retained by the rear wall of the existing garages.

There will be space for new tree planting at the south corner, along the north boundary and at places on the east boundary. It may be possible to plant large growing specimen trees at both sides of the new entrance as a feature.

Structural Implications

The subsoil type and potential future growth of the existing trees and any proposed new planting must be taken into account in the design of foundations. Clay shrinkage or heave through the continued or previous seasonal water use of trees must be allowed for.

Direct physical action through root growth must be considered in the design, particularly for shallow construction such as hard surfacing.

Tree Protection Measures

In order to retain the existing trees in good condition, it is important that the required minimum area of root should remain undisturbed. This is shown as the Root Protection Area in the Tree Schedule and is the extent of ground around each tree where all activities must be excluded. This is to avoid root damage through compaction of the soil, spillage of toxic material or root removal through soil stripping.

In some cases, a tree canopy may extend beyond the Root Protection Area and allowance must be made to prevent damage to branches during construction or conflict with buildings.

Prior to commencement of development works, tree protection fencing must be erected along the approved lines.

Conclusion

There is a good range of age and species of trees and shrubs on the site, both deciduous and evergreen.

The existing trees should be retained where possible, however the sloping nature of the site may necessitate the removal of several trees to accommodate excavation for a building and grading for car parking.

The trees along Churchfield Lane will have the majority of their root systems growing in towards the centre of the site due to the steep banking and rock face to the southeast, These trees will not tolerate disturbance to the root systems and could become dangerously unstable if soil is removed or roots cut.

On balance, it is likely that only a few of the existing trees can be retained if there is to be significant development to the site.

There appears to be scope for new planting, particularly in the corners of the site.

Signed  **Date** 03.02.09

Steve Parker Tech Cert (Arbor A)
Arboricultural Consultant

Global climate changes are forecast to create more extreme weather conditions. The future health and condition of trees with regard to safety may therefore be compromised.

Trees are biological organisms that over time are subject to the forces of nature and the intervention of humans. The effect of the local environment above and below ground can alter the condition of the tree and the tree can affect the local environment, including structures. Whilst this report attempts to address the issues under consideration at present, the situation may change. A further report must, therefore, be obtained if significant changes occur to a tree or its surroundings or otherwise in a maximum of five years time.

Trees interact with their surroundings in many different ways - it is important for the client to consider the opinion of experts in all relevant fields before embarking on a course of action.

Appendix A

Tree Data

Key To Abbreviations and Terms Used

Tree No.
Tree or group number as indicated on site plan.

Species
English name and *botanical name*.

Height
From ground level at the base of the tree to the top twig - in metres.

Trunk Diameter
Measured in millimetres at 1.2m to 1.5m above ground level where practical – otherwise above the root flare and below the first major fork.

Crown Spread
From the trunk to the ends of the branches at the four points of the compass – in metres.

Clearance
Height from ground level to the lowest part of the branch canopy – in metres.

Age
Approximate stage of growth for the species:

Y - Young (Less than one third life expectancy)
MA - Middle Age (one third to two thirds life expectancy)
M - Mature
OM - Over mature
V - Veteran

Vitality
Assessment of the growth response of the tree:

D - Dead
L - Low
N - Normal

Condition
Assessment of the general health and structural condition, particularly with regard to safety:

D - Dead
P - Poor
F - Fair
G - Good
O - Offsite

Comment
Description of particular benefits or faults.

Work Required
Recommendations for remedial work that is required for safety and the health of the tree at present. Additional work may be necessary to allow the development – a Tree Work Specification can be drawn up once a final site layout is available.

% Leaf Volume
Amount of live leaf bearing twig to be removed as a total of all work recommended.

SULE
Estimated safe useful life expectancy.

RPR – Root Protection Radius
Minimum root protection radius – in metres assuming tree growing in open ground with no root restrictions.

RPA Root Protection Area
Minimum root protection area if required to be offset due to root restriction or development if allowed.

Mature Height
Estimated likely height if allowed to grow.

