Arboricultural Impact Assessment

Plus Tree Survey

The Horse & Groom,
Barnsley Road

Report reference: AR-5503-02
May 2021

Report Title:	Arboricultural Impact Assessment The Horse & Groom Barnsley Road
Report Reference:	AR-5503-02
Written by:	Tom Benson FdSc Arb Trainee Arboricultural Consultant
Technical review:	Victoria Black FdSc Arb Principal Arboricultural Consultant
QA review:	Victoria Black FdSc Arb Principal Arboricultural Consultant
Approved for issue:	Victoria Black FdSc Arb Principal Arboricultural Consultant
Date:	18.05.2021

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Contents

Summary Statement

The site is located in Goldthorpe, a small town situated in between Doncaster to the east and Barnsley to the west. Rotherham is approximately 10 miles to the south. The existing site consists of a parcel of land occupied by a derelict pub with areas of hard standing and car parking.

The application site is located in an urban area and the surrounding neighbourhood is a mix of residential and light commercial uses. To the north, the site is bound by a public car park and Queen street which is a residential street. To the east and west lie commercial properties and to the south is the Doncaster/Barnsley Road.

The tree survey revealed a total of six individual trees and two groups of trees. Of these, four trees were identified as retention category 'B' and four trees/groups were identified as retention category 'C'. There were no retention category 'A' or 'U' trees identified.

This report should be read in conjunction with the attached Tree Constraints Plan Ref: DR-5503-01 and Tree Survey AR-5503-01.

The proposals consists the demolition of the existing two storey building and out-building, the removal of existing foundations, the retainment of current areas of hardstanding and the construction of a new residential development.

A plan has been provided by the client to enable an impact assessment of the proposed works on the existing relevant trees within the Site.

Introduction

Purpose of the report

1. This report has been commissioned to provide professional independent, detailed arboricultural advice on relevant trees present at The Groom & Horses, Barnsley Road, Goldthorpe.

2. Plans have been provided by the architect/client to enable an impact assessment of the proposed works on the existing relevant trees within the Site.

Impact Schedule

The following schedule identifies the individual tree and its retention category with the main feature(s) of the proposed works likely to cause an impact. The tree references are shown on the tree constraints plan and the tree protection plan. Any mitigation measures are noted.

Tree ref.	Species	Retention category	Proposal feature	Impact	Mitigation
T1	Silver Maple	C1	Demolition of existing building. Too close to protect	Removal	Mitigation planting on site required.

Tree ref.	Species	Retention category	Proposal feature	Impact	Mitigation
T2	Silver Maple	B1	Demolition of existing building. Too close to protect	Removal	Mitigation planting on site required.
G3	Cherry	C2	Demolition of existing building. Too close to protect	Removal	Mitigation planting on site required.
G4	Sycamore	C2	Demolition of existing building. Too close to protect	Removal	Mitigation planting on site required.
T5	Goat Willow	C1	The retainment and protection of existing tarmac hardstanding. In sections repair/make good works are required	Hand tools only	Tree protection fencing in accordance with BS 5837:2012 Hand tools only. No heavy machinery.
T6	Hornbeam	B1	The retainment and protection of existing tarmac hardstanding. In sections repair/make good works are required	Hand tools only	Tree protection fencing in accordance with BS 5837:2012 Hand tools only. No heavy machinery. Care must be taken when removing grass /hard standing within the vicinity of any retained tree.
T7	Hornbeam	B1	The retainment and protection of existing tarmac hardstanding. In sections repair/make good works are required	Hand tools only	Tree protection fencing in accordance with BS 5837:2012 Hand tools only. No heavy machinery. Care must be taken when removing grass /hard standing

Tree ref.	Species	Retention category	Proposal feature	Impact	Mitigation
					within the vicinity of any retained tree.
T8	Hornbeam	B1	The retainment and protection of existing tarmac hardstanding. In sections repair/make good works are required	Hand tools only	Tree protection fencing in accordance with BS 5837:2012 Hand tools only. No heavy machinery. Care must be taken when removing grass /hard standing within the vicinity of any retained tree.

