



## Arboricultural Impact Assessment

Vine Street,  
Gorton,  
Manchester  
M18 8SR

Prepared on behalf of  
Kirkland Developments Ltd

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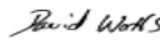
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## QUALITY MANAGEMENT

| Quality Management Approved prior to Issue |                                                               |              |                                                                                     |
|--------------------------------------------|---------------------------------------------------------------|--------------|-------------------------------------------------------------------------------------|
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| Checked by:                                | David Watts BSc (Hons) FdSc MICFor<br>MArborA MCIEEM          | Signature:   |  |
| Prepared by:                               | Dr David Hackett, BSc (Hons) MLD PhD<br>MCIEEM CEnv, Director | Signature:   |  |

This report has been prepared with all reasonable skill, care and diligence, within the terms of the contract with the client. This report is confidential to the Client. Biora Limited accepts no responsibility of whatever nature to third parties to whom this report may be made known.

This report is based on survey data gathered in October at land at Vine Street, Gorton M18 8SR.

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## 1.0 SUMMARY

- 1.1 Biora Ltd were appointed by Mike Stewart on behalf of Kirkland Developments to update a tree survey and produce an Arboricultural Impact Assessment (AIA) relating to land off Vine Street, Gorton, Manchester. The wider site was subject of an earlier Arboricultural Impact Assessment and Method Statement by TBA Landscape Architects for Mulbury Homes in 2013, updated in 2014.
- 1.2 The site survey identified 5 trees, and three groups of trees with the potential to be affected by the development proposals. These include two Category B trees and three category C trees and three Category C groups
- 1.3 The development proposals will necessitate the removal of two Category B groups and three category C trees.
- 1.4 It is recommended that works follow an Arboricultural Method Statement to ensure that retained trees survive the proposed development works and thrive upon their completion. This includes the installation of temporary tree protection fencing during development works and use of cellular confinement systems.

## 2.0 INTRODUCTION

### 2.1 Background and Commission

- 2.1.1 Biora Ltd were appointed by Mike Stewart on behalf of Kirkland Developments to update a tree survey and produce an Arboricultural Impact Assessment (AIA) relating to land off Vine Street, Gorton, Manchester. The wider site was subject of an earlier Arboricultural Impact Assessment and Method Statement by TBA Landscape Architects for Mulbury Homes in 2013, updated in 2014
- 2.1.2 The proposed development consists of residential development of previously developed, derelict land, with access off Vine Street, Gorton. A proposed site layout was provided in order to carry out the AIA.

### 2.2 Aims of the Survey

- 2.2.1 The purpose of the report is to:
- Assess the quality of the trees on and immediately adjacent to the site, in accordance with BS5837: 2012 – Trees in Relation to Design, Demolition and Construction: Recommendations (hereafter referred to as BS5837: 2012).
  - Identify any potential impacts upon trees due to the development proposals.
  - Prescribe arboricultural recommendations for the long-term management of trees on the site.
  - Where necessary, to assess the site for its suitability for mitigation planting, and to specify planting requirements.

### 2.3 Site Details

- 2.3.1 The site is located at grid reference and is accessed off Vine Street, Gorton, Manchester grid reference SJ 892 969
- 2.3.2 The site comprises former developed land adjacent to a railway line. This derelict site was largely under scrub vegetation, some of which had been cleared, at the time of the survey and had been heavily fly-tipped.



*Figure 1: Aerial Imagery of Site and Surrounding Area (Google Earth, 2019)*

### 2.4 Development Proposals

- 2.4.1 The development proposals comprise residential units and associated parking off a single access road with turning head, off Vine Street.

## 3.0 METHODS

### 3.1 Desk Based Study

- 3.1.1 The Local Planning Authority was consulted to determine whether any trees on the site and immediately adjacent to the site are protected by Tree Preservation Orders (TPOs) and/or are within Conservation Areas. Cranfield University's Landis Soils map was consulted to determine the soil type of the surrounding area.

