



SELWYNTREES

ARBORICULTURAL CONSULTANTS



ARBORICULTURAL IMPACT ASSESSMENT

Barnsley Trade Park, Wombwell
Lane, Stairfoot S70 3PB

13 June 2025

REF: 0641 Rev. A

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Prepared For;

Foxford Property Holdings Ltd.

Our Ref: 0641 Rev. A

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Reviewer:



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This report dated 13 June 2025 has been prepared for Foxford Property Holdings Ltd. (the "Client") in accordance with the terms and conditions of appointment dated 01 June 2025 (the "Appointment") between the Client and **Selwyn Trees** for the purposes specified in the Appointment. For avoidance of doubt, no other person(s) may use or rely upon this report or its contents, and Selwyn Trees accepts no responsibility for any such use or reliance thereon by any other third party.



Version Control

Issue	Revision No.	Date Issued	Page No.	Description	Reviewed By
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2 Introduction

- 2.1.1 Foxford Property Holdings Ltd. engaged Selwyn Trees to carry out an Arboricultural Impact Assessment for a site at Barnsley Trade Park, Wombwell Lane, Stairfoot, Barnsley.
- 2.1.2 The purpose of this Arboricultural Impact Assessment report was to advise on any Arboricultural issues which relate to a proposed development. An initial Arboricultural Survey site visit was carried out on the 5th June 2025. The survey was carried out in accordance with BS5837: 2012- ‘Trees in relation to Design, Demolition and Construction.
- 2.1.3 Consent has been granted by Barnsley Metropolitan Borough Council for 3 new units on the site and an Arboricultural Impact Assessment and protection scheme have been requested as part of the conditions of consent. The proposal assessed in this Impact Assessment is as shown in the drawing referenced as “20240594 524-P3B Proposed Site Layout”.
- 2.1.4 The following documents were provided:

Table 1- Reference documents

Document	Reference number
Site Plan	20240594 524-P2B Existing Site Layout (1)
Proposal Plan	20240594 524-P3B Proposed Site Layout
Decision Notice	20240594 Decision Notice
Proposal Plan	20240594 Proposed Site Layout (Unit 1 & 2) 524-P4A
Proposal Plan	20240594 Proposed Site Layout (Unit 3) 524-P6A

3 Policy and Guidance

National Planning Policy Framework (NPPF)

- 3.1.1 The following paragraphs within the NPPF¹ set out policies which guide the planning policy and decision-making process of Local Planning Authorities in relation to trees. These are:
- 3.1.2 **Paragraph 136:** “Trees make an important contribution to the character and quality of urban environments and can also help mitigate and adapt to climate change. Planning policies and decisions should ensure that new streets are tree-lined, that opportunities are taken to incorporate trees elsewhere in developments (such as parks and community orchards), that appropriate measures are in place to secure the long-term maintenance of newly-planted trees, and that existing trees are retained wherever possible. Applicants and local planning authorities should work with highways officers and tree officers to ensure that the right trees are planted in the right places, and solutions are found that are compatible with highways standards and the needs of different users.”
- 3.1.3 **Paragraph 187:** “Planning policies and decisions should contribute to and enhance the natural and local environment by:
- 3.1.4 a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
- 3.1.5 b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
- 3.1.6 d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures and incorporating features which support priority or threatened species such as swifts, bats and hedgehogs;
- 3.1.7 e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans;
- 3.1.8 **Paragraph 188:** “Plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework⁶⁵; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries
- 3.1.9 **Paragraph 192:** To protect and enhance biodiversity and geodiversity, plans should:

¹ https://assets.publishing.service.gov.uk/media/65a11af7e8f5ec000f1f8c46/NPPF_December_2023.pdf

- 3.1.10 b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.
- 3.1.11 **Paragraph 193:** When determining planning applications, local planning authorities should apply the following principles:
- 3.1.12 a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
- 3.1.13 c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and
- 3.1.14 d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

Guidance Documents

- 3.1.15 This AIA had been written making reference to, and in accordance with, the following guidance documents:
- 3.1.16 BS5837:2012 'Trees in relation to design, demolition and construction – recommendations'
- 3.1.17 BS3998:2010 Tree work – recommendations
- 3.1.18 NJUG 4 – National Joint Utilities Group "Guidelines for the planning, installation and maintenance of utility apparatus in proximity to trees. Volume 4, issue 2. London: NJUG 2007" To include Operatives Hand-out Guidance
- 3.1.19 BGS Open Source Soil Data <http://www.bgs.ac.uk/nercsoilportal/maps.html>
- 3.1.20 Cranfield University Soilscales LandIS Land Information: <http://www.landis.org.uk/services/soilscales.cfm>
- 3.1.21 'Guidance Note 12: The Use of Cellular Confinement Systems Near Trees: A Guide to Good Practice', by the Arboricultural Association (2020)
- 3.1.22 Ground Protection Practice Note GPPN8/21, Tree Root Protection using Temporary Access Trackways, By M J Oliver, Product Development Manager, GroundGuards

4 Desk-based Study

Statutory Tree Protection and Designation

TPO (Tree Preservation Order) and Conservation Area Status

- 4.1.1 According to the interactive map on the Barnsley Metropolitan Borough Council website, the site is not within a Conservation Area and there are no TPOs (Tree Preservation Orders) present on the site. Trees with TPOs are present to the Southeast of one of the development areas, but these are not directly adjacent.
- 4.1.2 Physical Site Information
- 4.1.3 The site surveyed is at Barnsley Trade Park.



Figure 1- An aerial view of the site from Google Maps ©, orientated Northeast. The two main areas of development are approximately outlined in red.

- 4.1.4 The site currently consists of two main areas of land to the south of Barnsley Trade Park. A pedestrian footpath and agricultural fields border the development areas to the Southwest.
- 4.1.5 The land directly adjacent to the Southwest of the site is a higher ground level than the site, with a banking present. Scrub-like vegetation is present along this banking.
- 4.1.6 The main access way into the site is via Wombwell Lane from the Northeast. The development areas are within an existing industrial park, with existing access road (Wombwell Lane) and car parking present.
- 4.1.7 According to the Cranfield Soil and Agrifood Institute (2024) the soil type in the area of the site is: **“Freely draining slightly acid loamy soils”**.
- 4.1.8 The Bedrock geology of the site is “Oaks Rock - Sandstone. Sedimentary bedrock formed between 318 and 315.2 million years ago during the Carboniferous period ” according to BGS Geology Viewer: [BGS Geology Viewer - British Geological Survey](#)
- 4.1.9 Flood Risk and flood zone:
- 4.1.10 According to the Flood Map for Planning service, the site is adjacent to the proposed development has areas allocated as Flood Zones 2 and 3. Zone 2 denotes medium risk, with a 1% chance from rivers or 0.5% from the sea. Zone 3 has the highest risk, with a 1% or higher chance from rivers or 0.5% from the sea, often underpinned by historical flood records.

<https://flood-map-for-planning.service.gov.uk/map?cz=437667.7,404908.4,18.897655>



Figure 2: Excerpt from Flood Map for planning at <https://flood-map-for-planning.service.gov.uk/map?cz=437667.7,404908.4,18.897655>

5 BS5837 Tree Survey & Tree Schedule

Survey Summary

- 5.1.1 An initial Arboricultural Survey site visit was carried out by Selwyn Trees on the 5th June 2025. The data was collected and report compiled by Rachel Selwyn, BSc (Hons) in Arboriculture and Urban Forestry, who has 10 years of experience working for Selwyn Trees and is a professional member of the Arboricultural Association.
- 5.1.2 The survey was carried out and the information provided in this report has been compiled in accordance with the relevant British Standard- BS5837:2012- 'Trees in relation to design demolition and construction recommendations. The purpose of this Impact Assessment report is to advise on any Arboricultural issues which relate to a proposed development.
- 5.1.3 There are very few trees present on site with stem diameters over 75mm. The site is characterised by large groups of scrub and self-sets, consisting mostly of Brambles, Wild Rose and occasional Hawthorn and Silver Birch . Some larger trees are present offsite and adjacent to the site and these have been taken into account. Most groups of vegetation have been assigned retention category C.
- 5.1.4 The BS5837:2012 Arboricultural Survey with Schedule is shown on the following pages:

BS 5837 (v2012) - Tree Survey



BS5837 Retention Category:

- A - High Quality (40 years remaining contribution)
- B - Moderate Quality (20 years remaining contribution)
- C - Low Quality (10 years remaining contribution)
- U - Unsuitable for retention

RPA= Root Protection Area

Sub Category:

- 1- Mainly Arboricultural Qualities
- 2- Mainly Landscape Qualities
- 3- Mainly Cultural Qualities

Caveats & Limitations:

- This tree survey is to be limited to planning purposes only.
 - This tree survey is not a tree risk assessment.
 - This survey was undertaken from ground level using visual assessment.
 - Where access was restricted attributes and dimensions were estimated.
 - The weather condition on the day of the survey was: **Heavy Rain Showers**
- All trees should be inspected annually unless otherwise stated**

DATE OF SURVEY - 5th June 2025

CLIENT- Foxford Property Holdings Ltd.