Implications for retained trees

Tree protection

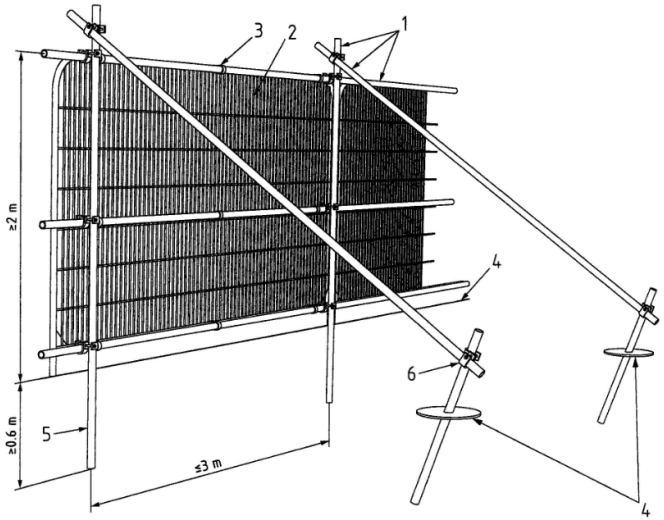
3. Trees and tree groups should be protected from unwanted damage during construction works with temporary tree protection barriers. The barriers should be erected to the outer edge of the tree canopy or the edge of the RPA, whichever is the furthest away from the tree, unless otherwise indicated on the Tree Protection Plan.

4. Tree protection barriers should be the default specification for protective barrier, Figure 2, BS 5837: 2012 Trees in relation to design, demolition and constructions – Recommendations. Where Site circumstances prevent the use of the default barrier, an alternative specification would be recommended by the project arboriculturist with agreement of the local planning authority. The recommended locations for tree protective barriers are shown in Tree Protection Plan.

5. All-weather notices should be attached to the barrier with words such as: "Construction exclusion zone – no access".

6. Where facilitation access is authorised within the RPA temporary ground protection should be installed prior to work starting on Site. The temporary ground protection should be capable of supporting the weight of any traffic/machinery

using the Site without being distorted or causing compaction to the ground. It is recommended that the ground of the possible Site compound/storage area is covered in temporary ground protection to minimise soil damage by compaction and conserve soil health through to post-construction planting in this area.



Key

1 Standard scaffold poles
2 Heavy gauge 2 m tall galvanized tube and welded mesh infill panels
3 Panels secured to uprights and cross-members with wire ties
4 Ground level
5 Uprights driven into the ground until secure (minimum depth 0.6 m)
6 Standard scaffold clamps

Figure 1

Tree work

7. Where pruning work is necessary and authorised to roots or branches of retained trees to enable facilitation works, it should be carried out by a competent contractor in accordance with BS 3998: 2010 Tree Works – Recommendations.

Drainage and utilities

8. Drainage and utilities are expected to be included within the proposed Site works and should not involve digging or trenching within RPA's.

Demolition

9. Demolition of the existing two storey building and out-building expected. These building should be collapsed within their own footprints.

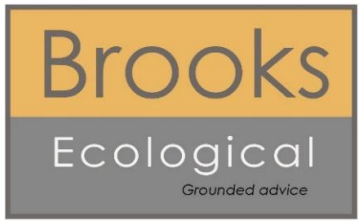
10. Care must be taken when removing grass /hard standing within the vicinity of any retained tree.

Ground level changes

11. It is our understanding that no ground level changes are required within the root protection area of any tree on this site.

Trees to be removed

12. Two trees and two groups are expected to be removed to facilitate the development.



Tree Survey

The Horse & Groom
Barnsley Road

Report reference: AR-5503-01
May 2021

Report Title:	Tree Survey The Horse & Groom Barnsley Road
Report Reference:	AR-5503-01
Written by:	Tom Benson FdSc Arb Trainee Arboricultural Consultant
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Summary Statement

The site is located in Goldthorpe, a small town situated in between Doncaster to the east and Barnsley to the west. Rotherham is approximately 10 miles to the south. The existing site consists of a parcel of land occupied by a derelict pub with areas of hard standing and car parking.

The application site is located in an urban area and the surrounding neighbourhood is a mix of residential and light commercial uses. To the north, the site is bound by a public car park and Queen street which is a residential street. To the east and west lie commercial properties and to the south is the Doncaster/Barnsley Road.

The tree survey revealed a total of six individual trees and two groups of trees. Of these, four trees were identified as retention category 'B' and four trees/groups were identified as retention category 'C'. There were no retention category 'A' or 'U' trees identified.