Category
Tree quality category and colour coding in accordance with BS 5837:2005 to allow suitable tree retention:

R	- Remove	- Dark Red
A	- High quality	- Light Green
B	- Moderate quality	- Mid Blue
C	- Low quality	- Grey

A,B,C Sub-category values:

1 - Arboricultural
2 - Landscape
3 - Cultural and conservation

NR
Data not recorded due to site conditions or has been accidentally omitted. If the information is critical, an attempt will be made to collect the data at the next site visit.

ONSITE TREES

Tree No	Species	Height	Trunk Diameter	Crown Spread				Clearance	Age	Vitality	Condition	Comment	Work Required	% Leaf Volume	SULE	RPRadius	RPArea	Mature Height	Category
				North	East	South	West												
G1	**Shrubs** *Various sp.*	4	-	3	-	3	-	1.5	MA	N	G	Group of evergreen and deciduous shrubs.	-	-	>20	1.5	-	8	C2
0633	**Variegated Holly** *Ilex sp.*	6	170	2	2	2	2	2.5	M	N	G	-	-	-	>40	2.1	13.1	15	.A2
0634	**Holly** *Ilex sp.*	8	235 220 190	3	3	3	3	2	M	N	G	Three stems from ground level.	-	-	>40	4.6	64.1	15	A2
G2	**Shrubs** *Various sp.*	4	-	2	-	2	-	-	MA	N	G	Group of evergreen *and deciduous shrubs*	-	-	>20	1.5	-	8	C2
0635	**Variegated Holly** *Ilex sp.*	7	265	2	2	2	1	2.5	M	N	G	-	-	-	>40	3.2	31.8	15	A2
0636	**Holly** *Ilex sp.*	8	310	3	3	3	3	2	M	N	G	-	-	-	>40	3.8	43.5	15q	A2
0637	**Sycamore** *Acer pseudoplatanus*	9	270	3	3	4	3	2.5	MA	N	G	-	-	-	>40	3.3	33	24	A2
0638	**Holly** *Ilex sp.*	8	155 170 210	3	3	3	3	1.5	MA	N	G	Three stems from ground level.	-	-	>40	3.8	43.5	15	A2

ONSITE TREES

Tree No	Species	Height	Trunk Diameter	Crown Spread				Clearance	Age	Vitality	Condition	Comment	Work Required	% Leaf Volume	SULE	RPRadius	RPArea	Mature Height	Category
				North	East	South	West												
0639	**Sycamore** *Acer pseudoplatanus*	9	210	3	3	3	3	3	MA	N	G	-	-	-	>40	2.6	20	25	A2
0640	**Holly** *Ilex sp.*	8	230	2	2	2	2	1	M	N	G	-	-	-	>40	2.8	24	15	A2
G3	**Shrubs** *Various sp.*	5	-	3	-	2	-	-	MA	N	G	Group of evergreen and deciduous shrubs	-	-	>20	1.5	-	10	C2
0641	**Holly** *Ilex sp.*	7	150	1.5	1.5	1.5	1.5	1	MA	N	G	-	-	-	>40	1.8	10.2	15	A2
G4	**Shrubs** *Various sp.*	4	-	-	-	-	-	-	MA	N	G	Group of evergreen shrubs.	-	-	>20	1.5	-	8	C2
0642	**Sycamore** *Acer pseudoplatanus*	12	270 240	3	4	4	5	2	MA	N	G	Twin stem from ground level.	Remove basal suckers.	-	>20	3.6	40.1	25	A2
0643	**Sycamore** *Acer pseudoplatanus*	12	495	5	5	5	5	1.5	MA	N	F	Multi-stemmed from 1.5m where topped in the past. Must not be allowed to grow unchecked as failure may occur.	Crown clean. Crown thin at branch tips to reduce weight and leverage on pollard head.	-	>20				B2