SITE- Barnsley Trade Park, Wombwell Lane, Stairfoot, Barnsley, S70 3PB

REFERENCE- 0641- Tree Data Table- A

SURVEYOR- Rachel Selwyn

Tree Number	Photo	Crown Clearance (m)	First Branch + Direction of Growth	Species	Height (m)	Tree Trunk Diameter (mm) (Estimated)	RPA (m ²)	Radius (m)	Branch Spread (m)				Age Class	Observations	Recommendations	Remaining Years	Category Grade
									N	E	S	W					
T1		0.4m	1m.South East.2m	HAWTHORN <i>Crataegus monogyna</i>	5m	260 (Yes)	28	3	3m	3m	3m	3m	Mature (M)	An off site 4x stemmed Hawthorn situated on edge and the top of raised banking adjacent to agricultural field. Physiological condition is good. Structural condition fair	No preliminary work recommended	10-20 Years	C2
T2		0m	1m.North.1m	ELDER <i>Sambucus nigra</i>	3.5m	75 (Yes)	3	0.9	2m	2m	1.5m	2m	Mature (M)	An off site Elder tree situated adjacent to agricultural field and on a raised banking. Tree is multi-stemmed. It is not particularly significant. Physiological condition is good. Structural condition fair	No preliminary work recommended	10-20 Years	C2

Tree Number	Photo	Crown Clearance (m)	First Branch + Direction of Growth	Species	Height (m)	Tree Trunk Diameter (mm) (Estimated)	RPA (m ²)	Radius (m)	Branch Spread (m)				Age Class	Observations	Recommendations	Remaining Years	Category Grade
									N	E	S	W					
T3		2m	2m.West.1m	COMMON ASH Fraxinus excelsior	7m	220 (Yes)	23	2.7	2m	2m	2m	2m	Dead (D)	Tree is situated off-site behind fencing and appears to be mostly dead. Bark splitting and cracking present on the Southwest side at approximately 2.5 m upwards. A neighbouring Ash Tree is present directly adjacent to it. Die back and Deadwood is observed in this Ash tree Ash Dieback Disease suspected	Remove tree	<10 Years	U
T4		2m	1.5m.South West.2m	SYCAMORE Acer pseudoplatanus	9m	328 (Yes)	48	3.9	5m	4m	4m	4m	Mature (M)	Tree appears to be straddling the boundary. It has 2 stems joined below 1 m. Branches extend towards and overhang the access driveway by around 1 m. Clearance of canopy over access drive was currently at 2.5 m. Physiological condition is good structural condition fair	No preliminary work recommended	20-40 Years	B2
Trees should be re-inspected on an annual basis unless otherwise specified; by a suitably qualified Arboriculturist, providing up to date tree survey recommendations.						Notes:											

BS 5837 (v2012) - Tree Survey- Groups



BS5837 Retention Category:
■ A - High Quality (40 years remaining contribution)
■ B - Moderate Quality (20 years remaining contribution)
■ C - Low Quality (10 years remaining contribution)
■ U - Unsuitable for retention
 RPA= Root Protection Area

Sub Category:
 1- Mainly Arboricultural Qualities
 2- Mainly Landscape Qualities
 3- Mainly Cultural Qualities

Caveats & Limitations:
 - This tree survey is to be limited to planning purposes only.
 - This tree survey is not a tree risk assessment.
 - This survey was undertaken from ground level using visual assessment.
 - Where access was restricted attributes and dimensions were estimated.
 - The weather condition on the day of the survey was: **Heavy Rain Showers**
All trees should be inspected annually unless otherwise stated

DATE OF SURVEY - 5th June 2025
CLIENT- Foxford Property Holdings Ltd.
SITE- Barnsley Trade Park, Wombwell Lane, Stairfoot, Barnsley, S70 3PB
REFERENCE- 0641- Tree Data Table- A
SURVEYOR- Rachel Selwyn

Tree Group	Photos	Tree Count	Average Height (m)	Average DBH (mm)	Root Protection Area (RPA) (m ²) (For individual trees within the group)	RPA radius (For individual trees within the group)	Predominant Species	Observations	Recommendations	Category Grade	Retention Years
G1		8	3.5	40	1m ²	0.5m	Betula pendula SILVER BIRCH Rosa rugosa WILD ROSE Populus alba WHITE POPLAR Buddleja Rubus fruticosus BRAMBLES	A group of young self-sets mostly consisting of Birch, Buddleja, Wild Rose and White Poplar. All stem diameters are under 75 mm currently. Young and scub-like in nature. Unremarkable.	No preliminary work recommendations	C2	10 -20 Years
G2		40	3	50	1m ²	0.6m	Rosa rugosa WILD ROSE Rubus fruticosus BRAMBLES Betula pendula SILVER BIRCH Sambucus nigra ELDER Crataegus monogyna HAWTHORN Acer pseudoplatanus SYCAMORE Buddleja	A large group of scrub including predominantly Wild Rose with occasional Hawthorn, Birch, Brambles, Elder, Buddleja, Sycamore. Diameter of all is less than 75 mm, and low arboricultural value.	No preliminary work recommendations	C2	10 -20 Years
G3		30	2	40	1m ²	0.5m	Rosa rugosa WILD ROSE Rubus fruticosus BRAMBLES Sambucus nigra ELDER Corylus avellana HAZEL Buddleja Crataegus monogyna HAWTHORN Betula pendula SILVER BIRCH Salix fragilis CRACK WILLOW	A large group of predominantly Wild Rose with Elder, Hazel, Brambles, Buddleja, Hawthorn, Crack Willow. Silver Birch . This is a scrub group of vegetation with no trees of stem diameters over 60mm present.	No preliminary work recommendations	C2	10 -20 Years

Tree Group	Photos	Tree Count	Average Height (m)	Average DBH (mm)	Root Protection Area (RPA) (m ²) (For individual trees within the group)	RPA radius (For individual trees within the group)	Predominant Species	Observations	Recommendations	Category Grade	Retention Years
G4		20	7	350	55m ²	4.2m	Crataegus monogyna HAWTHORN Prunus avium CHERRY Salix fragilis CRACK WILLOW Sorbus aucuparia ROWAN Sambucus nigra ELDER	An off-site group consisting of Hawthorn, Cherry, Willow, Rowan and Elder. Most are situated off site with minor self sets present on the site, on this side of palisade fencing. Maximum diameter is the Cherry which is approximately 350 mm. Most stem diameters are less than this and many are young self sets. The Cherry has branches overhang into the site by around 6 m.	No preliminary work recommendations	B2	20 -40 Years
G5		15	4.5	75	3m ²	0.9m	Fraxinus excelsior COMMON ASH Rosa rugosa WILD ROSE Buddleja Rubus fruticosus BRAMBLES Crataegus monogyna HAWTHORN Betula pendula SILVER BIRCH	A scrub group of mostly young self-sets, including Wild Rose, Brambles, Ash, Hawthorn, Buddleja, Silver Birch. All diameters estimated to be under 75 mm. Significat Brambles are present and Buddleja and Brambles encroach and are growing out of the existing tarmac. Two larger Hawthorns are present with stem diameters over 75mm but these are offsite.	No preliminary work recommendations	C2	10 -20 Years
G6		25	4	75	3m ²	0.9m	Crataegus monogyna HAWTHORN Buddleja Rubus fruticosus BRAMBLES Fraxinus excelsior COMMON ASH Acer pseudoplatanus SYCAMORE	A group of vegetation that straddles the boundary consisting of Hawthorn, Sycamore, Buddleja, Brambles, Elder, and Ash. All are young relatively self-set, adn scub-like in nature. In some areas, the lower foliage does overhang the access road by up to 1 m, bt clearance for vehicles sufficient currently. This group provides good screening value between the ste and offiste. It doesn't significantly impact the road. Larger trees are situated further North and East but these do not affect the site directly and do not overhang the site.	No preliminary work recommendations	C2	10 -20 Years
Trees should be re-inspected on an annual basis unless otherwise specified; by a suitably qualified Arboriculturist, providing up to date tree survey recommendations.							Notes:				

Landscape context images.



