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arboricultural consultants

Location:
**The Seam**
**Barnsley**

Report Type:
**Arboricultural Survey**
**Arboricultural Impact Assessment**
**Arboricultural Method Statement**
**Tree Protection Plan**

Ref:
**ARB/AE/3428**

Date:
**November 2024**

# Contents



## Appendices

# 1 Introduction

1.1 This report has been prepared by Andrew Elliott of Elliott Consultancy Ltd on behalf of the applicant.

1.2 Elliott Consultancy Ltd was commissioned to visit the site to inspect the trees and to produce an arboricultural report in accordance with British Standard 5837:2012 '*Trees in Relation to Design, Demolition & Construction*'. An initial inspection of the trees was undertaken on the 17th June 2024.

1.3 **Scope of the report:**

- This report provides arboricultural information and advice in relation to the proposed re-development of the site to include new and associated infrastructure – as shown within Appendix 8.
- It should be used to guide any construction process in order to minimise potential damage to retained trees.
- Section 4 provides a summary of the design proposals and their impact on the current tree population.
- Sections 5-7 provide a method statement that details all measures recommended for adequate tree protection including any special construction measures to be utilised.
- Within the Arboricultural Tasks Sequence Table (Appendix 2), is a timescale for implementation of any tree works and protective measures in reference to the development period.

1.4 **Prior to site works commencing, the Arboricultural Method Statement needs to be passed to the site manager or contractor and used as reference during the development period, with particular attention paid to Sections 5-7, and Appendices 2-9**

# 2 Site Information

2.1 The survey included an assessment of trees on and around the lower parking area at The Seam in Barnsley. The tree survey area was larger than that of the proposals to allow for adjacent tree cover on the site to be assessed and considered within any proposals. Figure 1 shows the approximate extent of the area surveyed.

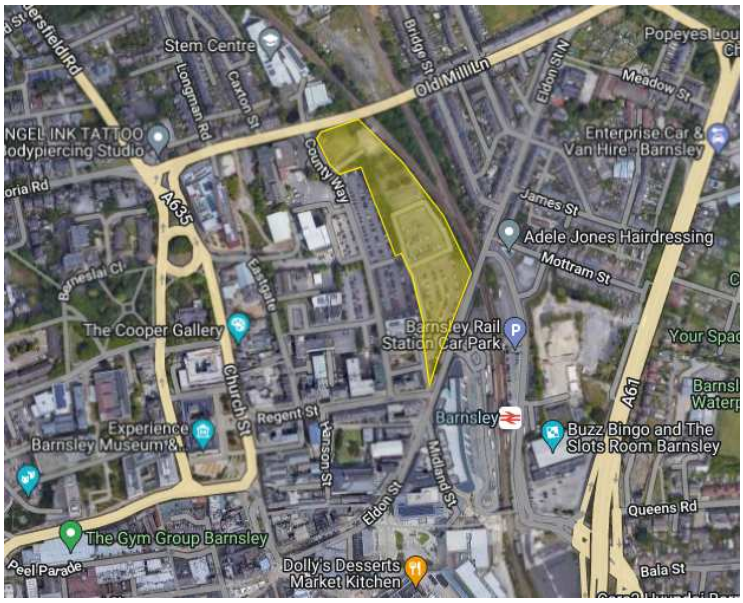



**Figure 1: Survey area highlighted – exceeding the proposals extent.**

2.2 Any visibility constraints encountered are noted within the survey data (Appendix 1).

# 3 Tree Quality Assessment

3.1 BS5837:2012 notes that all trees apart from those with stem diameters <150mm or classified as Category U should be viewed as a site constraint. When inspected, each tree and or group feature is assigned one of four categories that signify how suitable that tree/group would be for retention within any development proposals, and therefore the degree to which it should constrain the site. The four categories are as follows:

3.2.1 **Category A** trees are those of high quality and value, and of a condition whereby they could make a substantial contribution to the site. Such trees should be retained and offered adequate consideration during the design phase and physical protection during the construction phase in accordance with BS 5837:2012. This means keeping proposed features and alterations to ground levels outside of root protection areas and crown spreads to ensure that trees remain in adequate condition post-development.

3.2.2 **Category B** trees are those of moderate quality and value, and of a condition that still make a substantial contribution to the site. Category B trees should be retained wherever possible and offered adequate consideration during the design phase and physical protection during the construction phase in accordance with BS 5837:2012.

3.2.3 **Category C** trees are considered to be of low quality and value, or lacking stature, but of an adequate condition to remain in the short-term. These trees can also be retained if required but where they form a significant constraint to development their removal should be considered. Where they are to be retained they should be afforded adequate consideration during the design phase and physical protection during the construction phase in accordance with BS 5837:2012.

3.2.4 **Category U** trees are of such a condition that any existing value would be lost within 10 years. As a result it is recommended that Category U trees are not considered a constraint for development and are removed prior to construction commencing.