ONSITE TREES

Tree No	Species	Height	Trunk Diameter	Crown Spread				Clearance	Age	Vitality	Condition	Comment	Work Required	% Leaf Volume	SULE	RPRadius	RPArea	Mature Height	Category
				North	East	South	West												
0644	**Ash** *Fraxinus excelsior*	8	160	2	3	2	1	3	Y	N	G	Slight lean to the south east.	-	-	>40	2	11.6	25	C2
G5	**Shrubs** *Various sp.*	5	-	-	-	-	-	-	M	N	F	Group of mostly Hawthorn and Elder growing in the loose banking and collapsing due to dense heavy canopies.	Crown lift to 3m over the footpath. Reduce height to 2m.	-	>10	1.5	-	15	C2
0645	**Sycamore** *Acer pseudoplatanus*	12	10 X 270	6	7	6	5	2	MA	N	G	Group of ten stems.	Remove basal suckers. Crown clean.	-	>40	15	707	25	A2
0646	**Ash** *Fraxinus excelsior*	7	230 180	4	4	4	3	2	MA	L	F	Twin stem from ground level. Growing on edge of rock face. Fair amount of deadwood in crown.	Fell.	-	<10	-	-	-	R
0647	**Sycamore** *Acer pseudoplatanus*	9	150	2	2	2	2	3	Y	N	G	-	-	-	>20	1.8	10.2	25	C2
0648	**Ash** *Fraxinus excelsior*	8	195 175	3	2	2	3	0	Y	N	F	Twin stem from ground level with decay to west stem.	Remove west stem. Crown clean.	-	>20	2.6	21.1	25	C2

ONSITE TREES

Tree No	Species	Height	Trunk Diameter	Crown Spread				Clearance	Age	Vitality	Condition	Comment	Work Required	% Leaf Volume	SULE	RPRadius	RPArea	Mature Height	Category
				North	East	South	West												
0649	**Sycamore** *Acer pseudoplatanus*	10	160	2	3	2	0	3	Y	N	G	Growing close to edge of cliff face.	-	-	>20	2	11.6	25	C2
G6	**Hawthorn** *Crataegus monogyna*	4	-	-	-	-	-	-	M	N	F	Group of shrubs growing on the edge of the rock face.	Reduce spread. Reduce height to 1.5m.	-	>10	1.5	-	15	C2
0650	**Sycamore** *Acer pseudoplatanus*	12	310	6	4	0	5	2	MA	N	G	Slight lean to north. Close to edge of rock face.	Remove Ivy.	-	>20	3.8	43.5	25	B2
0651	**Sycamore** *Acer pseudoplatanus*	13	600	6	6	6	6	0	M	N	G	Trunk base growing over edge of rock face.	Remove Ivy. Crown clean. Crown thin. Remove basal suckers.	15	?	7.2	163	25	B2
0652	**Sycamore** *Acer pseudoplatanus*	13	380	5	0	7	5	2	MA	N	G	Slight lean to west.	Remove Ivy.	-	>20	4.6	65.4	25	A2
0653	**Ash** *Fraxinus excelsior*	8	200	-	-	-	-	-	Y	-	D	Dead.	Fell.	-	-	-	-	-	R
G7	**Shrubs** *Various sp.*	6	-	-	-	-	-	-	MA	N	G	Mostly Ivy covered Hawthorn and young Ash growing on the steep banking.	Reduce height to 2m.	-	>10	1.5	-	25	C2