Photo 1: Looking Northwest with G1, Right and G2, left

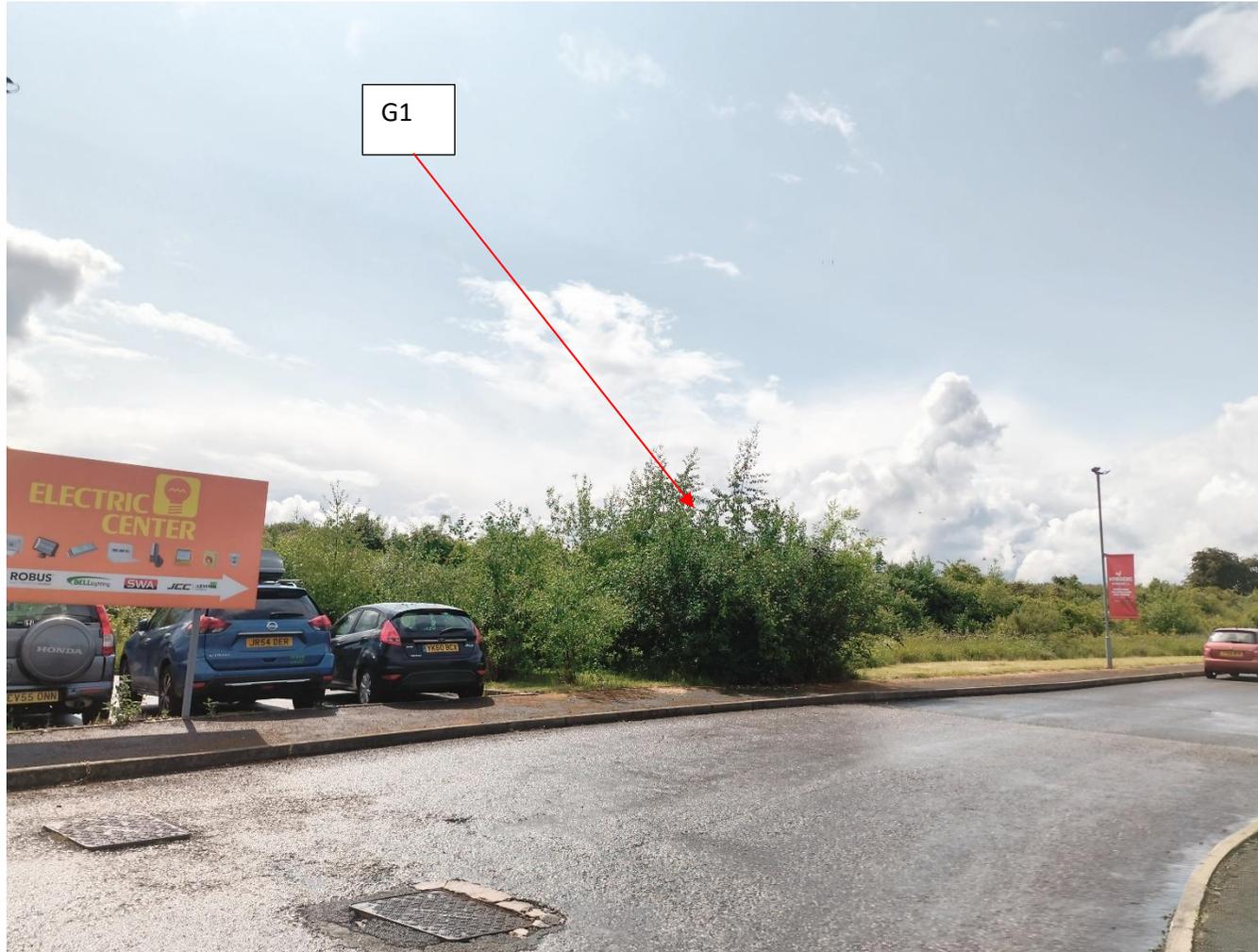


Photo 2: Looking Southwest towards G1



Photo 3: looking South towards G2



Photo 4: looking South towards G2



Photo 5: Looking South/ Southwest towards group G3



Photo 6: looking Southeast towards G3



Photo 7: Looking North/ Northwest towards group G4



Photo 8: Looking Northwest

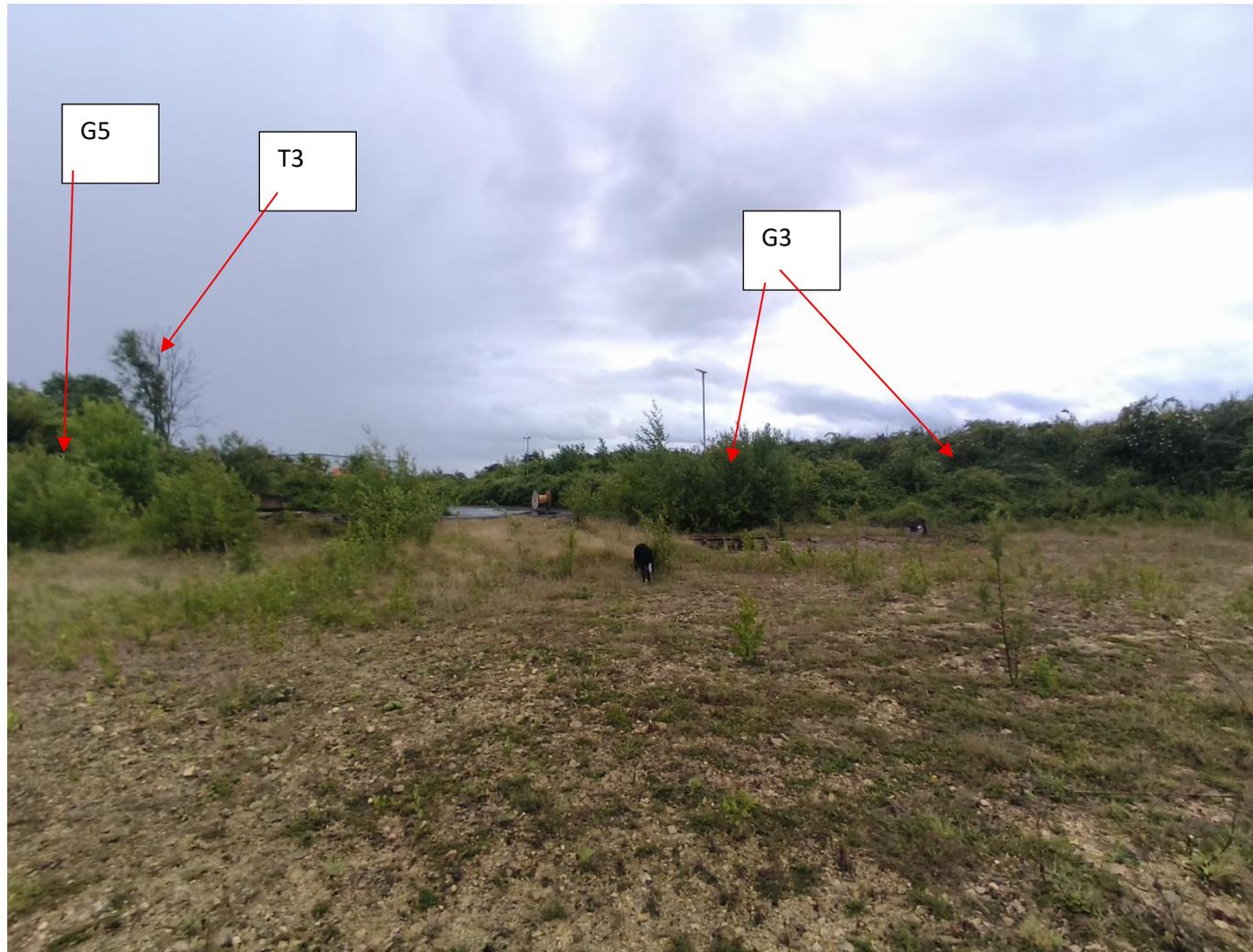


Photo 9: Looking Southeast



Photo 10: Looking east towards G5



Photo 11: looking West. Northwest towards G4

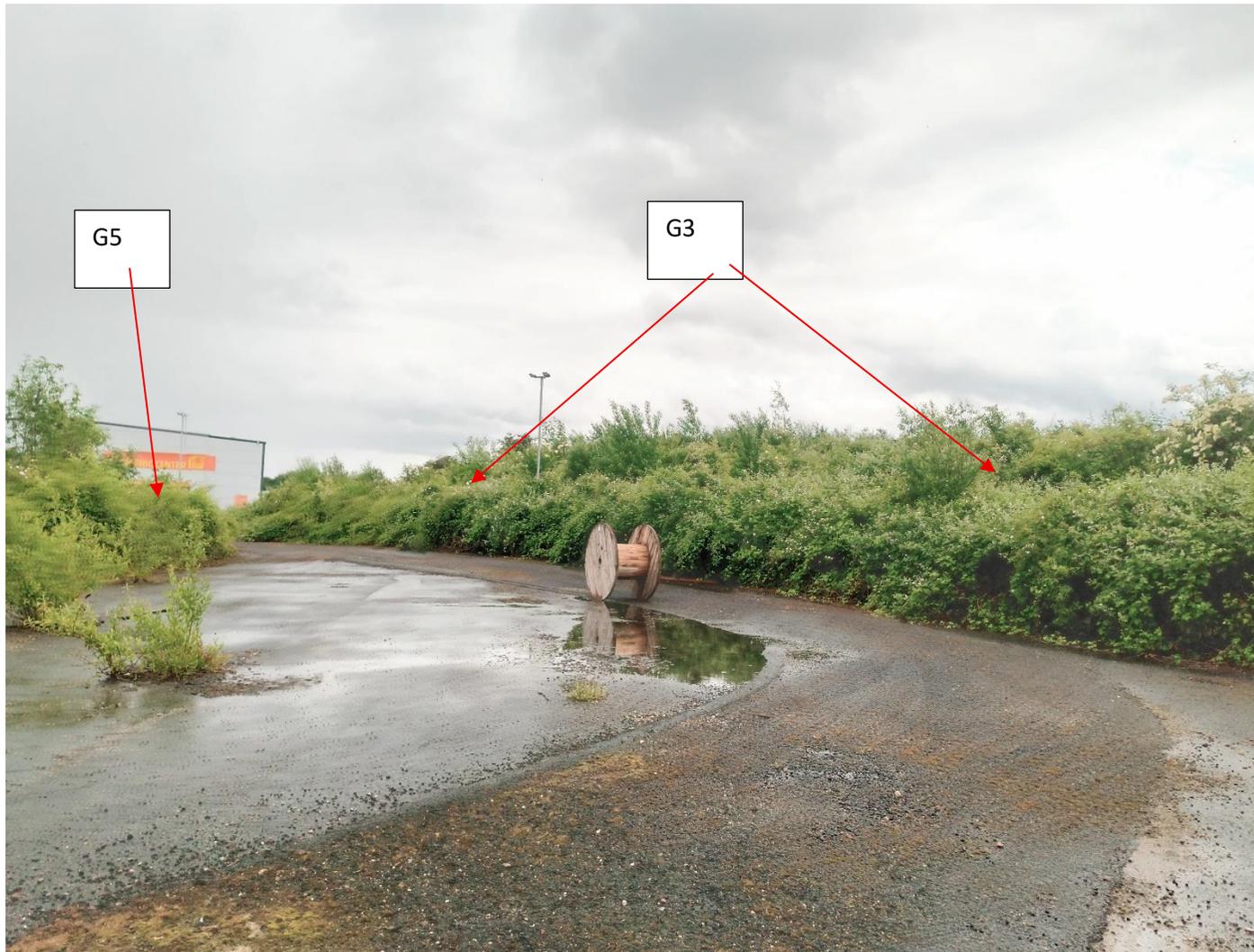


Photo 12: looking Southeast

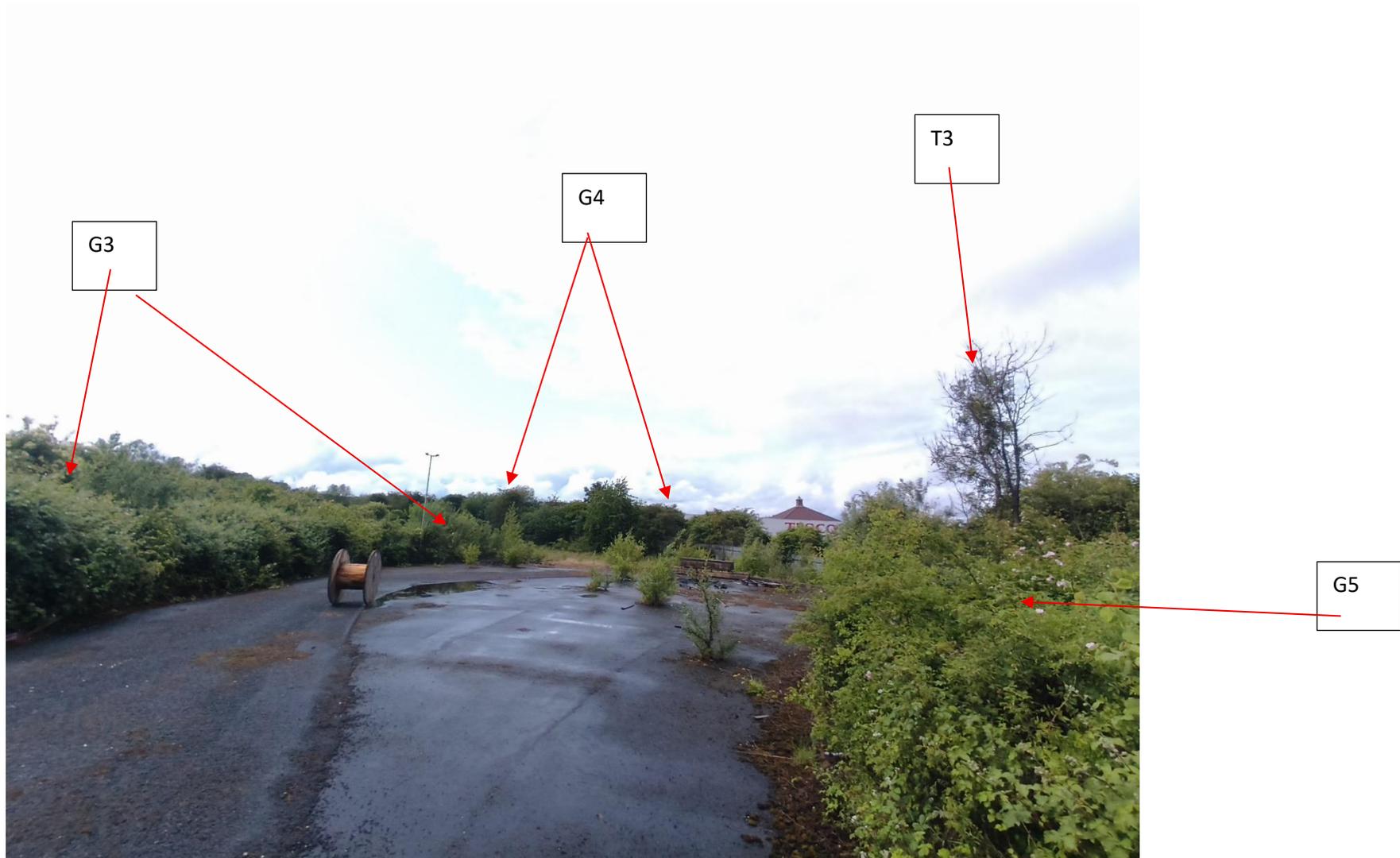


Photo 13: Looking Northwest



Photo 14: Looking Northwest towards G6



Photo 15: Looking east towards G6



Photo 16: Looking Northwest towards G6



Photo 17: Looking North towards G6



Photo 18: Looking Northeast towards G6.

6 Tree Constraints Plan:



According to the LANDIS Soilscape interactive soils map (Cranfield Soil and Agrifood Institute 2025), the soil type in the area of the site is "Freely draining slightly acid loamy soils".

According to the interactive map on the Barnsley Metropolitan Borough Council website, the site is not within a Conservation Area and there are no TPOs (Tree Preservation Orders) present on the site. Trees with TPOs are present to the Southeast of one of the development areas, but these are not directly adjacent.

Trees are referenced as T(n)
Groups are referenced as G(n)
Hedges are referenced as H (n)

RPAs (Root Protection Areas) are illustrated by grey hatched polygon areas

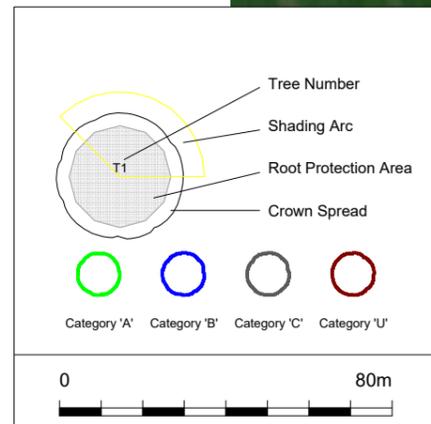
For groups the illustrated RPAs were approximated, either by approximating individual trees within the group using an average stem diameter, or, by drawing a block RPA for the whole group.

Crown spreads are illustrated by green, blue, grey or red outlines depending on the retention category of the tree, group or hedgerow.