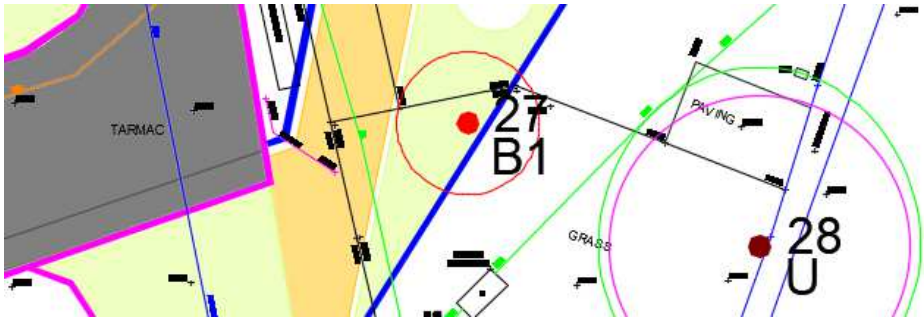
3.3 In addition to the four main categories explained above, each tree/group is assigned a sub-category which signifies its overriding value as determined by the surveyor, which is noted by adding a suffix of 1, 2 or 3 alongside the category letter. 1 signifies that the trees/groups main value is arboricultural e.g. it may be a particularly good example or may be rare. A 2 signifies that the overriding factor was due to the landscape value that the tree/group provides e.g. it may be part of a group feature such as a screen. A 3 indicates that a cultural factor was the overriding value e.g. it may have historical or commemorative importance.

# 4 Design Proposals and Arboricultural Impact

4.1 This section concentrates on the proposals and how they relate to the current trees on and adjacent to the site (as shown within Appendix 8).

4.2 **Potential Conflict 1: Loss of trees to allow construction.**

Tree 16, 20, 27, and immature bushes at the edge of Tree Group 3 will require removal to allow construction. N.b. Tree 28 requires removal regardless of the proposals (Category U tree damaging retaining wall structure), and the stump between Trees 21 & 22 should also be removed.




**Mitigation / Countermeasure:** No countermeasures or mitigation can be undertaken to retain this vegetation. Trees 16 & 20 are Italian Alder located within the main carpark that are to be removed to allow the access road to be excavated and reconstructed with adequate construction space, and Tree 27 is a small Rowan. Although all were classified as Category B trees of moderate quality, it is not expected that their removal will have a significant arboricultural or visual impact within the site surrounding landscape. At the northwestern entrance to the lower carpark, a realignment of the access footpath will require bushes and small trees to be removed or cut back from the edge of Tree Group 3.

**Figure 2: In 2017 – limited growth on corner.**

As seen with the previous detail taken from April 2017, vegetation on this corner has only recently become established and the cutting back of such new growth will have no visible or physiological impact on the larger group. The arboricultural impact removals is therefore considered to be minor. All tree removal can be compensated for by tree planting within the comprehensive post-construction landscape proposals.

4.3 **Potential Conflict 2: Damage to Trees 13-15 & 17-19 due to the resurfacing of the surrounding carpark.**

The proposals include the resurfacing of the parking areas within the root protection areas (RPA's) of trees and could cause damage to underlying roots.

**Mitigation / Countermeasure:** The trees which are all Italian Alder, have historically had conventionally constructed hard-surfaced parking-bays within their root zones. Evidence around the trees shows extensive surface-rooting and deformation of the existing wearing layer in several locations as a result. The use of a conventional construction around the trees again would lead to further deformation and potentially require the removal or damage to significant root tissue. It is proposed that construction will therefore use a cellular system with a permeable block paving wearing layer (following removal of the current non-permeable wearing layer). Such a construction would limit any further excavation requirements to a minimum and allow bridging of surface roots where encountered. All construction works within this area will require care and follow the guidelines on working within root protection zones as provided at Appendix 5.

4.4 **Potential Conflict 3: Damage to Tree 25 due to the realignment of the parking edge.**

The proposals include the realignment of the parking edge closer to Tree 26 which could cause damage to underlying roots.

**Mitigation / Countermeasure:** Tree 26 is a small London Plane in reasonable condition - it was not shown on the provided topographical data and its location was therefore estimated. The proposed encroachment into the tree RPA to install the new carpark edge is approximately 10% of the trees overall recommended protection zone and is expected to be at the periphery of the rootplate (the location of the tree should be confirmed accurately to confirm this). Given the species, immature age, and the good vigour of the subject tree, it is expected that any impact to the tree physiologically will be limited and if a 2m wide protection zone can be maintained, then no structural issues should be caused. N.b. some pruning back of shrubs and bushes around the tree will be required.

4.5 **Potential Conflict 4: Damage to retained trees around the site during construction.**

Retained trees on and off site could be subject to various pressures and damage during the construction process.

**Mitigation / Countermeasure:** All retained trees can be protected during the construction process by the installation of appropriate protective fencing where possible and maintaining the agreed construction exclusion zones as shown within Appendix 7. Fencing locations shown at Appendix 7 allow for the current topography and layout whilst protecting vulnerable root zones. No access, encroachment, surface, or level change will be undertaken within these zones. Where trees within the parking areas cannot be protected by fencing, individual stem protection will be required – see Appendix 4 for specification of stem protection.

4.6 **Potential Conflict 5: Damage to trees during installation of utilities.**

During the installation of utilities roots can be damaged by excavation.

**Mitigation / Countermeasure:** No new utility runs must be located within any of the retained trees RPA's. Any works to existing utilities must be undertaken with regard for the retained tree cover and be in accordance with NJUG (National Joint Utility Groups) guidelines.

4.7 **Potential Conflict 6: Damage to trees due to post-development landscaping:**

Damage can be caused post-development by excessive landscaping and soil changes in close proximity to retained trees.