### 3.2 Site Survey

- 3.2.1 The site survey was carried out on 18<sup>th</sup> October 2020. The weather at the time of the survey was clear and dry, and visibility was good.
- 3.2.2 The survey was carried out by Dr David Hackett, Landscape Architect and Plant Ecologist with specialism in plant/soil relations and over 20 years of tree survey, with input provided by David Watts, a chartered arboriculturist (registered consultant with the Institute of Chartered Foresters), a member of the Arboricultural Association at Professional Level, and a full member of CIEEM.
- 3.2.3 All trees on site were inspected from ground level, using the Visual Tree Assessment (VTA) method (*Mattheck et al, 2015*). Any notable defects of trees were recorded, although the site survey did not constitute a full tree safety assessment.
- 3.2.4 Tree heights and crown clearances were measured to the nearest 0.5 m with a clinometer. Crown spreads of trees were measured on their, north, east, south and west aspects to the nearest 0.5m.
- 3.2.5 The diameter at breast height (DBH) of trees was measured to the nearest 10mm. This was used to calculate the root protection area (RPA) of trees using methods prescribed in BS5837: 2012:

For single stem trees, the RPA was calculated as a circle with a radius 12 times the DBH.

For trees with 2-5 stems, the RPA was calculated using the formula:

$$RPA = \sqrt{(Stem\ 1\ DBH)^2 + (Stem\ 2\ DBH)^2 + ... (Stem\ 5\ DBH)^2}$$

For trees with 6 or more stems, the RPA was calculated using the formula:

$$RPA = \sqrt{(\mu\ DBH)^2 \times number\ of\ stems}$$

In accordance with BS5837: 2012, trees were classified as either A, B, C or U, using the criteria shown in [Table 1](#). Trees were additionally categorised with the suffix 1, 2 or 3 to denote arboricultural, landscape and/or cultural qualities. As stated in BS5837: 2012, this additional categorisation does not affect the retention value of the tree.

**Table 1: BS5837 Cascade Chart (adapted from British Standards, 2012)**

| Category   | Definition                                                                                                                                                                                                                                        | Retention                                                             | Colour code |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|-------------|
| Category A | Trees of high quality with an estimated remaining life expectancy of at least 40 years; trees that are particularly good examples of their species, especially if rare or unusual.                                                                | Highly desirable                                                      | Light green |
| Category B | Trees of moderate quality with an estimated remaining life expectancy of at least 20 years; trees lacking the special quality to merit category A designation.                                                                                    | Desirable                                                             | Dark blue   |
| Category C | Trees of low quality with an estimated remaining contribution of at least 10 years, or trees with a stem diameter below 150mm; unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories. | Feasible, but should be removed if posing a constraint to development | Grey        |
| Category U | Trees that have serious, irremediable, structural and/or physiological defects, including those that will become unviable after removal of other category U trees.                                                                                | Unfeasible                                                            | Dark red    |

- 3.2.6 Where necessary, comments were made as to any outstanding safety concerns of trees on the site; however, a full tree safety assessment was not undertaken.

### 3.3 Constraints

- 3.3.1 The survey was constrained by the season in which it took place. Some pathogens of trees, in particular fruiting bodies of decay fungi, are only visible at certain times of year and die-back is not obvious until the trees are in leaf.

## 4.0 RESULTS AND ASSESSMENT

### 4.1 Desk Based Study

- 4.1.1 A request for information to Manchester City Council on 26<sup>th</sup> November 2020<sup>1</sup> found that none of the trees on the site are afforded protection by TPOs, and that the site is not within a Conservation Area. Where street trees are owned by the Local Planning
- 4.1.2 The Landis Soilsdapes database from Cranfield University<sup>2</sup>, interrogated on 26<sup>th</sup> November 2020 states that the surrounding area consists of slowly permeable, seasonally wet, acid loamy and clayey soils. However, the majority, if not all, of the site appeared to be disturbed ground comprising a large percentage of building residue.

### 4.2 Tree Population Assessment

- 4.2.1 The site survey identified 5 trees and three groups of trees with the potential to be affected by the development proposals. These included 2 Category B trees, 3 Category C trees and 3 Category C groups, of moderate quality. A summary of the categorisation of trees on the site can be viewed in **Table 2**, below.
- 4.2.2 Of those trees included within the site survey, T1, T2 and T3 were included within the previous Arboricultural Impact Assessment.