Green Canopy outline: Category A trees = Trees of high quality with an estimated remaining life expectancy of at least 40 years
Blue Canopy outline: Category B trees = Trees of moderate quality with an estimated remaining life contribution of at least 20 years
Grey Canopy outline: Category C trees = Those of low quality and value with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm
Red Canopy outline: Category U trees = Those in such a condition that cannot realistically be retained as living trees in the context of the current land use for longer than 10 years

Trees were plotted with a GPS receiver and manual measurements were taken to nearby features, where available. However, there may be error margins with GPS receivers. Therefore, the tree positions on this map are APPROXIMATE ONLY. If accurate tree positioning is required a topographical survey will be needed.

Do not scale from these drawings. All measurements should be checked on site. If in doubt, ask.



The default position as outlined in BS5837:2012 is that all new development should be located outside of RPAs, and crown spreads of trees to be retained.

This map was manually scaled. There may be error margins in manual scaling

		30 Tickhill Road Doncaster South Yorkshire DN4 8QE 01302 816850 info@selwynthrees.co.uk	
Tree Constraints Plan- Barnsley Trade Park, Wombwell Lane, Stairfoot, S70 3PB			
SCALE :	1 : 1700 @ A3	DATE :	12/06/2025
MAP FILENAME :		TCP- Barnsley Trade Park, Wombwell Lane Rev. A	
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7 Arboricultural Impacts Plan:

According to the LANDIS Soilscape interactive soils map (Cranfield Soil and Agrifood Institute 2025), the soil type in the area of the site is "Freely draining slightly acid loamy soils".

According to the interactive map on the Barnsley Metropolitan Borough Council website, the site is not within a Conservation Area and there are no TPOs (Tree Preservation Orders) present on the site. Trees with TPOs are present to the Southeast of one of the development areas, but these are not directly adjacent.