**Mitigation / Countermeasure:** Landscaping works within the root protection areas will be kept to a minimum. Tractor mounted rotavation or other heavy mechanical cultivation must not be used within the root protection areas of retained trees. All cultivation within RPA's will be carefully undertaken by hand or pedestrian controlled light machinery to avoid root damage.

# 5 Pre-construction and Site Preparation Works

5.1 Refer to Appendix 2 for stage specific tasks.

5.2 Further to any site works commencing, the protection fencing needs to be erected in order to protect the trees and the soil structure from damage; this must remain in situ during the entire build process. The fencing needs to be erected according to the locations found on the Tree Protection Plan (Appendix 9). The fence should conform to the specifications within Appendix 3. All weather notices should be attached to the fencing marked with the following: '*Construction Exclusion Zone - Keep Out'* (a notice is provided within Appendix 6). Trees within the parking areas will have stem protection installed (see Appendix 4).

5.3 Construction material storage and site offices must be confined to an area identified outside of all root protection areas and agreed with the local authority as acceptable.

5.4 At the beginning of the construction phase, the site manager will appoint a delegated site representative who shall be responsible for continued checking of protective fencing and stem protection to ensure it is compliant with the method statement and exclusion zones.

# 6 Tree protection measures during construction

6.1 Refer to Appendix 2 for stage specific tasks.

6.2 All ground levels where trees are located should be maintained. Changes to soil levels adjacent to trees can severely affect the trees structural integrity and its ability to gain moisture and nutrients from the surrounding soil. Unavoidable level changes that may affect retained trees, and not already accounted for within this method statement, should be assessed by a qualified arboriculturalist so that any mitigation or special construction techniques can be considered.

6.3 Building material storage and operations that can contaminate soil, such as cement mixing, must be confined to areas outside the construction exclusion zones shown on Appendix 7.

6.4 Fires should not be lit.

6.5 The trees should not be used to attach notices, cables or other services.

6.6 The installation of any underground services near or adjacent to trees on the site shall conform to the requirements of National Joint Utilities Group publication Volume 4 (November 2007).

# 7 Post-Construction Considerations

7.1 Refer to Appendix 1 for stage specific tasks.

7.2 Only once all works have been completed can the protective fencing and any stem protection be removed.

7.3 Landscaping and groundworks or resurfacing within root protection areas can be undertaken. Within these construction exclusion zones, all works will be undertaken by hand or with pedestrian operated lightweight machinery with care to avoid any compaction of subsoil or excavation below topsoil levels.

# Appendix 1: Tree Data

## Key to tree survey headings:

- **Tag –** Tree number corresponding to plans & tags
- **Species –**Common name of each tree
- **DBH –** 'Diameter at breast height' in cm taken on stem at 1.5m.
- **Hgt –** Height in metres of each tree
- **Crown spread: North, South, East, West –** Crown spread in metres to x4 cardinal points from centre of stem
- **CH –** Crown clearance from ground to lowest branches
- **EstD** – Estimated dimensions
- **Age –** Age-class of tree: Y = Young, SM = Semi-mature, M = Mature, OM = Over-mature.
- **General observations –** details both Physiological and structural Condition
- **Est Con –** Estimated life expectancy / contribution to the landscape (in years): 0-10, 10-20, 20-40, 40+
- **Recommendations –** Any recommendations that, regardless of land use, require attention.
- **BS. Cat –** Retention category. **A**, **B**, **C**, or **U**. For retained trees **A** being of the highest quality, **C** being the lowest. Category **U** trees for removal regardless of design. Category A, B, & C are given sub-catagories1, 2, & 3 – details of which are shown in appendices.

# Tree Survey Data

| No. | Species | Age | DBH | Stems | Height | Crown Spread | | | | CH | EstD | General Observations | EstCont | BS Cat | Recommendation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | N | S | E | W | | | | | | |
| 1 | Silver Maple | SM | 38 | 1 | 12 | 3 | 5 | 3 | 6 | 2.5 | N | Minor crown suppression. Crown has poor quality branch attachments due to acute unions or possible non-integrated wood fibres. | 20+ | B1 | No work required |
| 2 | Norway Maple | SM | 60 | 1 | 13 | 5 | 6 | 5 | 5 | 2.5 | N | Crown has poor quality branch attachments due to acute unions or possible non-integrated wood fibres. | 20+ | B1 | No work required |
| 3 | Sycamore | SM | 30 | 1 | 10 | 5 | 2 | 3 | 5 | 2.5 | N | Ivy on stem limited visibility. Suppressed crown form. | 40+ | B2 | No work required |
| 4 | Sycamore | SM | 40 | 2-5 | 12 | 5 | 2 | 3 | 3 | 0.5 | N | Co-dominant stems at base with acute union. Suppressed crown form. | 40+ | B2 | No work required |
| 5 | Sycamore | SM | 40 | 2-5 | 12 | 3 | 3 | 3 | 5 | 0.5 | N | Not on topographical survey - location estimated. Ivy on stem limited visibility. X3 multiple stems at base. Suppressed crown form. | 40+ | B2 | No work required |
| 6 | Italian Alder | EM | 55 | 1 | 16 | 3 | 4 | 4 | 3 | 1 | N | Not on topographical survey - location estimated. Ivy on stem limited visibility. | 40+ | B1 | No work required |
| 7 | Italian Alder | EM | 53 | 1 | 16 | 3 | 4 | 4 | 3 | 1 | N | Not on topographical survey - location estimated. Ivy on stem limited visibility. | 40+ | B1 | No work required |
| 8 | Italian Alder | EM | 72 | 1 | 15 | 5 | 6 | 5 | 8 | 1 | N | | 40+ | B1 | No work required |