This report should be read in conjunction with the attached Tree Constraints Plan Ref: DR-5503-01.

Introduction

Purpose of the report

13. This report has been commissioned to provide professional independent, detailed arboricultural advice on all relevant trees present at the Horse & Groom, Barnsley Road, Goldthorpe.

14. This report has been undertaken in accordance with BS 5837:2012 Trees in relation to construction – Recommendations.

15. The client has provided a topographical plan.

16. All findings and recommendations are based on visual observations conducted from ground level during the Site visit only. No other diagnostic procedures were used to establish any extent of internal decay nor was a climbing inspection undertaken.

17. All measurements were obtained with the use of a clinometer and an electronic distometer. On occasion it is not viable to provide accurate measurements due to restricted access or other mitigating circumstances on site, and the data may be estimated.

Legal implications of work to trees

18. Due to the potentially large penalties for illegally carrying out work to protected trees, it is recommended that a check with the local planning authority is carried out prior to any tree works being undertaken and any required consents such as for work to trees with Tree Preservation Orders and/or Conservation Areas are obtained before work to trees on site. Additionally, work to trees at certain times of the year may contravene sections of the Wildlife and Countryside Act regarding nesting and roosting of protected species.

19. Every tree owner has a general duty of care to ensure their tree(s) does not pose an unacceptable risk to other people on or adjacent to their land. The landowner will only be liable for injury or damage caused by trees if they are found to be negligent.

20. There is no legal obligation for a tree owner to cut back growth from a neighbouring property. However, under Common law of tort of nuisance, an affected neighbour has the right to cut back roots or branches that encroach onto a neighbouring property back to the boundary of the land owned by the person abating the nuisance without the neighbour's consent (with the exception of TPO's or CA's). The person abating the nuisance has a duty to exercise reasonable care in carrying out work as a failure to do so may lead to liability in negligence (for example where removal of roots makes a tree unstable).

Site description

21. The site is located in Goldthorpe, a small town situated in between Doncaster to the east and Barnsley to the west. Rotherham is approximately 10 miles to the south.

22. The application site is located in an urban area and the surrounding neighbourhood is a mix of residential and light commercial uses. To the north, the site is bound by a public car park and Queen street which is a residential street. To the east and west lie commercial properties and to the south is the Doncaster/Barnsley Road.

23. The wider landscape is dominated by residential development associated with the town of Goldthorpe beyond which is greenspace/agricultural land spreading out to the larger townships of Doncaster, Barnsley and Rotherham.

Survey conditions

24. The trees were surveyed in cool, alternately overcast and bright conditions on 18th May 2021.

Tree data abbreviations and survey methodology

T	Tree	GL	Ground level
G	Tree group	MS	Multi-stemmed
H	Hedge	AFP	Access facilitation pruning
OSB	Outside Site boundary	Ave	Average dimension
#/est	Estimated dimension	Typ	Typical dimension
N	North	E	South

S	South	W	West
Min	Minimum	Lwr	Lower
adj	Adjacent	Ht	Height

25. The trees were assessed visually from ground level. Where access to a tree is restricted this is noted in the schedule.

26. The tree reference numbers refer to the attached Tree Constraints Plan (TCP) references. The trees were not tagged for this survey.

27. The tree species is listed by common name in the schedules, with a key to scientific names below:

Common name	Botanical name	Common name	Botanical name
Alder (common)	Alnus glutinosa	Goat willow	Salix caprea
Alder (grey)	Alnus incana	Hawthorn	Crataegus monogyna
Apple	Malus domestica	Hazel	Corylus avellana
Aspen	Populus tremula	Holly	Ilex aquifolium
Ash	Fraxinus excelsior	Hornbeam	Carpinus betulus
Beech	Fagus sylvatica	Larch	Larix decidua
Birch (silver)	Betula pendula	Lime (common)	Tilia x europaea
Birch (downy)	Betula pubescens	Lime (small-leaved)	Tilia cordata
Chestnut (sweet)	Castanea sativa	Maple (field)	Acer campestre
Chestnut (horse)	Aesculus hippocastanum	Maple (Norway)	Acer platanoides
Cherry (wild)	Prunus avium	Poplar (black)	Populus nigra
Cherry (bird)	Prunus padus	Oak (sessile)	Quercus petraea
Cherry (Japanese)	Prunus serrulata	Oak (pendunculate)	Quercus robur
Leyland Cypress	X Cupressocyparis leylandii	Rowan/mountain ash	Sorbus aucuparia
Elm (English)	Ulmus procera	Sycamore	Acer pseudoplatanus
Elm (wych)	Ulmus glabra	Weeping willow	Salix chrysocoma
		Whitebeam (Swedish)	Sorbus intermedia

28. Measurement of the existing height above ground level of the first significant branch and the direction of growth and the height of the canopy. This informs ground clearance, crown/stem ratio and shading.