Summary of Arboricultural Impacts

Remove G1 - Reason: to accommodate Unit

Remove part of Group G2- to accommodate unit

G3- remove section of G3, approx. 55m² - for working space and for car park

G5- remove a section of G5, approx. 179m², to accommodate car parking.

G4

The footprint of Units 1 and 2 would marginally encroach into the RPA of trees in Group G4. The stem diameter of trees within this group are variable with the maximum stem diameter estimated as around 350mm.

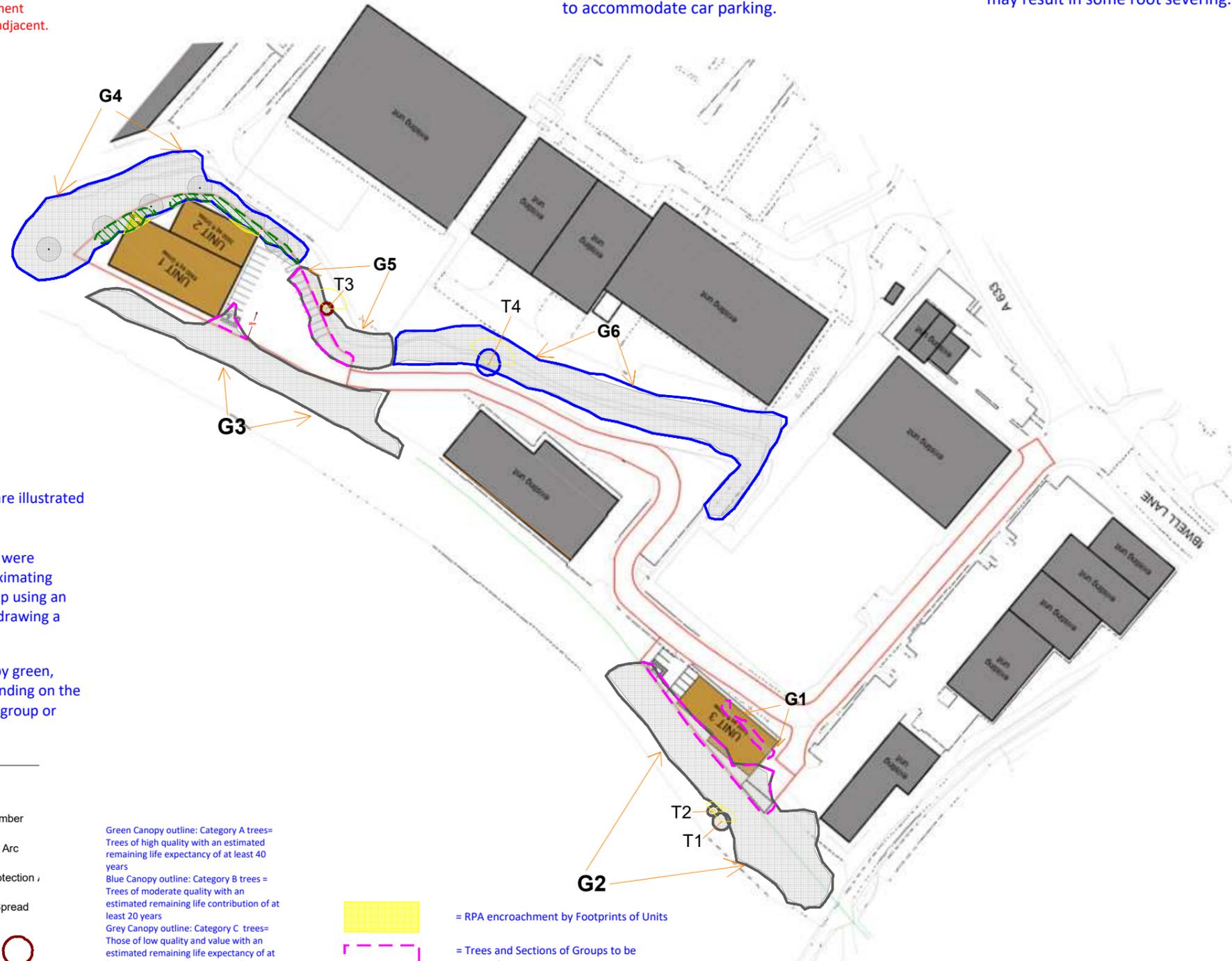
Excavation for the footprints of the units may result in some root severing.

Pruning

Overhanging branches of G4 would require tip reduction pruning to accommodate Units 1 and 2, and to facilitate construction access of these units.

Construction Access

Access would likely be required within the RPAs of group G4. Existing historical tarmac is present in these areas



Trees are referenced as T(n)
Groups are referenced as G(n)
Hedges are referenced as H (n)

RPAs (Root Protection Areas) are illustrated by grey hatched polygon areas

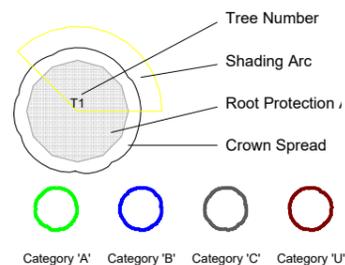
For groups the illustrated RPAs were approximated, either by approximating individual trees within the group using an average stem diameter, or, by drawing a block RPA for the whole group.

Crown spreads are illustrated by green, blue, grey or red outlines depending on the retention category of the tree, group or hedgerow.

Trees were plotted with a GPS receiver and manual measurements were taken to nearby features, where available. However, there may be error margins with GPS receivers. Therefore, the tree positions on this map are APPROXIMATE ONLY. If accurate tree positioning is required a topographical survey will be needed.

Do not scale from these drawings. All measurements should be checked on site. If in doubt, ask.

This map was manually scaled. There may be error margins in manual scaling



Green Canopy outline: Category A trees = Trees of high quality with an estimated remaining life expectancy of at least 40 years
Blue Canopy outline: Category B trees = Trees of moderate quality with an estimated remaining life contribution of at least 20 years
Grey Canopy outline: Category C trees = Those of low quality and value with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm
Red Canopy outline: Category U trees = Those in such a condition that cannot realistically be retained as living trees in the context of the current land use for longer than 10 years

- = RPA encroachment by Footprints of Units
- = Trees and Sections of Groups to be removed
- = Pruning required

		30 Tickhill Road Doncaster South Yorkshire DN4 8QE 01302 816850 info@selwyntrees.co.uk
Arboricultural Impacts Plan- Barnsley Trade Park, Wombwell Lane, Stairfoot, S70 3PB		
SCALE : 1 : 1700 @ A3	DATE : 12/06/2025	
MAP FILENAME : Arb Impacts Plan- Barnsley Trade Park, Wombwell Lane Rev. A		
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8 Tree Protection Plan:

Tree Work Required

Remove G1 - Reason: to accommodate Unit

Remove part of Group G2- to accommodate unit

G3- remove section of G3, approx. 55m² - for working space and for car park

G5- remove a section of G5, approx. 179m², to accommodate car parking.

Pruning

Overhanging branches of G4 would require tip reduction pruning to accommodate Units 1 and 2, and to facilitate construction access of these units.

Excavation within RPAs

Traditional strip footing foundations are proposed. Air excavation shall be used to excavate for foundations that encroach into RPAs of G4. Air excavation shall be used to minimise overspill beyond the footprints of Units 1 and 2.

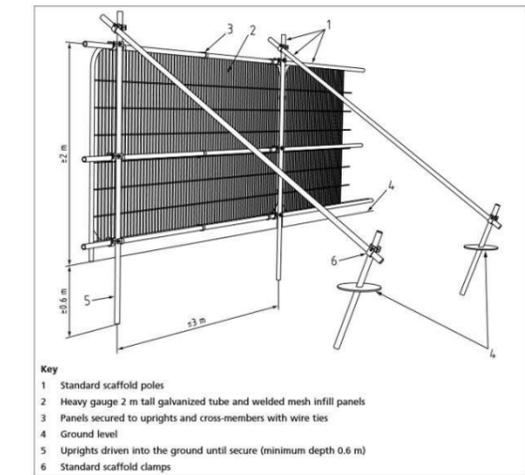
This shall be undertaken with Arboricultural supervision.

Any roots discovered shall be cleanly cut, and any exposed roots will be wrapped with damp hessian.

Figure 2: Tree Protection Fencing to be used as per BS5837:2012:

Example of Rigid Style Heras fencing:

Default specification for protective barrier as per British Standard BS 5837:2012 – Trees in relation to Design, Demolition and Construction



Construction Access

Access would likely be required within the RPAs of group G4. Existing historical tarmac is present in these areas

Existing tarmac and hard surfacing within RPAs

Existing hard surfacing within RPAs of G4 shall be removed sensitively using hand tools and under Arboricultural supervision

Trees are referenced as T(n)
Groups are referenced as G(n)
Hedges are referenced as H (n)
RPAs (Root Protection Areas) are illustrated by grey hatched polygon areas

For groups the illustrated RPAs were approximated, either by approximating individual trees within the group using an average stem diameter, or, by drawing a block RPA for the whole group.

Crown spreads are illustrated by green, blue, grey or red outlines depending on the retention category of the tree, group or hedgerow.