| No. | Species | Age | DBH | Stems | Height | Crown Spread | | | | CH | EstD | General Observations | EstCont | BS Cat | Recommendation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | N | S | E | W | | | | | | |
| 9 | Italian Alder | EM | 56 | 1 | 15 | 3 | 4 | 3 | 4 | 1 | Y | Not on topographical survey - location estimated. Ivy on stem limited visibility. Suppressed crown form. | 40+ | B2 | No work required |
| 10 | Turkish Hazel | Y | 5 | 1 | 3 | 0.5 | 0.5 | 0.5 | 0.5 | 1.5 | N | Not on topographical survey - location estimated. | 40+ | C1 | No work required |
| 11 | Turkish Hazel | Y | 5 | 1 | 3 | 0.5 | 0.5 | 0.5 | 0.5 | 1.5 | N | Not on topographical survey - location estimated. | 40+ | C1 | No work required |
| 12 | Turkish Hazel | Y | 5 | 1 | 3 | 0.5 | 0.5 | 0.5 | 0.5 | 1.5 | N | Not on topographical survey - location estimated. | 40+ | C1 | No work required |
| 13 | Italian Alder | EM | 52 | 1 | 14 | 5 | 5 | 4 | 3 | 2 | N | | 40+ | B1 | No work required |
| 14 | Italian Alder | EM | 47 | 1 | 14 | 5 | 5 | 3 | 3 | 2 | N | | 40+ | B1 | No work required |
| 15 | Italian Alder | EM | 31 | 1 | 11 | 3 | 3 | 2 | 4 | 2 | N | Suppressed crown form. | 40+ | B2 | No work required |
| 16 | Italian Alder | EM | 38 | 1 | 11 | 5 | 5 | 6 | 4 | 1.5 | N | | 40+ | B1 | No work required |
| 17 | Italian Alder | EM | 68 | 2-5 | 15 | 6 | 5 | 6 | 3 | 2 | N | Co-dominant stems at 1.5m with acute union - smaller of the two stems on eastern side has very poor structural attachment and angle of growth, and is predisposed to future failure. | 20+ | B1 | If retained remove smaller of two stems at 1.5m |
| 18 | Italian Alder | EM | 51 | 1 | 15 | 5 | 5 | 3 | 5 | 1.5 | N | | 40+ | B1 | No work required |

| No. | Species | Age | DBH | Stems | Height | Crown Spread | | | | CH | EstD | General Observations | EstCont | BS Cat | Recommendation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | N | S | E | W | | | | | | |
| 19 | Italian Alder | EM | 51 | 1 | 15 | 4 | 5 | 5 | 3 | 1.5 | N | Basal growth. | 40+ | B1 | Remove basal & lower growth |
| 20 | Italian Alder | EM | 39 | 2-5 | 11 | 4 | 4 | 7 | 3 | 1.5 | N | Co-dominant stems at 1m - smaller of the two stems has very poor structural attachment and angle of growth, and is predisposed to future failure. | 20+ | B1 | If retained remove smaller of two stems at 1m |
| 21 | Italian Alder | EM | 59 | 1 | 15 | 4 | 5 | 5 | 4 | 2.5 | N | Epicormic growth at base. | 40+ | B1 | Remove basal & lower growth |
| 22 | Italian Alder | EM | 44 | 1 | 13 | 4 | 5 | 3 | 5 | 2.5 | N | Epicormic growth at base. | 40+ | B1 | Remove basal & lower growth |
| 23 | Italian Alder | EM | 34 | 1 | 12 | 2 | 4 | 3 | 3 | 2.5 | N | Epicormic growth at base. | 40+ | B1 | Remove basal & lower growth |
| 24 | Italian Alder | EM | 34 | 1 | 10 | 5 | 4 | 3 | 5 | 2 | N | Epicormic growth at base. | 40+ | B1 | Remove basal & lower growth |
| 25 | London Plane | SM | 43 | 1 | 10 | 5 | 4 | 4 | 3 | 2.5 | N | Not on topographical survey - location estimated. | 40+ | B1 | No work required |
| 26 | London Plane | SM | 32 | 1 | 8 | 5 | 3 | 3 | 3 | 2.5 | N | Not on topographical survey - location estimated. Limited visibility. | 40+ | B1 | No work required |
| 27 | Rowan | SM | 21 | 1 | 5 | 2 | 2 | 2 | 2 | 2 | N | Not on topographical survey - location estimated. Surface rooting and pavement deformation evident. | 40+ | B1 | No work required |

| No. | Species | Age | DBH | Stems | Height | Crown Spread | | | | CH | EstD | General Observations | EstCont | BS Cat | Recommendation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | N | S | E | W | | | | | | |
| 28 | Ash | SM | 35 | 2-5 | 8 | 5 | 5 | 5 | 5 | 1.5 | N | Not on topographical survey - location estimated. Self-seeded multi-stemmed tree at base of retaining wall. 2 main stems have severe bark inclusion. Damaging wall - danger to adjacent road. | <10 | U | Remove and treat to prevent regrowth to protect high retaining wall |
| 29 | Cherry spp | SM | 29 | 1 | 3 | 4 | 3 | 5 | 5 | 1.5 | N | Small spreading Flowering Cherry. | 40+ | B1 | No work required |