ONSITE TREES

Tree No	Species	Height	Trunk Diameter	Crown Spread				Clearance	Age	Vitality	Condition	Comment	Work Required	% Leaf Volume	SULE	RPRadius	RPArea	Mature Height	Category
				North	East	South	West												
0654	**Apple** *Malus sp.*	6	250	3	4	4	4	1	M	N	G	-	Crown clean. Crown thin.	20	>20	3	28.3	10	B2
0655	**Cherry** *Prunus sp.*	8	490	6	6	6	6	0	M	N	F	Multi stemmed from 0.5m. Decay to trunk and one stem has failed.	Fell.	-	<10	-	-	-	R
0656	**Sycamore** *Acer pseudoplatanus*	11	395	5	5	5	5	2	MA	N	P	Cavity to base and probing revealed extensive decay.	Fell.	-	-	-	-	-	R
0657	**Cherry** *Prunus sp*	9	280	2	5	4	5	1.5	MA	N	G		Crown clean. Crown lift to 4m over offsite driveway.	-	>20	3.4	35.5	15	B2
0658	**Oak** *Quercus robur*	11	300	2	6	4	4	2	Y	N	G	Twin stem from 1.2m.	Crown clean. Crown lift to 4m over offsite driveway.	-	>40	3.6	40.8	25	B2
G8	**Privet** *Ligustrum ovalifolium*	2	-	0.5	-	0.5	-	0	M	N	G	Trimmed evergreen hedge.	-	-	>40	1	-	5	C2
0659	**Ash** *Fraxinus excelsior*	13	320	4	2	5	5	0	MA	N	G	-	Crown clean.	-	>20	3.9	46.4	25	B2

ONSITE TREES

Tree No	Species	Height	Trunk Diameter	Crown Spread				Clearance	Age	Vitality	Condition	Comment	Work Required	% Leaf Volume	SULE	RPRadius	RPArea	Mature Height	Category
				North	East	South	West												
0660	**Sycamore** *Acer pseudoplatanus*	13	390	4	4	3	2	2	MA	N	F	Twin stem from tight fork at 0.5m – appears stable at present.	-	-	<20	4.7	68.9	25	C2
0661	**Sycamore** *Acer pseudoplatanus*	9	2 X 200	3	4	3	2	0	Y	N	G	Twin stem from ground level.	Remove basal suckers.	-	>20	2.8	24.7	25	C2
G9	**Shrubs** *Various sp.*	7	-	-	-	-	-	0	MA	N	G	Group of evergreen and deciduous shrubs.	-	-	>20	1.5		15	C2

OFFSITE TREES

Tree No	Species	Height	Trunk Diameter	Crown Spread				Clearance	Age	Vitality	Condition	Comment	Work Required	% Leaf Volume	SULE	RPRadius	RPArea	Mature Height	Category
				North	East	South	West												
OG1	**Trees** Various species	10	200	-	3	-	-	2	Y	N	O	Row of deciduous and evergreen trees including conifers.	-	-	-	2.4	-	30	O
OT1	**Maple** *Acer sp.*	10	300	3	5	5	4	1.5	MA	N	O	-	-	-	-	3.6	40.08	25	O
OT2	**Maple** *Acer sp.*	12	380	3	7	4	5	1.5	MA	N	O	-	-	-	-	4.6	65.4	25	O
OT3	**Sycamore** *Acer pseudoplatanus*	10	380	4	5	3	4	3	MA	N	O	-	-	-	-	4.6	65.4	25	O
OT4	**Gold Lawson Cypress** *Chamaecyparis lawsoniana*	6	100	1	1	1	1	2	MA	N	O	-	-	-	-	1.2	4.6	20	O

Appendix B

Work Standard

Standard of Work

All tree work should be carried out by a competent Tree Surgeon and in compliance with the following:

i Public Liability Insurance of at least £5m to be held.

ii Work to be carried out to a minimum standard as in British Standard 3998 1989 and in accordance with current good arboricultural practice.

iii All relevant Health and Safety guidelines to be complied with.

iv All operatives to hold relevant certificates demonstrating competence in tasks being carried out.

v It is the Contractor's responsibility to carry out a risk assessment and take all necessary action in order to ensure safe working.

vi Chainsaw chain oil to be bio-degradable.

vii All tools to be sterilised after working on diseased trees before being used on live trees that are to be retained.

viii All debris arising from the works to be removed and the site to be left in a safe condition at the end of each working day.

ix Due care must be taken to avoid disturbance to nesting wildlife e.g. birds, bats, squirrels.