29. The stem/trunk diameter is measured with a diameter tape at 1.5m from ground level around the stem for single stem trees and for multi-stemmed trees and other variants in accordance with Annex C of the British Standard. Where access restricts measurement of the tree, an estimate has been made, denoted by '#'.

30. Canopy spread is measured with an electronic distometer. The close-spacing of some of the trees impeded measurements of canopy spread and height and estimates were made.

31. The age of the tree is based on the typical longevity of the particular tree species. The age classes are: young (Y), semi-mature (SM), early mature (EM), mature (M), over-mature (OM) and veteran (V).

32. The physiological condition of the tree is an assessment of its likely health, vigour and stress. The classes for physiological condition are: good, fair, poor and dead.

33. Structural condition includes tree form, visible defects, irregularities and influencing factors.

34. Preliminary management recommendations note work (with prior approval where necessary) to promote the health and longevity of the tree and/or improve safety and/or increase habitat potential.

35. The life expectancy (life exp.) is the estimated remaining contribution in years, (<10, 10+, 20+, 40+).

36. The retention category (ret cat) for each tree is assessed in accordance with BS 5837: 2012 Table 1, summarised as below:

Category A	Trees of high quality with an estimated remaining life expectancy (ERC) of at least 40 years. Green canopy outline on plan.
Category B	Trees of moderate quality with an estimated ERC of at least 20 years. Blue canopy outline on plan.
Category C	Trees of low quality with an ERC of at least 10 years, OR young trees with a stem diameter below 150mm. Grey canopy outline on plan.

Category U	Trees in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years. Trees unsuitable for retention. Dark red canopy outline on plan.

37. Sub- categories of 1, 2 or 3 are included in the tree data tables and are defined as follows:

Sub-category 1 trees are those with 'mainly arboricultural value'

Sub-category 2 trees are those with 'mainly landscape value'

Sub-category 3 trees are those with 'mainly cultural or conservation value'.

38. The root protection area (RPA) in $m^2$is for layout purposed and indicates the 'minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority'. The RPA is calculated in accordance with BS 5837: 2012 Annex D. Where Site features are likely to have distorted the typical RPA, a polygon of the same area is estimated on plan to reflect a more realistic shape, in accordance with the British standard.

Tree data

39. The following schedule contains the tree data obtained on site:

Ref	Species	Life stage	Ht (m)	Can Ht (m)	Stem diam (mm)	Canopy spread (m)	Physio logical	Structural condition	Recommendations	Life exp. (yrs)	Ret cat
T1	Silver Maple	M	15	3.5	495	N 6 E 6 S 6 W 6	F	Single vertical stem with a balanced canopy. Large bark wound to SE at 2-3M. Located on far side of a concrete wall/fence along a passageway. Pruning wounds. Bark splitting throughout. Situated on adjacent land. Overhanging footpath, boundary and building.	Monitor	20+	C1
T2	Silver Maple	M	16	4	610	N #6 E 6.2 S 4.6 W #6	F	Single vertical stem with a balanced canopy. Located on far side of a concrete wall/fence along a passageway. Pruning wounds. Bark splitting throughout. Situated on adjacent land. Overhanging footpath, boundary and building.	No action required.	20+	B1
G3	Cherry	Y-M	>12	0+	# >320	See plan	F	Several young to mature trees growing alongside and through a wire mesh fence. Pruning wounds throughout.	No action required.	10+	C2
G4	Sycamore	Y	>5	0+	# >90	See plan	F	Self-set group of young trees growing along brick wall.	No action required.	10+	C2
T5	Goat Willow	EM	7	2	315 260	N 5.6 E 6.1 S 4.5 W 3.6	F	Twin stemmed at base with a balanced canopy. Slight lean to east. Pruning wounds throughout, crown lifted over footpath. Dense vegetation growing at base limiting inspection.	No action required.	10+	C1