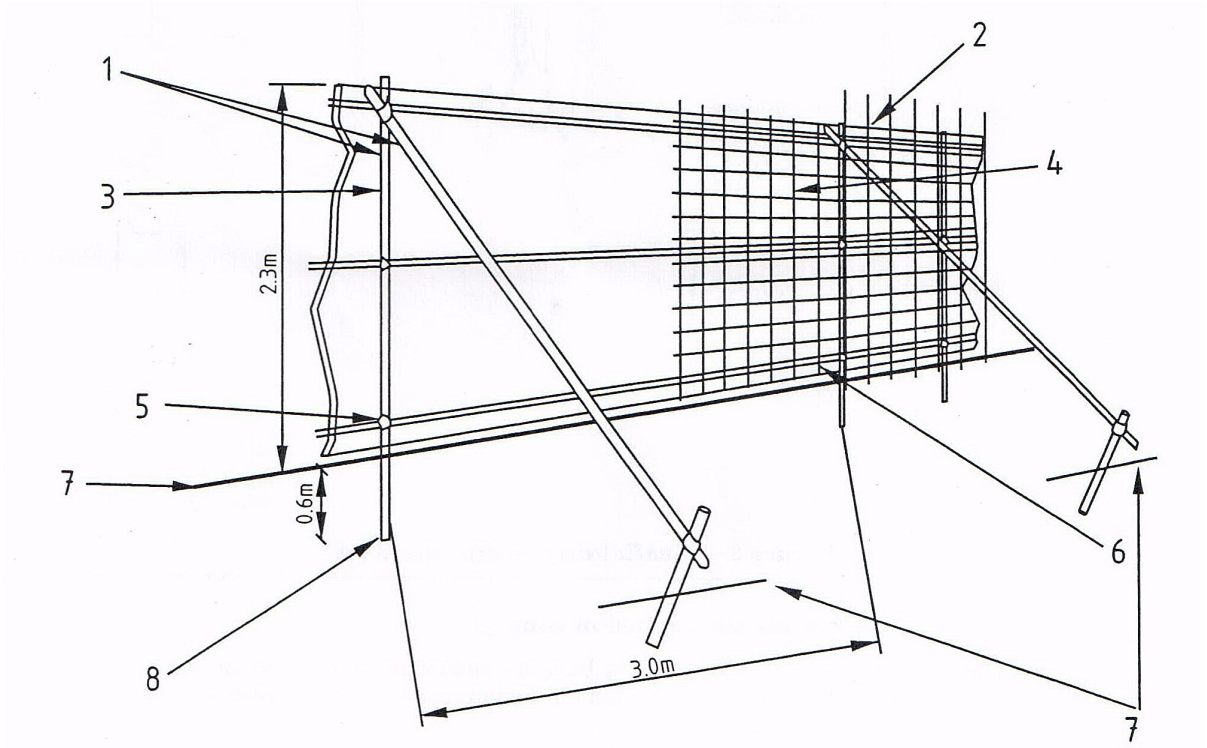
# Group Data

| Group Number | Dominant Species | Lesser Species | DBH | Average Height | Age | Average Spread | Condition/Comments | Recommendations | EstCont | BS Cat |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Sycamore | Ash | 10 | 5 | Y | 2 | Off-site (edge of railway corridor). Not on topographical survey and location estimated. Dense self-seeed stems. Overhang into site 1-3m. | No work required | 40+ | C2 |
| 2 | Oleaster<br>Elder<br>Buckthorn. | | 20 | 6 | SM | 2 | Dense area of small woody shrubs. | No work required | 10+ | C2 |
| 3 | Sycamore<br>Field Maple<br>False Acacia | Hazel | 30 | 15 | SM | 4 | Dense plantation on banking at side of the site. Planted 2-3m spacings with very dense understorey. Varying overhangs of hard-surfaced car park areas of between 2-4m. | No work required | 20+ | B2 |

## Appendix 2: Arboricultural Tasks Sequence Tables

| Tree or Group Number | Pre-Construction Stage | Construction Stage | Post Construction Stage |
|---|---|---|---|
| Tree 16, 20, 27, & 28.<br><br>Bushes at northwestern access point.<br><br>Shown in red at Appendix 8. | Remove. | | |
| Stump between Trees 21 & 22. | Grind to below ground level. | | |
| Tree Group 2. | Prune back lower overhanging foliage to allow new carpark edge construction. | | |
| All retained trees | Adhere to Section 5.<br><br>Install fencing to specification of Appendix 3 and as per locations shown at Appendix 7.<br><br>Attach notice from Appendix 4 onto fencing.<br><br>Install stem protection to trees within the parking areas – as per Appendix 4. | Adhere to Section 6. | Adhere to Section 7. |

# Appendix 3: Protective Fencing Specification.




1 Standard scaffold poles

2 Uprights to be driven into the ground

3 Panels secured to uprights with wire ties and where necessary standard scaffold clamps

4 Weldmesh wired to the uprights and horizontals

5 Standard clamps

6 Wire twisted and secured on inside face of fencing to avoid easy dismantling

7 Ground level

8 Approx. 0.6 m driven into the ground

# Appendix 4: Tree Stem Protection - specification :


Trunk Protecta® waterproof, high-vis canvas tree guard
Product name: Trunk Protecta®
Cross-section dimensions (mm): Single unit for trees with 30-60cm diameter; multiple units for 200cm+
Aboveground height (mm): 1200 or 1800mm