**Table 2: Summary of Tree Categories on the Site**

| Category   | Tree numbers           | Totals |
|------------|------------------------|--------|
| Category A |                        |        |
| Category B | T1, T2                 | 2      |
| Category C | T3, T4, T5, G1, G2, G3 | 5      |
| Category U |                        |        |
| Total:     |                        | 7      |

- 4.2.3 Tree data can be viewed in **Appendix 1: Tree Survey Schedule**. Tree locations can be viewed in **Appendix 3: Tree Constraints Plan**.
- 4.2.4 Six species recorded during the site survey included Sycamore *Acer pseudoplatanus*, Ash *Fraxinus excelsior*, Manchester Poplar *Populus nigra* subsp. *Betulifolia*, Birch *Betula pubescens* Wild Cherry *Prunus padus*, Goat Willow *Salix caprea*.
- 4.2.5 The Ash trees on Vine Street appeared to be healthy and, currently, free of infection. However, many of the Ash trees in the UK are now suffering from Ash Die-back or 'chalara' (caused by the fungus *Hymenoscyphus fraxineus*). Ash Dieback is a highly destructive disease of Ash trees (*Fraxinus* species), especially the United Kingdom's native Ash species, Common Ash *Fraxinus excelsior*. For this reason, there is currently a moratorium on the planting of Ash in Greater Manchester.

<sup>1</sup> Email received from [a.savage@manchester.gov.uk](mailto:a.savage@manchester.gov.uk), 26<sup>th</sup> November 2020.

<sup>2</sup> [Soilsdapes soil types viewer - National Soil Resources Institute. Cranfield University \(landis.org.uk\)](https://landis.org.uk/soilsdapes-soil-types-viewer)

## 5.0 IMPACT ASSESSMENT

### 5.1 Tree Removals

- 5.1.1 T3 is a Category C Ash street tree, which is in the path of the access road. This tree will have to be removed
- 5.1.2 T4 is a Category C Ash which is in the path of the access road. This tree will have to be removed.
- 5.1.3 G1 is a large group of young self-seeded trees, mainly Birch and Goat Willow. There will have to be some thinning and removal along the southern boundary of the group to accommodate the development platform.
- 5.1.4 G2 is a small group of young Goat Willow, Birch and a solitary Manchester Poplar. These trees are within the development platform and will have to be removed as part of the site remediation and redevelopment.
- 5.1.5 G3 is a small group of young Goat Willow and Birch. These trees are within the development platform and will have to be removed as part of the site remediation and redevelopment.

### 5.2 Root Protection Areas (Affected by Development)

- 5.2.1 The location of housing adjacent to T1 and T2 has been adjusted following the calculated RPAs to minimise the impact on the root system. However, because the majority of the root system is under hard surfacing (the road and pavement), the planned additional coverage of currently un-covered surface exceeds the guidance (BS5837:2012) figure of 20% in T1 (approximately 30%). This figure is 14% in T2. There will have to be, therefore, consideration of root protection and porous surfacing where further realignment is not viable.

## 6.0 CONCLUSION AND RECOMMENDATIONS

### 6.1 Tree Removals

- 6.1.1 At the time of writing the trees on the site are not afforded protection by TPOs and are not within a Conservation Area. This may be subject to change, and any legal designations affecting trees should be verified with the local authority prior to works commencing. Killing or damaging a protected tree is a criminal offence and can result in an unlimited fine.
- 6.1.2 Trees T3, T4 and T5 and G2, G3 and a portion of the edge of G1 will need to be removed to facilitate development. None of these trees exceed category C and are mainly self-seeded and growing within the site's made ground.
- 6.1.3 Tree works should be carried out by a suitably qualified and fully insured arboricultural contractor who is able to comply with BS3998: 2010 – Tree Works: Recommendations.