Ref	Species	Life stage	Ht (m)	Can Ht (m)	Stem diam (mm)	Canopy spread (m)	Physio logical	Structural condition	Recommendations	Life exp. (yrs)	Ret cat
T6	Hornbeam	M	18	2.5	490	N #6 E #7 S 5.76 W 4.46	G	Single vertical stem with a balanced canopy. Multi-stemmed at 2.2M. Growing at the edge of the car park against timber building. Overhanging boundary and building. No major visible defects.	No action required.	20+	B1
T7	Hornbeam	M	18	2.5	375	N 4.6 E #5 S 2.5 W 5	G	Single vertical stem with a balanced canopy. Multi-stemmed at 2.2M. Growing at the edge of the car park against neighbouring building. Overhanging boundary and building. No major visible defects.	No action required.	20+	B1
T8	Hornbeam	M	18	2.5	400	N 2.1 E #5 S 4.4 W 5.1	G	Single vertical stem with a balanced canopy. Multi-stemmed at 2.2M. Growing at the edge of the car park against neighbouring building. Overhanging boundary and building. No major visible defects.	No action required.	20+	B1

Findings

Tree descriptions and recommendations

40. The tree survey revealed a total of six individual trees and two groups of trees. Of these, four trees were identified as retention category 'B' and four trees/groups were identified as retention category 'C'. There were no retention category 'A' or 'U' trees identified. Please refer above for retention category and definition criteria.

41. No tree works have been recommended.

42. Those trees which overhang the public footpaths or public highways, shall require future maintenance to maintain clearance heights for vehicular or pedestrian traffic. These heights should be 5.6m above a road and 2.5m above a footpath.

Figure 1: A large decaying bark wound on T1.

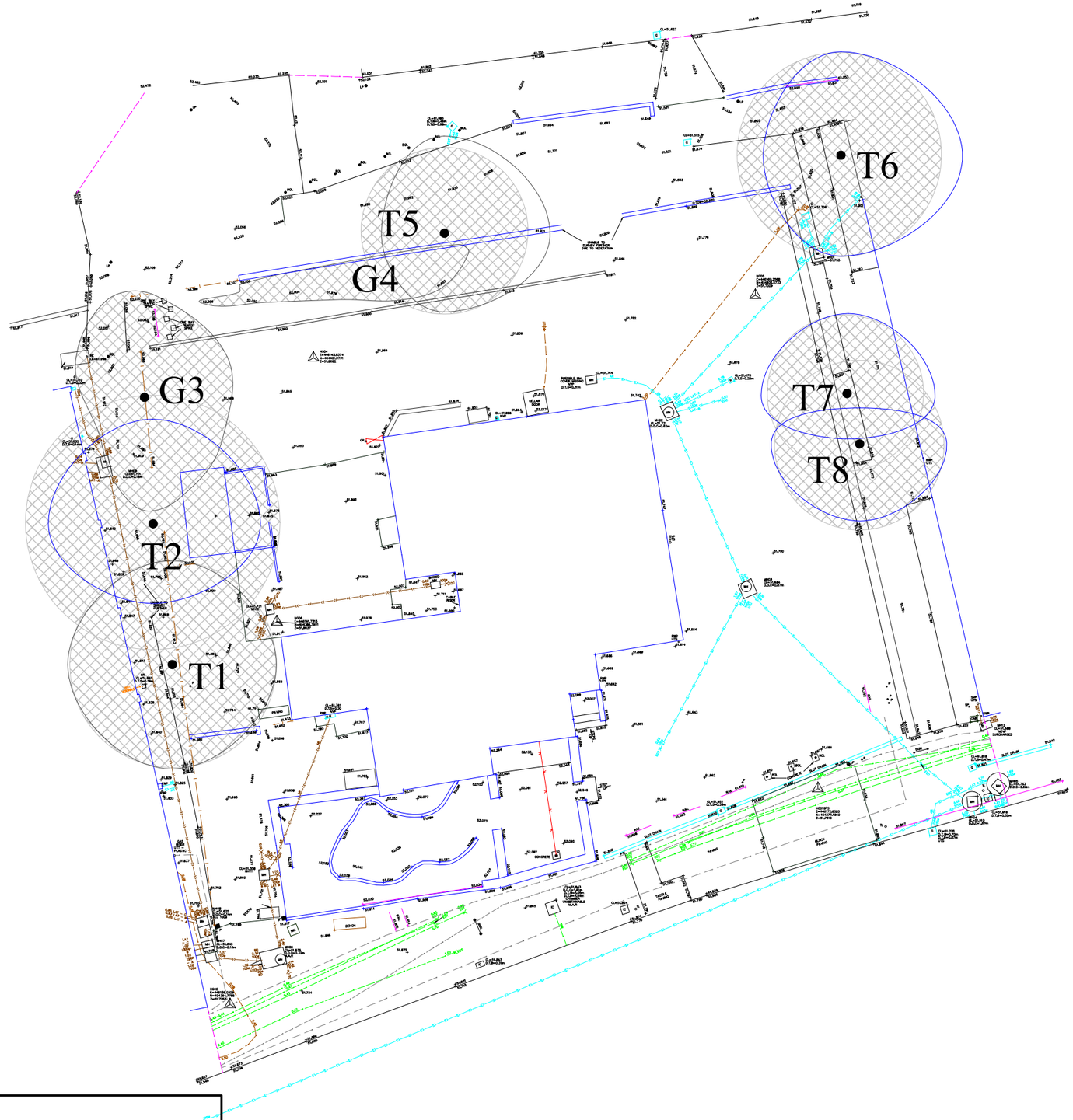
Figure 2: A mature Cherry within G3 which is growing through a wire mesh fence.