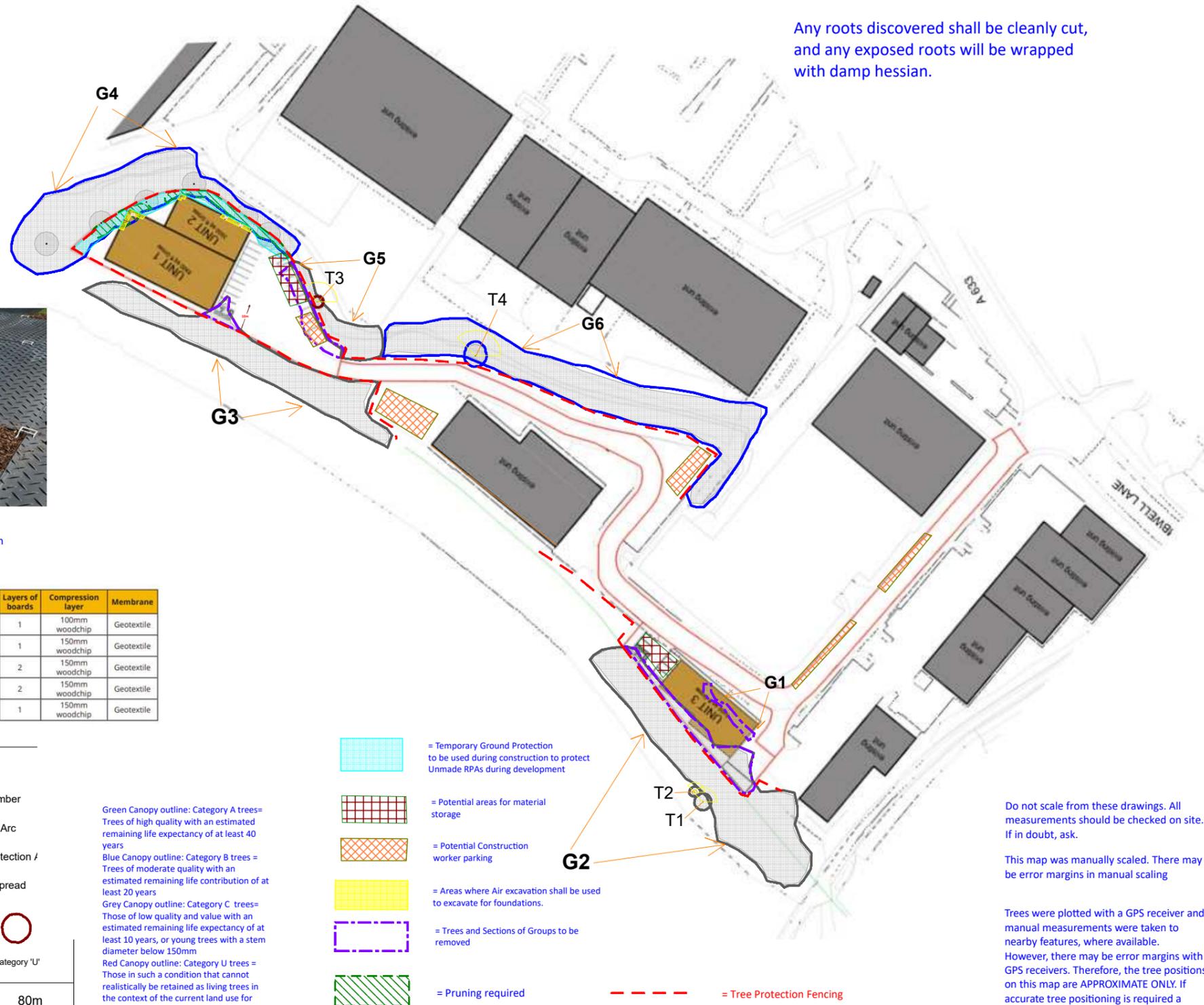
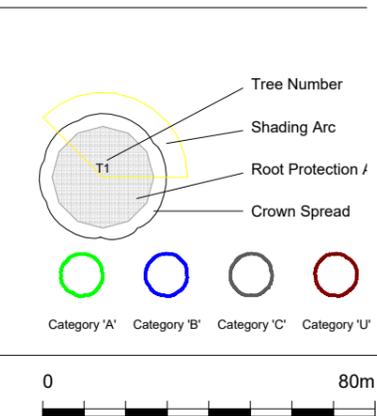


Figure 1: Example of Ground Guards Temporary ground Protection:



Table 1: specification for ground protection boards (Groundguards system) depending on load requirements:

Traffic	Gross weight	Ground Protection Boards	Layers of boards	Compression layer	Membrane
Pedestrians only		GroundGuards MultiTrack	1	100mm woodchip	Geotextile
Pedestrian plant	Up to 2 t	GroundGuards MultiTrack	1	150mm woodchip	Geotextile
Vehicular plant	2 - 10 t	GroundGuards MultiTrack	2	150mm woodchip	Geotextile
Vehicular plant	10 - 20t	GroundGuards MaxiTrack	2	150mm woodchip	Geotextile
Vehicular plant	Over 20 t	GroundGuards XtremeMats	1	150mm woodchip	Geotextile



Green Canopy outline: Category A trees = Trees of high quality with an estimated remaining life expectancy of at least 40 years
Blue Canopy outline: Category B trees = Trees of moderate quality with an estimated remaining life contribution of at least 20 years
Grey Canopy outline: Category C trees = Those of low quality and value with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm
Red Canopy outline: Category U trees = Those in such a condition that cannot realistically be retained as living trees in the context of the current land use for longer than 10 years

- = Temporary Ground Protection to be used during construction to protect Unmade RPAs during development
- = Potential areas for material storage
- = Potential Construction worker parking
- = Areas where Air excavation shall be used to excavate for foundations.
- = Trees and Sections of Groups to be removed
- = Pruning required
- = Tree Protection Fencing

Do not scale from these drawings. All measurements should be checked on site. If in doubt, ask.

This map was manually scaled. There may be error margins in manual scaling

Trees were plotted with a GPS receiver and manual measurements were taken to nearby features, where available. However, there may be error margins with GPS receivers. Therefore, the tree positions on this map are APPROXIMATE ONLY. If accurate tree positioning is required a topographical survey will be needed.

ARBORICULTURAL CONSULTANTS

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Tree Protection Plan Plan- Barnsley Trade Park, Wombwell Lane, Stairfoot, S70 3PB

SCALE : 1 : 1700 @ A3	DATE : 13/06/2025	
MAP FILENAME : TPP- Barnsley Trade Park, Wombwell Lane Rev. A		

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9 Arboricultural Impact Assessment

9.1.1 The proposal is for 3 new units on the site. The proposal assessed in this Impact Assessment is as shown in the drawing referenced as “20240594 524-P3B Proposed Site Layout”

Direct conflicts and Impacts

Tree removals and pruning for development:

Table 2- Tree Work required to accommodate and facilitate proposed development

Tree	Category	Work required pre – commencement of proposal	Work required during development	Work required post development
G1	C	Remove group	None	None
G2	C	Remove part of group	None	None
G3	C	Remove section of G3, approx. 55m ² - for working space and for car park	None	None
G5	C	Remove a section of G5, approx. 179m ² , to accommodate car parking.	None	None
G4	B	Overhanging branches of G4 would require tip reduction pruning to accommodate Units 1 and 2, and to facilitate construction access of these units.	None	None

9.1.2 Most of the trees in groups G1, G2, G3, and G5 are young self-sets with stem diameters of less than 75mm. Collectively they form groups of scrub-like vegetation but individually are unremarkable from an Arboricultural perspective and have low Arboricultural value. Significant portions of these groups consist of shrub vegetation such as Brambles and Wild Rose.

Root Protection Area (RPA) encroachments

9.1.3 The footprint of Units 1 and 2 would marginally encroach into the RPA of trees in Group G4. The stem diameters of trees within this group are variable with the maximum stem diameter estimated as around 350mm. This is the maximum, with most trees having smaller stem diameters. The group includes self sets, with stems diameters of around 75mm. Excavation for the footprints of the units may result in some root severing.

- 9.1.4 Traditional strip footing foundations are proposed.
- 9.1.5 Air excavation shall be used to excavate for foundations that encroach into RPAs of G4. Air excavation shall be used to minimise overspill beyond the footprints of Units 1 and 2, and hence minimise root disturbance and severing.
- 9.1.6 This shall be overseen by an Arboriculturist with Arboricultural supervision. Any roots discovered shall be cleanly cut, and any exposed roots will be wrapped with damp hessian.

Existing tarmac and hard surfacing within RPAs

- 9.1.7 Existing hard surfacing within RPAs of G4 shall be removed sensitively using hand tools and under Arboricultural supervision.