### 6.2 Tree Protection

- 6.2.1 It is recommended that all works follow an Arboricultural Method Statement (AMS). An outline AMS can be viewed in [Appendix 4: Outline Arboricultural Method Statement](#). As aspects of the development proposals may be subject to change, the AMS should be reviewed by a suitably qualified arboricultural consultant prior to the commencement of works.
- 6.2.2 The installation of temporary tree protection fencing will be required during development works. The location of tree protection fencing can be viewed in [Appendix 5: Tree Protection Plan](#). Specifications for tree protection fencing can be viewed in the AMS.
- 6.2.3 The trees T1 and T2 (category B), although not under Tree Protection Order, are street trees and provide visual amenity to the street scene. There is, therefore, a presumption to retain these trees wherever possible. The RPAs of these trees are within the proposed front gardens of two houses and overlap with the footprint of the two houses. There will, therefore, need to be a detailed Arboricultural Method Statement to address how the tree root systems can be accommodated without harm during construction and afterwards. Such work will typically include the provision of tree protection fencing and installation of a cellular confinement system or 'geocells' to protect the retained roots (see Rose, B. (2020) *The Use of Cellular Confinement Systems Near Trees – A Good Practice Guide*. Arboricultural Association Guide Note 12).

### 6.3 Mitigation

- 6.3.1 Three category C trees, two category C groups and a line of trees within another Category C group will have to be removed. Trees T3 and T4 are visible within the surrounding area, and therefore the removal of these trees is anticipated to have impact upon visual amenity. There is an opportunity to mitigate visual amenity in the loss of the two category C trees at the entrance of the site in the provision of extra-heavy standards.
- 6.3.2 Any trees removed during these works should generally be replaced on a two-for one principle; where trees cannot be accommodated, the CAVAT system is a widely accepted method of monetary tree valuation for mitigation.
- 6.3.3 The pavement surfacing around trees T1 and T2 has been lifted by the roots of the trees. Any making-good of the pavement at this location as part of the proposed development might include the provision of cellular confinement systems and porous paving to mitigate some of the impacts of proposed development within the uncovered RPAs.

## 7.0 REFERENCES AND BIBLIOGRAPHY

British Standards (2010). BS3998: 2010 – Tree Works: Recommendations. British Standards Institute, London

British Standards (2012). BS5837: 2012 - Trees in Relation to Design, Demolition and Construction: Recommendations. British Standards Institute, London

British Standards (2014). BS8545: 2014 – Trees: from Nursery to Independence in the Landscape. British Standards Institute, London

Cranfield (2019). *Interactive Soilscape Viewer* [online]. Available at: [www.landis.org.uk](http://www.landis.org.uk)

Johnson, O., More, D. (2004). *Collins Tree Guide*. London: HarperCollins

Mattheck, C., Bethge, K., Weber, K. (2015). *The Body Language of Trees*. The Karlsruhe Research Institute, Karlsruhe (Germany)

Rose, B. (2020) The Use of Cellular Confinement Systems Near Trees – A Good Practice Guide. Guidance Note 12, Arboricultural Association. [AA\\_GuidanceNote12\\_CellularConfinementSystems.indd \(trees.org.uk\)](#)

T B A Landscape Architects (2014) *Arboricultural Impact Assessment and Method Statement*, Vine Street, Gorton.

## APPENDICES

## APPENDIX 1: TREE SURVEY SCHEDULE

A plan of the tree locations can be viewed in Appendix 3: Tree Constraints Plan.

| Key          |                                                      |          |                                                                |
|--------------|------------------------------------------------------|----------|----------------------------------------------------------------|
| Species      | Common name following Johnson & More (2004)          | Age      | M – Mature; tree in 3/3 of estimated lifespan                  |
| H            | Height, measured to nearest 0.5m                     |          | OM – Over mature; tree that has exceeded its natural life span |
| CC           | Height of crown clearance, measured to nearest 0.5m  |          | V – Veteran tree                                               |
| No of stems  | Number of stems bifurcating below 1.5 metres         | RPA      | Root protection area, in metres squared                        |
| DBH          | Diameter at breast height (1.5m), in millimetres     | RPR      | Root protection radius, in metres                              |
| Crown spread | Measured to nearest 0.5m                             | SULE     | Safe useful life expectancy of tree, in years                  |
| Age          | Y – Young sapling/newly planted tree                 | Category | See BS5837 cascade chart (Table 2.1)                           |
|              | SM – Semi-mature; tree in 1/3 of estimated lifespan  |          |                                                                |
|              | EM – Early mature; tree in 2/3 of estimated lifespan |          |                                                                |