Figure 3: T2 and G3 located to the west of the site.

Figure 4: G4 and T5 growing either side of a brick wall to the north of the site.

Figure 5: T6,7 and 8, healthy Hornbeam trees growing along the eastern edge of the site.

DR-5503-01 Tree Constraints Plan



N

Indicative

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DR-5503-01 TREE CONSTRAINTS PLAN

Site: Horse & Groom, Barnsley Road.

Paper Size: A2	**Scale: 1:200**

BS 5837: 2012 Retention Categories

	CATEGORY A
	CATEGORY B
	CATEGORY C
	CATEGORY U

	ROOT PROTECTION AREA
	TREE STEM

Please note:
The plan is for guidance only
and should not be scaled from.

The original of this drawing was produced
in colour - a monochrome copy should not be
relied upon.

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DR-5503-02 Tree Protection Plan

Scope of Works:

Work Items:

1. Prior to carrying out soft strip to main building, all fitted furniture , sanitary-ware, mechanical & electrical equipment and loose furniture / fixtures and fittings are to be removed and disposed of by the contractor.
   Note: There is a significant number of items stacked in one of the large ground floor rooms. Refer to Photos on Drgs 004 + 005 to give indication. Contractor to visit site to ascertain fully above items and make due consideration in tender return.
2. Demolish existing 2 storey building with pitched roofs in it`s entirety including cellar floor and walls. Refer to Photos on Drgs 004 + 005 to give indication of construction.
   Remove existing foundations (depth unknown).
   Reinstate disturbed ground to receive new temporary surface.
3. Demolish existing out-building in it`s entirety.
   Remove existing foundations (depth unknown).
   Reinstate disturbed ground to receive new temporary surface.
4. Remove existing concrete post and gravel board fence panels adjacent public footpath including bases to posts.
   Reinstate disturbed ground to receive new temporary surface.
5. Remove existing concrete block wall.
   Remove all foundations in association with above walls
   Reinstate disturbed ground to receive new temporary surface.
6. Remove obsolete traffic spikes and make good to disturbed tarmac.
7. Remove existing paving and sub-base.
   Reinstate disturbed ground to receive new temporary surface.
8. Remove and cart away all vegetation.
   Reinstate disturbed ground to receive new temporary surface.
9. Retain and protect existing brick high and low walls. Remove vegetation within walls and make good to walls and tarmac.
10. Existing mature tree to be removed including full root structure; Make good / reinstate disturbed ground will suitable compacted fill.

Note: Contractor to investigate existing below ground drainage - Any redundant drainage runs and manholes are to be removed and ground made good. Live drainage runs to be maintained and protected throughout the works. All retained live drains to be jetted at completion with CCTV survey provided to ensure system fully operational.

Items to be Retained / Protected

- A Retain and protect existing post and sign to front of site.
- B Retain and protect existing stone wall and hard-landscape. Remove vegetation within walls and make good to concrete slab / gravel areas.
- C Retain and protect existing tarmac car park surface. Repair / Make good to defective areas.
- D Retain and protect existing all mature trees during demolition works.
- E Retain existing bollards to front and rear entrance to site.