Soil Compaction within RPAs (Root Protection Areas) by construction traffic during development

- 9.1.8 Soil compaction reduces pore spaces which are necessary for water and oxygen availability for tree roots. Construction traffic including foot traffic can reduce these pore spaces, which can reduce the health of trees.
- 9.1.9 Access will likely be required within the RPAs of G4 to construct Unit 2. If so, and if the existing tarmac has been removed, the unmade ground within the RPAs shall be protected with temporary ground protection.
- 9.1.10 The temporary ground protection will consist of ground protection boards (i.e. GroundGuards system) plus a depth of woodchip and a membrane (or similar).
- 9.1.11 Underneath the ground protection boards, a woodchip layer shall be laid. The woodchip shall act as a compressible layer, absorbing the loads on it by construction traffic, and spreading the weight, minimising compaction to the soil beneath. Below this, a membrane is laid. The membrane shall prevent the woodchip from being forced into the soil under loading, allowing it to remain as a compressible layer that will spread the load of Plant, machinery and pedestrians within RPAs
- 9.1.12 The expected weight & loading from plant, machinery and pedestrians needs to be confirmed at the pre-commencement meeting before development begins, to confirm the specifications for the temporary ground protection and depth of the woodchip to be used.
- 9.1.13 This information including the table below, is for the GroundGuards system and outlines the specifications to support the load requirements.



*Figure 1: (right) example of GroundGuards
© temporary ground protection*

Table 3: Credit to: <https://www.ground-guards.co.uk/wp-content/uploads/2022/01/Tree-Root-Protection-GroundGuards-White-Paper.pdf> : Ground Protection Practice Note GPPN8/21, Tree Root Protection using Temporary Access Trackways, By M J Oliver, Product Development Manager, GroundGuards

Traffic	Gross weight	Ground Protection Boards	Layers of boards	Compression layer	Membrane
Pedestrians only		GroundGuards MultiTrack	1	100mm woodchip	Geotextile
Pedestrian plant	Up to 2 t	GroundGuards MultiTrack	1	150mm woodchip	Geotextile
Vehicular plant	2 - 10 t	GroundGuards MultiTrack	2	150mm woodchip	Geotextile
Vehicular plant	10 - 20t	GroundGuards MaxiTrack	2	150mm woodchip	Geotextile
Vehicular plant	Over 20 t	GroundGuards XtremeMats	1	150mm woodchip	Geotextile

Future pressure to Prune/ Remove issues.

- 9.1.14 Units 1 and 2 would be in close proximity to the site boundary with Group G4.
- 9.1.15 Trees from G4 can be expected to continuing growing into the site. There would likely be a requirement for future and repeated pruning of G4, to maintain clearance from the units as they continue to grow. This would involve fiscal expense. All pruning is a form of damage to trees.

Indirect conflicts and Impacts

Preventing access within RPAs and preventing accidental mechanical damage to crowns of trees during Development

- 9.1.16 Construction machinery, plant and vehicles may cause physical damage to trees during construction. Such plant may also cause compaction to the rooting areas of trees in the surrounding areas. Compaction reduces pore spaces in the soil, suffocating tree roots, which can lead to root death and the decline of trees.
- 9.1.17 Tree Protection Fencing shall be installed to prevent access within the RPAs of retained trees. Protective fencing will be strong enough to withstand accidental strikes by machinery, plant or booms to prevent mechanical damage or compaction damage to trees to be retained. No materials or construction debris shall be stored within the protective fencing around the RPAs of any retained trees on site.

9.1.18 The areas within the Tree Protection fencing shall be known as the Construction Exclusion Zone. The type of tree protection fencing that shall be used is shown below:

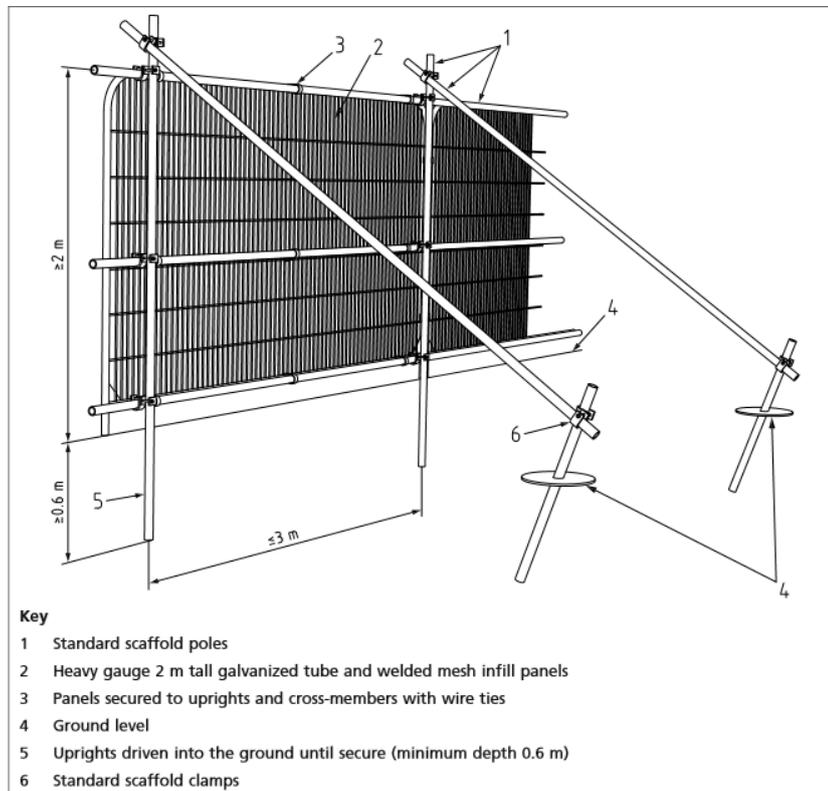


Figure 2- The type of protective fencing to be used is shown above taken from BS5837:2012 'Trees in relation to Design, Demolition and Construction- recommendations'



Figure 4- Tree Protection Signs attached to tree protection fencing

- 9.1.19 Fixed to the outside of the fencing will be words such as 'TREE PROTECTION AREA – NO ACCESS OR WORKING WITHIN THIS AREA'. These notices will be fixed to the fencing using suitable fixings such as tie wires and should be at least A3 in size and laminated.
- 9.1.20 Tree Protection fencing shall be installed before any demolition commences and remain in place throughout development, only being removed once development has been completed and all machinery and materials have been removed from the site.

Storage of materials, car parking and welfare areas

- 9.1.21 Parking shall be onsite in existing areas of tarmac...
- 9.1.22 Material storage can also be accommodated in multiple areas outside RPAs of trees and on existing areas of tarmac.
- 9.1.23 Any skips shall likely be located on the site. All debris from removal of existing tarmac on site, shall be removed from the site. It shall not be stored on site, tipped over boundaries, placed within RPAs, left or buried on the site.

Construction Access ways

- 9.1.24 The existing main access road shall be used to facilitate all construction access.. No other access way shall be used.
- 9.1.25 Materials shall not be stored within RPAs of any trees on site, unless as agreed by the project arboriculturist and LPA Tree Officer with suitable mitigation measures.

Potential Indirect Impact - Soil contamination within RPAs

- 9.1.26 Spoil from mixing, fuel for machinery and other liquid contaminants could run, if spilt, into the RPAs of the trees. Such spoilage could affect the pH value, nutrient availability and other features in the soil in which roots grow, which can negatively affect the health of the trees.

Mitigation:

- 9.1.27 Mixing will only take place in a designated area on the site. If refuelling of machinery and vehicles with fuel is required during development, this will either be carried out outside of the site or if machinery is on site, this will be carried out with the aid of absorbent material to prevent any spills from leaching into the soil.

- 9.1.28 Mixing will take place on tarpaulin or other impermeable sheeting/surface, to prevent any fuel spillage from leaching into the ground. Spill kits shall be present on site for all mixing, and for when concrete is delivered to the site.
- 9.1.29 Any spills of fuel, concrete mixing, spoil or other contaminants, on the soil, will be cleaned up immediately, using a spill kit.
- 9.1.30 Spoil will not be thrown away on-site; spoil will be thrown away into a skip.

New Landscaping

- 9.1.31 Some soft Landscaping and planting may be accommodated within the site and offsite, to improve the species diversity of groups of G2 and G3 in particular.

Onsite consultation and Supervision

- 9.1.32 An onsite meeting will be held with all relevant parties; including the developer, appointed Arboricultural supervisor and Local Planning Authority (LPA) representative to outline the methods of **construction**.

Report compiled by:

Rachel Selwyn

Signed.....  Date 13 June 2025

The following appendices give some further general information including tree categorisation, protective fencing and ground root protection for trees within RPAs

Appendix A- Tree Works Schedule

Table 4 Tree Work required to accommodate and facilitate proposed development

Tree	Category	Work required pre – commencement of proposal	Work required during development	Work required post development
G1	C	Remove group	None	None
G2	C	Remove part of group	None	None
G3	C	Remove section of G3, approx. 55m ² - for working space and for car park	None	None
G5	C	remove a section of G5, approx. 179m ² , to accommodate car parking.	None	None
G4	B	Overhanging branches of G4 would require tip reduction pruning to accommodate Units 1 and 2, and to facilitate construction access of these units.	None	None

Appendix B- Arboricultural Survey information & Key

This report takes into account the findings from this visit. Quantitative data is provided on tree species, height, diameter, age class, crown spread, British Standard category, crown clearance, and a brief assessment of tree condition and future potential. Trees found to be structurally dangerous or in poor condition are identified. The location of the trees with their calculated Root Protection Area (RPA) is shown in the tree constraints plan in the next chapter.