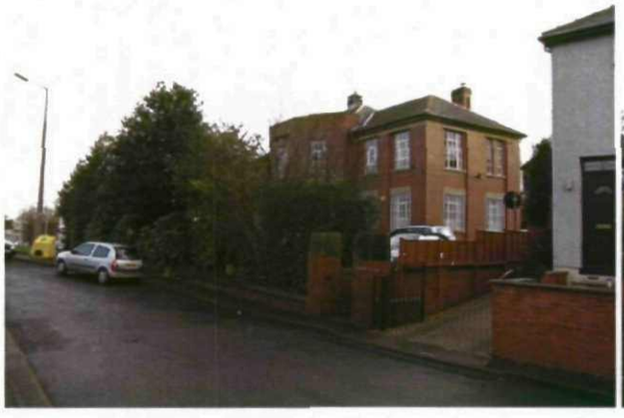
x If a bat or other protected species is discovered or disturbed, all work within the vicinity must be stopped. Advice must be obtained from The Statutory Nature Conservation Organisation before proceeding further. In England contact English Nature – telephone 01733 455101.

xi The work is to be carried out without causing damage, all debris arising is to be removed and the site left clean and tidy.

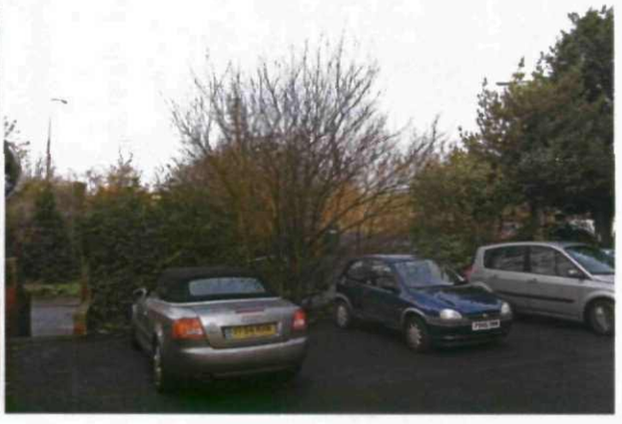
xii Any defects found to a tree that were not addressed by remedial works specified or that were not readily visible from ground level must be reported to the Arboricultural Consultant for further inspection.

Appendix C

Photographs

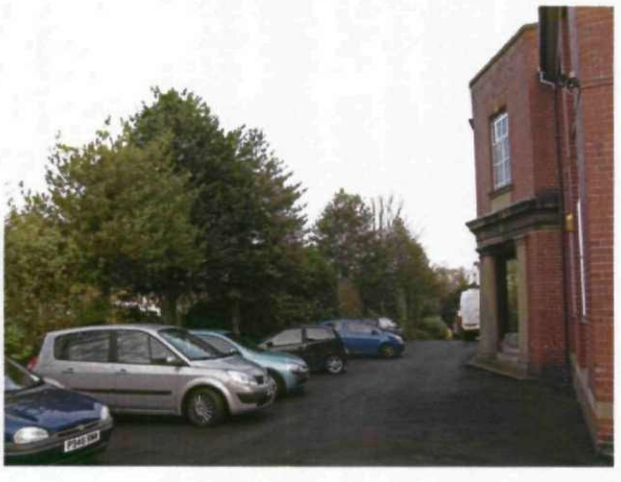


01 - G1 from Huddersfield Road.JPG



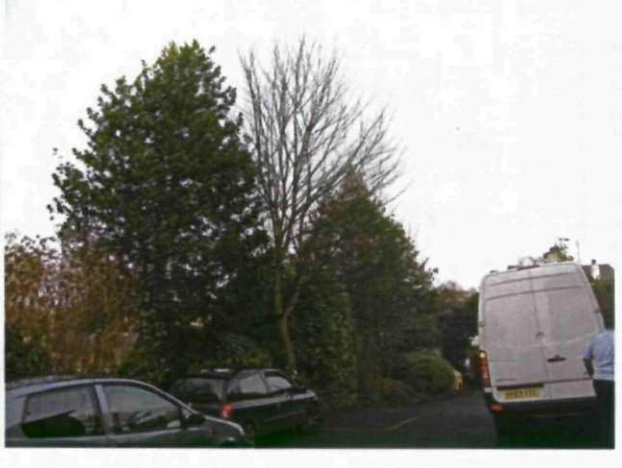
02 - G1 from site.JPG

03 - 0633, 0634, 0635 from Huddersfield Road...