Brooks Ecological
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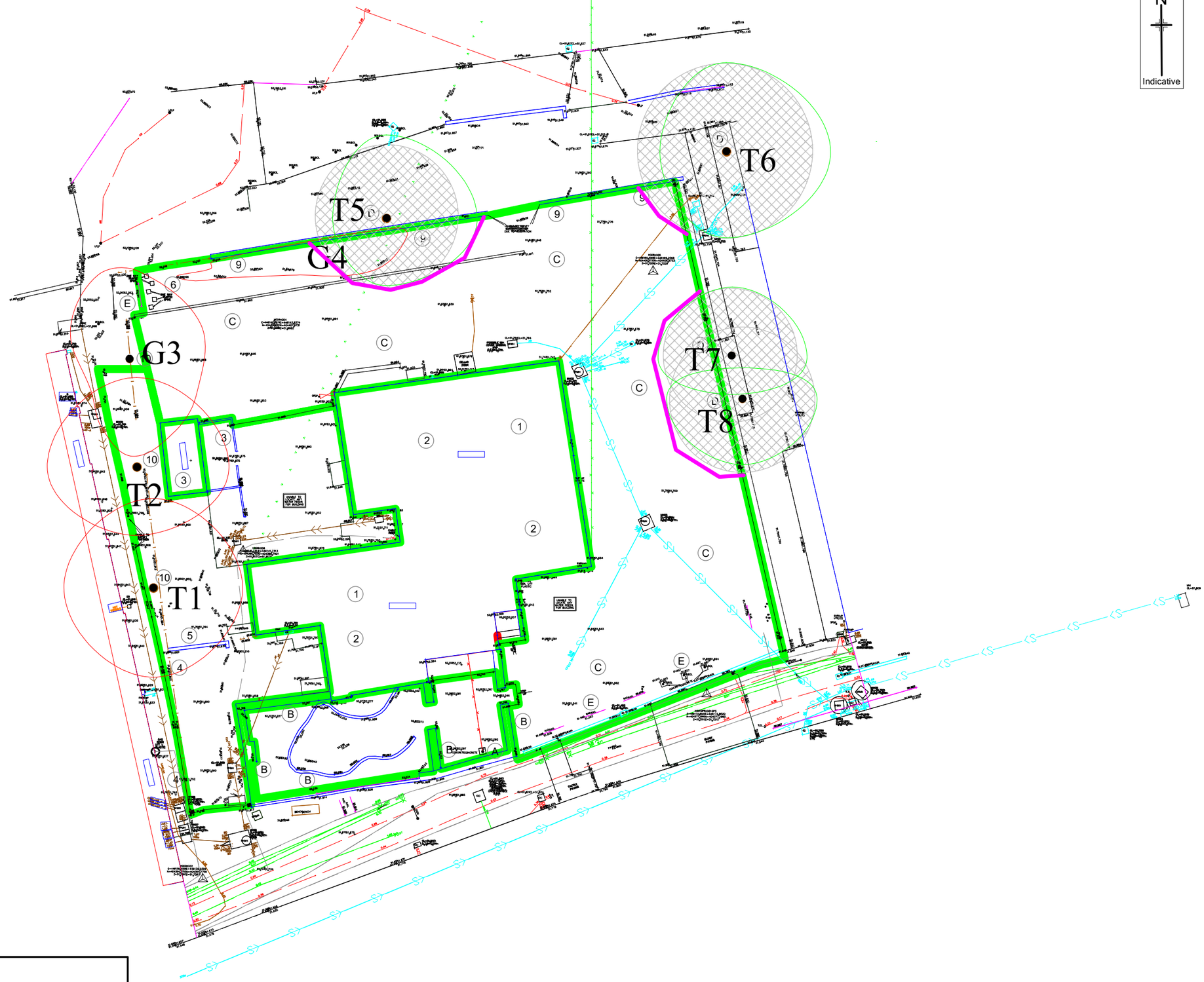
DR-5503-02 TREE PROTECTION PLAN

Site: Horse & Groom, Barnsley Road.

Paper Size: A2	**Scale: 1:200**

	Tree to be retained
	Tree to be removed
	Protective fencing in line with BS 5837:2012

	ROOT PROTECTION AREA
	TREE STEM



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