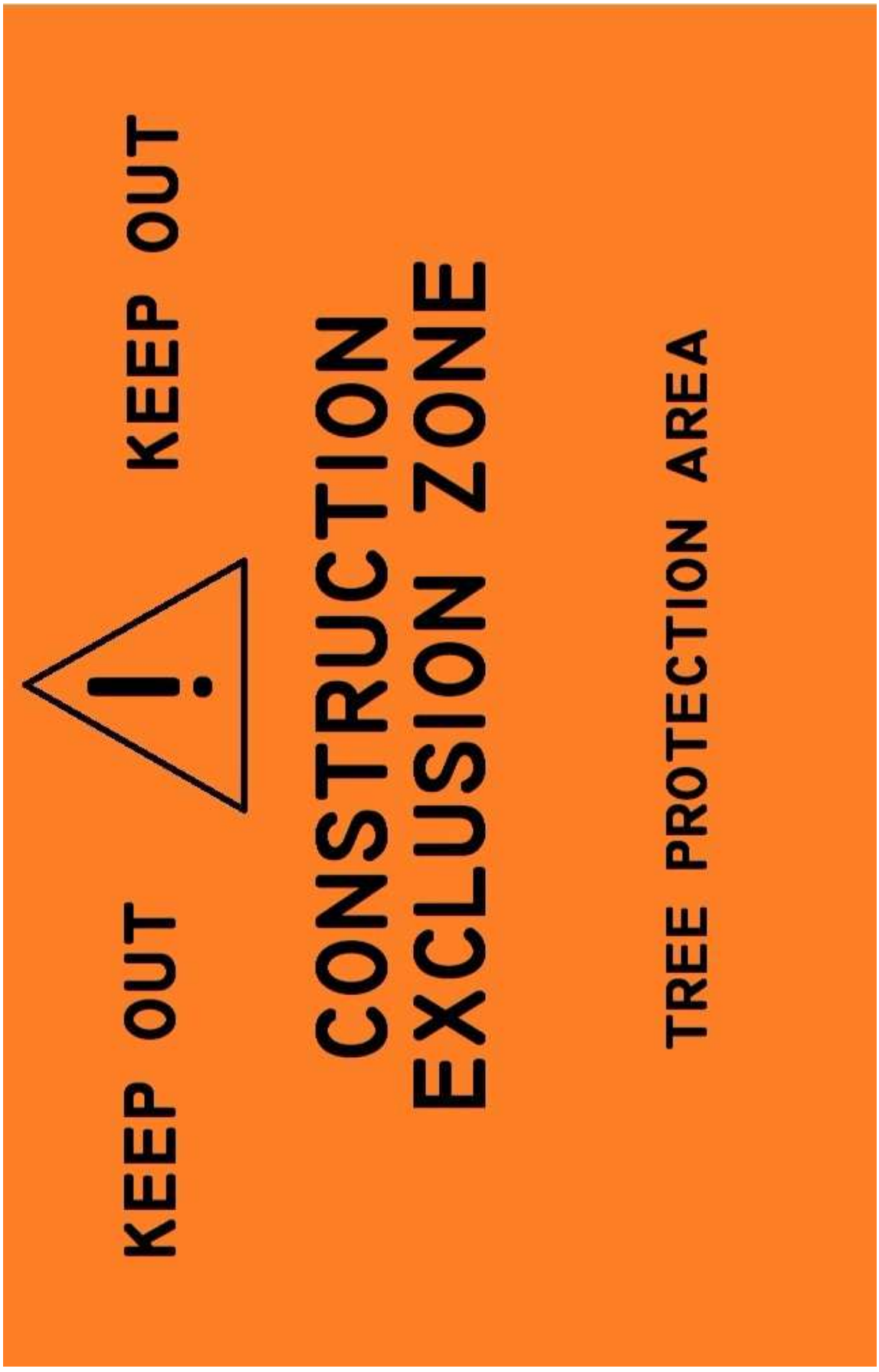
CONTACT
Green Grid Systems
The Nursery
Littleton Lane
Winchester
SO21 2LS
United Kingdom
Call: 01962 433460
Email: sales@greengridsystems.com
https://greengridsystems.com/products/trunk-protecta

DESCRIPTION
Trunk Protecta® provides an effective, easy-to-install solution for protecting a tree trunk from abrasion and accidental damage from vehicles and construction traffic. Trunk wounds that penetrate the bark will damage the cambium layer, a thin layer of vascular tissue, which is vital for the movement of water and nutrients around the tree. Standard level of protection - 1.2m; a higher level can be achieved using the 1.8m variant. Acts as an abrasion and impact-resistant protective barrier over tree bark, stopping wounds and tear injuries that could allow disease and decay to enter the tree.