04 - 0633, 0634, 0635 from site.JPG

05 - G2, 0636 from Huddersfield Road.JPG



06 - 0636, 0637 from site.JPG

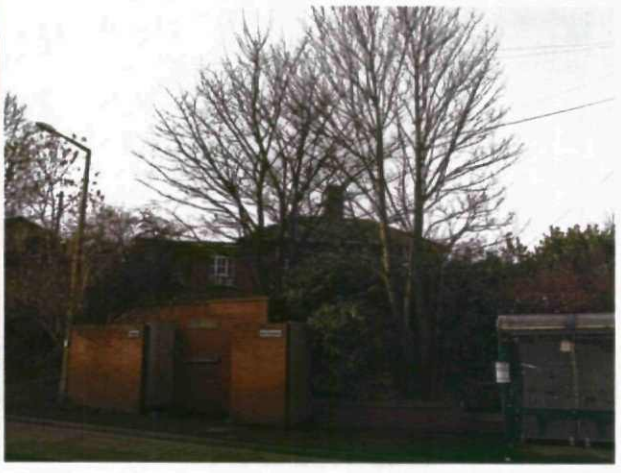
07 - 0636, G3, 0638 from Huddersfield Road.J...

08 - G3, 0638, 0639, 0640 from Churchfield La...

09 - G3, 0641, G4 from Churchfield Lane.JPG

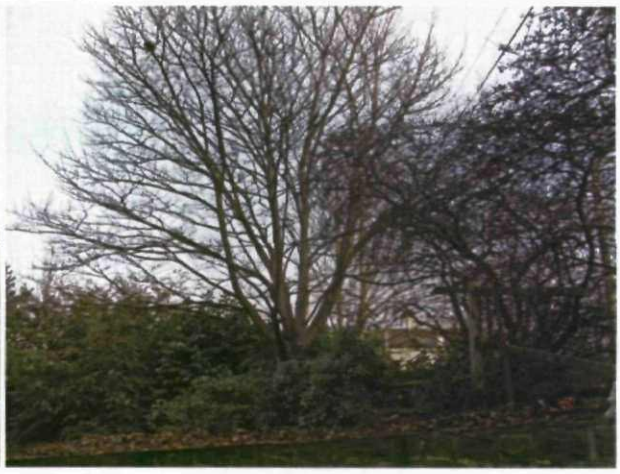
10 - G3, 0641, G4 from Churchfield Lane.JPG

11 - G4, 0643 from site.JPG



12 - G4, 0642, 0643 from Churchfield Lane.JPG

13 - View south on Churchfield Lane.JPG

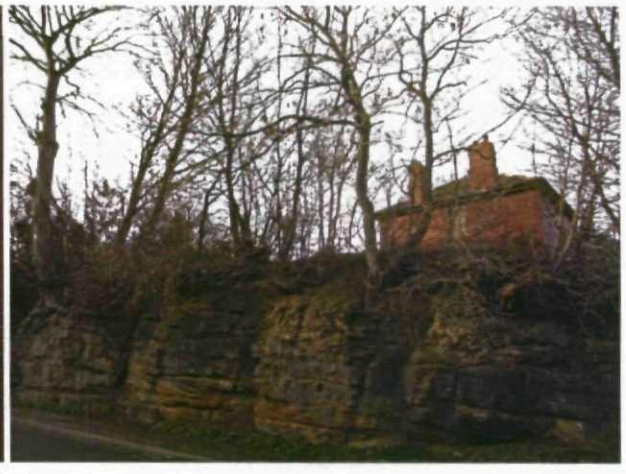


14 - 0643 from site.JPG

15 - G5, 0644 from Churchfield Lane.JPG

16 - 0645, G6 from Churchfield Lane.JPG

17 - 0645 from site.JPG



18 - G6, 0646, 0647, 0649, 0650 from Churchf...