All data for each tree is presented in table format. The survey includes the information below:

Tree Survey Table Key:

Survey Reference number- Trees were tagged.

Species- Species identification is based on visual observation with the common English name given first and the botanical name given in italics. If the species was not identified it is marked as Unidentified.

Tree Heights - These were measured in metres using laser technology. Where access was limited or there was little visibility due to overcrowding, heights were estimated.

Stem no. – Number of stems

Ø (mm)= Stem diameter measured at 1.5m above ground level - Measured using diameter tape in mm at 1.5m above ground level. In the case of grouped trees, the largest diameter was recorded.

Stem Diameters -

Crown Spread - The crown spread was measured in metres in the North, South, East, and West directions. Where access was limited crown spread was estimated.

Crown Clearance - the height of the first significant branch was measured. Where access or visibility is limited, this was estimated.

Age class - trees were recorded as young, semi-mature, early mature, mature, and over-mature as prescribed in BS 5837:2012.

RP - Root Protection

- **A (m²)**= Area
- **R (m)**= radius

Condition – tree condition was recorded particularly concerning structural and/or physiological conditions (eg. The presence of decay, physical defects, and/or preliminary management recommendations)

Where trees are grouped or in the case of woodlands, the condition stated will be typical of the feature. Groups of trees and woodlands are represented and the RPA will be included in the total area shown. The RPA will be calculated by taking an average measurement of stem diameter.

Deadwood -

Minor deadwood- less than 25mm in diameter

Moderate deadwood- 25-50mm in diameter

Major deadwood – Greater than 50mm in diameter

P = Physiological condition

S = Structural Condition

Those trees marked ‘Good’ can generally be classed as having good overall structural and physiological condition. They usually contribute significantly to the local or site amenity.

Those trees marked ‘Fair’ can generally be classed as having reasonable structural and physiological condition. They may contain smaller areas of included bark within either major or minor fork junctions. They may be subject to single or multiple fungal invasions, bacteria or viruses. They may be subject to minor crown dieback, unusually pale or smaller foliage or have been subjected to outside influences such as restriction of rooting spread, vandalism or mechanical damage, but should be viewed as in generally good overall condition.

Those trees marked ‘Poor’ can generally be classed as having poor overall structural or physiological condition. They may contain large areas of included bark either within major fork junctions. They may be subject to single or multiple fungal invasions, bacteria or viruses. They may contain splits or cracks throughout the branching structure. They may be subject to significant crown dieback or exhibit unusually pale or small foliage. They may be subject to outside influences such as restriction of rooting spread, vandalism or mechanical damage and are costly to retain.

Estimated Remaining Contribution/ Life Expectancy – estimated (eg. Less than 10 years, 10-20 years, 20 – 40 years, 40+ years)

RPA

An RPA is a calculation which estimates the area of soil around a tree needed to ensure the survival of retained trees.

By considering the RPAs and existing site features (including natural and man-made topography) and by adopting construction and tree protection techniques that minimise root disturbance, successful construction projects can be achieved

Root Protection Area (RPA) Calculations

All trees in retention categories A, B, C and U have their RPA calculated and the RPA figure given represents the radial distance, from the tree’s trunk, at which barriers should be erected. The calculation for the RPA is as per section 4.6 of BS 5837:2012.

For single-stem trees, the RPA should be calculated as an area equivalent to a circle with a radius 12 times the stem diameter. For trees with more than one stem, one of the two calculation methods below should be used. In all cases, the stem diameter(s) should be measured in accordance with Annex C, and the RPA should be determined from Annex D. The calculated RPA for each tree should be capped at 707 m2.

- a) For trees with two to five stems, the combined stem diameter should be calculated as follows:

$$\sqrt{(Stem\ diameter\ 1)^2 + (Stem\ diameter\ 2)^2 \dots + (Stem\ diameter\ 5)^2}$$

- b) For trees with more than five stems (not illustrated in Annex C), the combined stem diameter should be calculated as follows:

$$\sqrt{(\text{mean stem diameter})^2 \times \text{number of stems}}$$

N.B. Where all stem diameters were not accessible, this averaging formula has been adopted.

The RPA for each tree should initially be plotted as a circle centred on the base of the stem. Modifications to the shape of the RPA should reflect a soundly based Arboricultural assessment of likely root distribution.

Any deviation in the RPA from the original circular plot should take account of the following factors whilst still providing adequate protection for the root system: a) the morphology and disposition of the roots, when influenced by past or existing site conditions (e.g. the presence of roads, structures and underground apparatus); b) topography and drainage; c) the soil type and structure; d) the likely tolerance of the tree to root disturbance or damage, based on factors such as species, age, condition and past management.

Appendix C: Caveats and Limitations

This survey has been undertaken in compliance with BS5837:2012; it is not intended to be a tree safety survey. Tree inspection was carried out from ground level using the Visual Tree Assessment methodology. The survey did not include any climbing or investigation beyond what was visible from access points. Digital Scanning Software and other decay detection methods were not available to detect internal decay. No soil samples were taken. Any structural defects present may not be visible, for example being masked by vegetation, whether the tree's foliage, plants growing around the base of the tree, or climbing plants growing on the stem and into the crown.

This report includes an evaluation of the tree(s) on the day the site visits were made. Where access was limited, measurements were estimated. This report takes into account findings from these visits. Where similar trees are growing in large groups, their height and diameter may be estimated. Trees were surveyed if they affected the site and if their diameters at 1.5m exceeded 150mm in a woodland setting (75mm for individual trees).

This Arboricultural survey is valid only for typical weather conditions. Healthy trees, or parts of healthy trees, may fail at any time. Structural failures occur when the stresses due to the forces acting on a tree exceed the strength of the tree structure or the tree-soil connection supporting the tree. Even a structurally strong tree, free of defects, will fail when a load is applied that exceeds the load-carrying capacity of one or more of its parts. Most tree structural failures involve a combination of structural defects or conditions, such as the presence of decay or poor structure and an unusual or extreme loading event, such as strong wind. Every effort has been made to identify defects or hazards but no guarantee can be given for their safety. Healthy trees may fail in unusually high or unpredictable winds or violent storms and as the consequences of such weather phenomena are unforeseeable, Selwyn Trees cannot be held liable for any such failures.

Unless otherwise stated, the survey data should be considered time-limited for planning purposes to a maximum of 1 year.

Any legal descriptions stated or given by the consultant are understood to be accurate. Selwyn Trees will not assume responsibility for legal matters that arise from this survey, and will not be required to act as a legal witness to give testimony or attend court unless agreed arrangements are subsequently made.

Land managers are responsible for any work on surveyed trees or for carrying out any recommendations.

Appendix D: Author's Qualifications and experience

Rachel Selwyn BSc (Hons) Arboriculture and Urban Forestry, MArborA, QTRA registered.

Rachel is a consultant at Selwyn Trees and has 10 years of experience working in the role. She has a BSc Hons degree in Arboriculture & Urban Forestry from the University of Central Lancashire. She is a professional member of the Arboricultural Association and is a registered user of the Quantified Tree Risk Assessment methodology. Her work ranges from detailed tree assessment using specialist technology to producing a range of tree reports for development projects and providing tree protection solutions to BS5837 standards.

Appendix D: British Standard BS 5837:2012 Table 1 Cascade chart for Tree Quality Assessment:

Trees for Removal			
Category and definition	Criteria		
<p>Category U Those in such a condition that cannot realistically be retained as living trees in the context of the current land use for longer than 10 years</p>	<p>Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal or other U category trees (e.g where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning)</p> <p>Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline.</p> <p>Trees infected with pathogens of significance to the health and /or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality.</p> <p><i>NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve</i></p>		
Trees to be considered for retention			
Category and definition	Criteria- sub categories		
	1 Mainly Arboricultural Values	2 Mainly landscape values	3 Mainly Cultural values
<p>Category A Trees of high quality with an estimated remaining life expectancy of at least 40 years</p>	<p>Trees that are particularly good examples of their species, especially if rare or unusual, or those that are essential components of groups, or of formal or semi-formal Arboricultural features (e.g. the dominant and/ or principle trees within an avenue)</p>	<p>Trees, groups or woodlands of particular visual importance and /or landscape features</p>	<p>Trees, groups or woodlands of significant conservation, historical, commemorative or other value (eg. Veteran trees or woodland pasture)</p>
<p>Category B Trees of moderate quality with an estimated remaining life contribution of at least 20 years</p>	<p>Trees that might be included in the high category but are downgraded because of impaired condition (e.g. presence of remedial defects including unsympathetic management and storm damage), such that they are unlikely to be beyond retention for beyond 40 years; or trees lacking the special quality necessary to merit the Category A designation</p>	<p>Trees present in numbers usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality</p>	<p>Trees with material conservation or other cultural benefits</p>
<p>Category C Those of low quality and value with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm</p>	<p>Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories</p>	<p>Trees present in groups or woodlands but without this conferring on them significantly greater landscape value, and/or trees offering low or only temporary screening benefit</p>	<p>Trees with no material conservation or other cultural benefits</p>