# Appendix 5: Removing Hard Surfaces & Other Excavations within Root Protection Areas

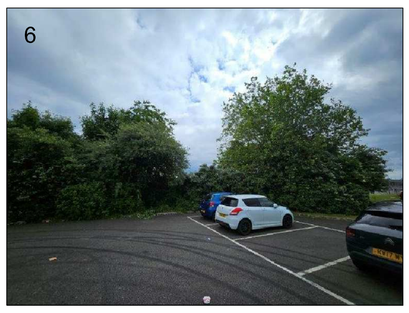
- All excavations within root protections areas must only be undertaken using hand tools or pedestrian operated machinery.
- The required excavations must be kept to a minimum to avoid unnecessary root damage and ideally undertaken during the presence of an arboriculturalist.
- Great care must be taken not to damage the bark of roots that can be retained in order to avoid wounds which could be exploited by pathogens.
- Exposed roots that can be retained must be wrapped with dry sacking if to be left for extended periods e.g. overnight. Sacking must be removed prior to backfilling.
- All roots >25mm should be preserved and worked around. Where this is not possible, severance should only take place after consultation with the tree officer / appointed arboriculturalist. Roots must be cut using a sharp knife leaving as small a wound and as clean a cut as possible.
- Great care must be taken not to allow contaminants, such as oils, into the excavation.

## Appendix 6: Construction Exclusion Zone Notice



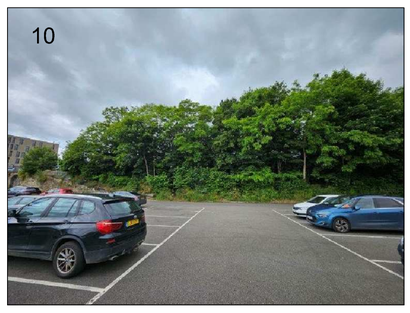











1:500

0 5 10 15 20 25 30 35 40 45 50 [m]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Tree Position Showing Crown Extents and BS5837 Category A

Tree Position Showing Crown Extents and BS5837 Category B

Tree Position Showing Crown Extents and BS5837 Category C

Tree Position Showing Crown Extents and BS5837 Category U

Root Protection Area - to remain free from disturbance

Group of Trees

1/G1 Tree/Group

A1/B1/ C1/U BS5837 Retention Category

**APPENDIX 7**

Drawing Title: Tree Constraints Plan

Project: The Seam, Barnsley

Drawing Number: ARB/AE/3428/TCP

Date: June 2024

Scale: 1:500 @ A0

1:500

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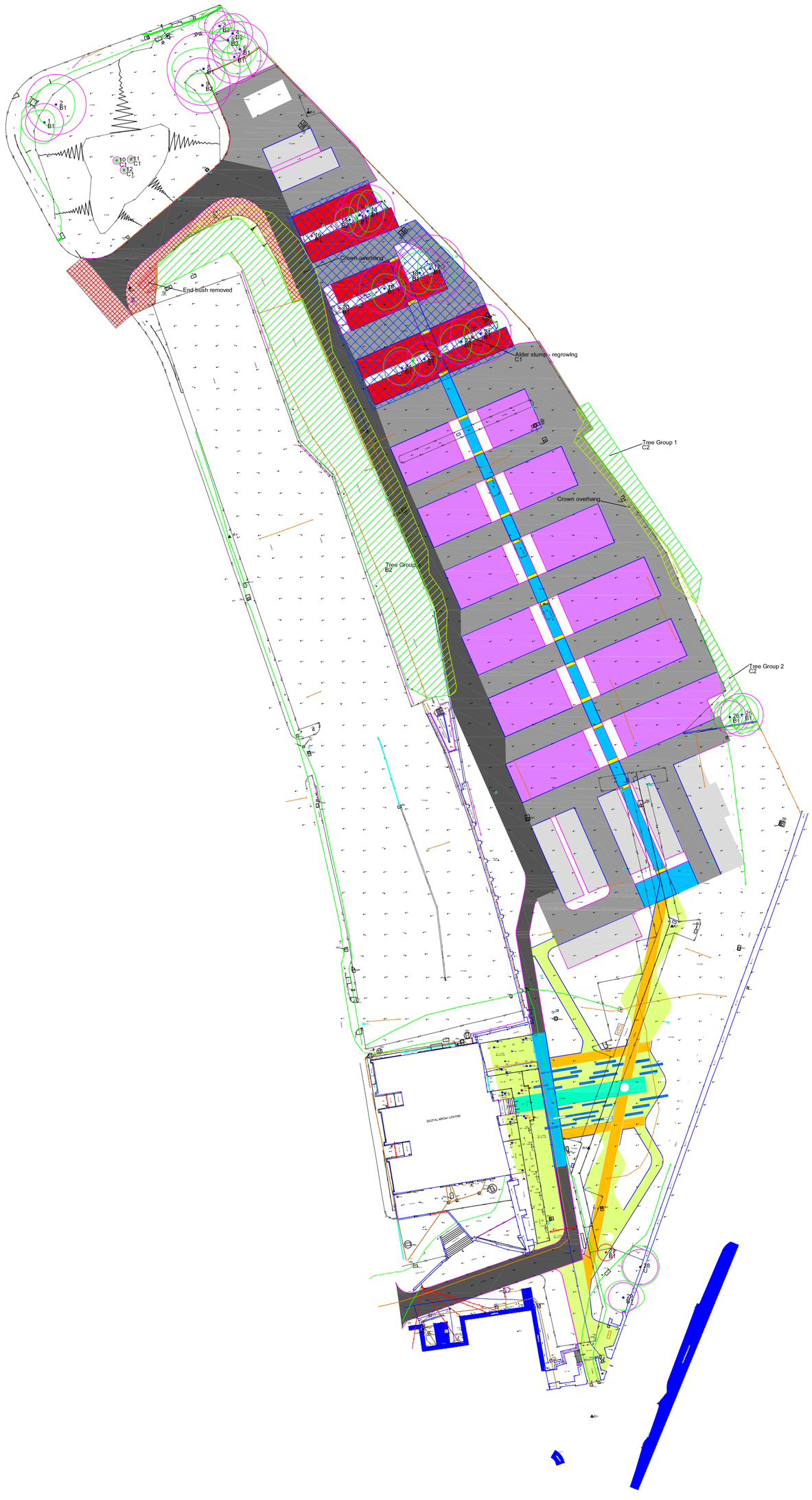