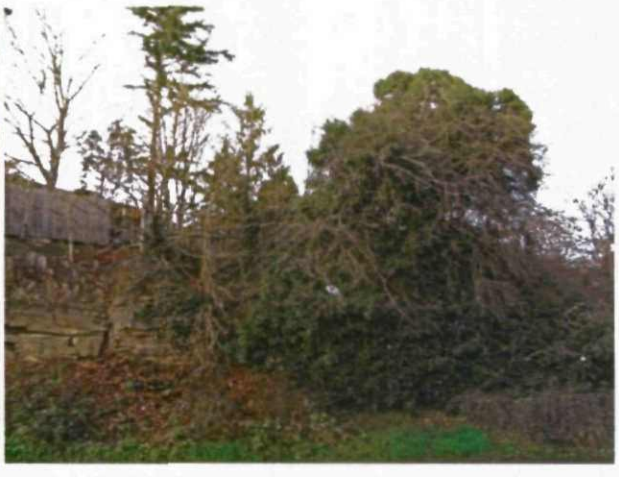
19 - 0647 to 0652 from site.JPG

20 - 0651 from Churchfield Lane.JPG

21 - 0652 from site.JPG

22 - 0651, 0652 from site.JPG

23 - G7 from Churchfield Lane.JPG

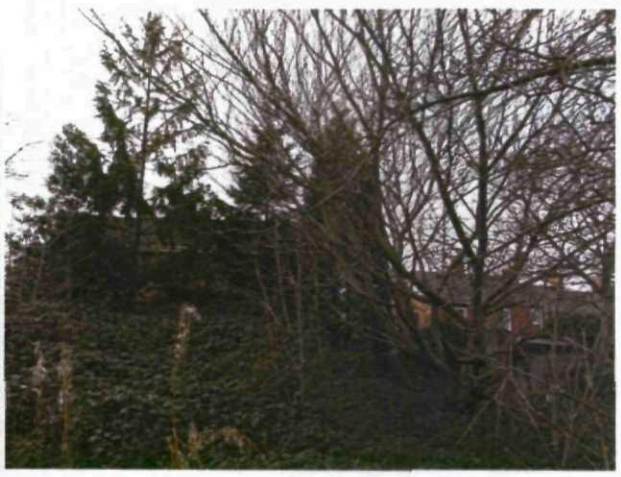


24 - G7 from Churchfield Lane.JPG

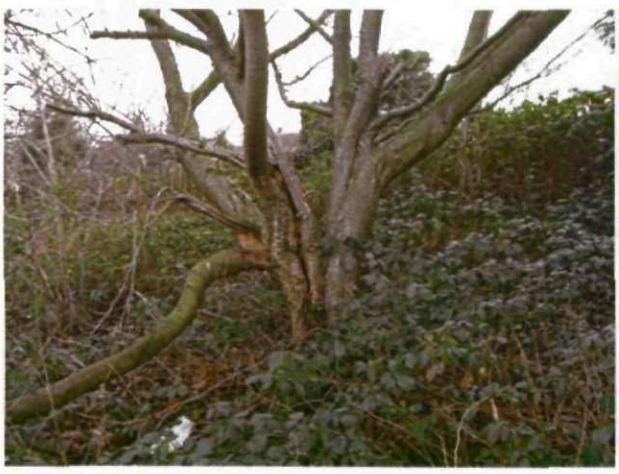
25 - G7, OG1 from Churchfield Lane.JPG

26 - G7, OG1 from site, view south west.JPG

27 - 0654, OG1 from site.JPG



28 - 0655, OG1 from site.JPG



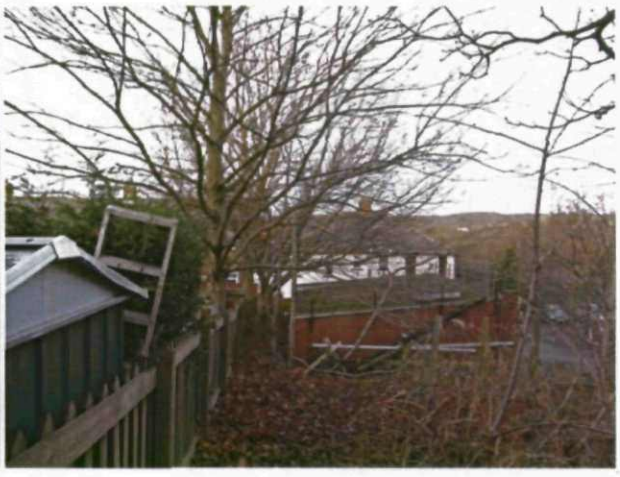
29 - 0655.JPG

30 - OG1, 0655 from site.JPG

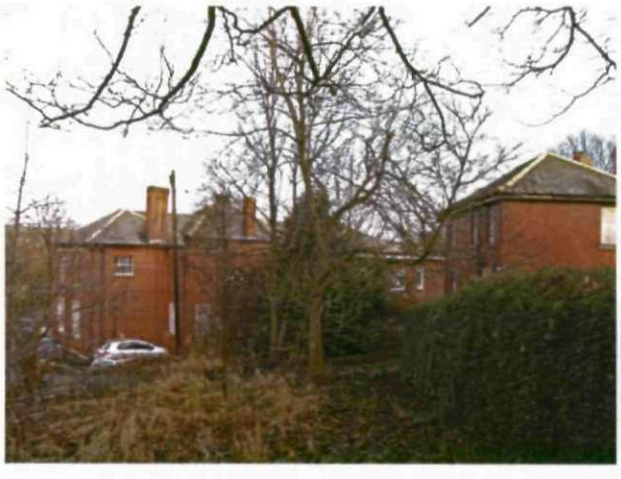
31 - View north from south corner of site.JPG

32 - 0656, G8 from site boundary.JPG

33 - G8, 0656 from site.JPG

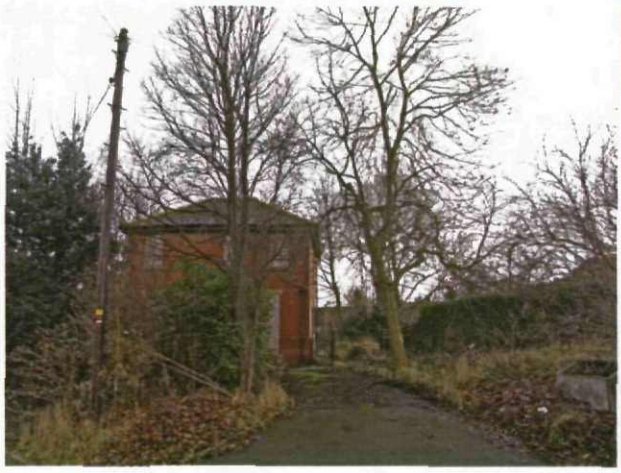


34 - OT1, 0657 from site boundary.JPG



35 - G8, 0659, 0660, G9 from site boundary.JPG

36 - G8, 0659, 0660, G9 from site view north w...



37 - G8, 0659, 0660, G9 from site, view south ...

38 - 0660, 0661, G9 from site, view south.JPG

39 - view north east from site boundary.JPG

Appendix D

Tree Location Plan

TOPOGRAPHIC SURVEY
SCALE 1:250

ACTIVE ARBORIST	
Site:	Barnsley LIFT – Tranche 3 - Darton Darton Council Offices Huddersfield Darton S75 5NB
Title:	Tree Locations
Scale:	1:250
Drg. No:	AA/4479.01.09D (From plan supplied)
Date:	16.01.09

FIELD ROAD

CHURCHFIELD LANE

OT1 OT2 OT3 OT4

OG1

G1 G2 G3 G4 G5 G6 G7 G8 G9

0633 0634 0635 0636 0637 0638 0639 0640 0641 0642 0643 0644 0645 0646 0647 0648 0649 0650 0651 0652 0653 0654 0655 0656 0657 0658 0659 0660 0661