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Tree Position - BS5837 Category A

Tree Position - BS5837 Category B

Tree Position - BS5837 Category C

Root Protection Area - to remain free from disturbance

Group of Trees

1/G1 Tree/Group

A1/B1/ C1/U BS5837 Retention Category

Tree Requiring Removal

**APPENDIX 8**

Drawing Title: Tree Impact Plan

Project: The Seam, Barnsley

Drawing Number: ARB/AE/3428/TiP

Date: November 2024

Scale: 1:500 @ A0

1:500

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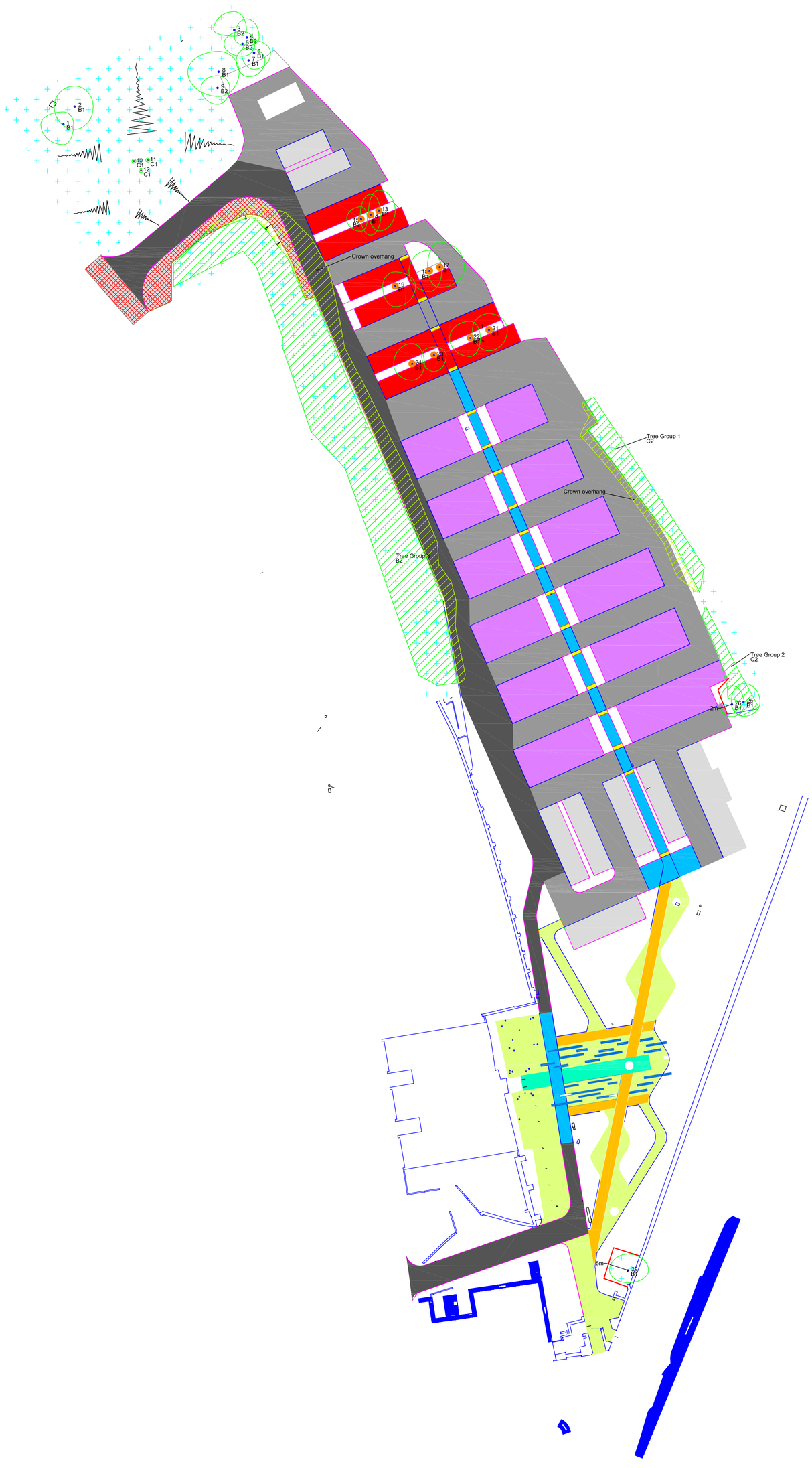


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Tree Position - BS5837 Category A

Tree Position - BS5837 Category B

Tree Position - BS5837 Category C

Group of Trees

1/G1 Tree/Group

A1/B1/ C1/U BS5837 Retention Category

Tree Protection Fence

Tree Stem Protection

Construction Exclusion Zone

**APPENDIX 9**

Drawing Title: Tree Protection Plan

Project: The Seam, Barnsley

Drawing Number: ARB/AE/3428/TpP

Date: November 2024

Scale: 1:500 @ A0