### Individual Trees

| Tree No. | Species                                                             | Height | CC  | Stems | DBH (cm) | Crown Spread |     |     |     | RPA (r, cm) | RPA (m²) | Age | Comments                                                                                                                                                                                 | SULE  | Category |
|----------|---------------------------------------------------------------------|--------|-----|-------|----------|--------------|-----|-----|-----|-------------|----------|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|----------|
|          |                                                                     |        |     |       |          | N            | E   | S   | W   |             |          |     |                                                                                                                                                                                          |       |          |
| T1       | Ash<br><i>Fraxinus excelsior</i>                                    | 16     | 9   | 1     | 72       | 4            | 8   | 7   | 5   | 864         | 234      | M   | Crown raised over several years to 8m, with majority of cuts now occluded. No signs of disease; slight lean to south-east. Tarmac of paving heaving due to root growth.                  | >40   | B        |
| T2       | Ash<br><i>Fraxinus excelsior</i>                                    | 16     | 9   | 1     | 70       | 6            | 3.5 | 6   | 6   | 840         | 222      | M   | Crown raised over several years to 8m, with majority of cuts now occluded.                                                                                                               | >40   | B        |
| T3       | Ash<br><i>Fraxinus excelsior</i>                                    | 12     | 6   | 1     | 38       | 5            | 4   | 4   | 4   | 456         | 65       | EM  | Tree branches at 2m. Partially occluded wounds near main branch, which will have weakened branch, with possible long-term failure.                                                       | 20-40 | C        |
| T4       | Ash<br><i>Fraxinus excelsior</i>                                    | 14     | 2.5 | 1     | 16       | 3            | 2.5 | 3   | 3   | 192         | 12       | SM  | Young, self-seeded ash, growing up hard against concrete fence post; no signs of abrasion on trunk but likely to scar with growth unless post is removed. Otherwise, healthy, young tree | >40   | C        |
| T5       | Manchester Poplar<br><i>Populus nigra</i> subsp. <i>betulifolia</i> | 9      | 0.5 | 1     | 22       | 2.5          | 2.5 | 2.5 | 2.5 | 264         | 22       | Y   | Self-seeded open-grown, healthy young tree.                                                                                                                                              | >40   | C        |

| Tree No. | Species                                                                                                                                        | Av. Height | Av. CC | Av. Stems | Av. DBH (cm) | Av. Crown Spread | Age | Comments                                                                      | SULE  | Category |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------|-----------|--------------|------------------|-----|-------------------------------------------------------------------------------|-------|----------|
| G1       | Birch <i>Betula pubescens</i> and Goat Willow <i>Salix caprea</i> with occasional Cherry <i>Prunus padus</i> and Ash <i>Fraxinus excelsior</i> | 8          | 1      | 2         | 11           | 2.5              | Y   | Majority of trees below 150 mm. Self-generated birch and willow scrub.        | 11-20 | C        |
| G2       | Birch <i>Betula pubescens</i> and Goat Willow <i>Salix caprea</i>                                                                              | 8          | 1      | 2         | 11           | 2.5              | Y   | Group of young birch surrounded by goat willow. No trees greater than 150 mm. | 11-20 | C        |
| G3       | Birch <i>Betula pubescens</i> and Goat Willow <i>Salix caprea</i>                                                                              | 8          | 1      | 2         | 11           | 2.5              | Y   | Two young birch and goat willow. No trees greater than 150 mm.                | 11-20 | C        |

## APPENDIX 2: PHOTOGRAPHS



*Plate 1: T1 Showing lean to the south-east, viewed from south*



*Plate 2: T1 close-up of occluded wound and pavement heave.*



*Plate 3: T1 viewed from north*



*Plate 4: T2*



*Plate 5: T3*



*Plate 6: T3 and T4 (left to right)  
viewed from east.*



*Plate 7: T5*



*Plate 8: G1*

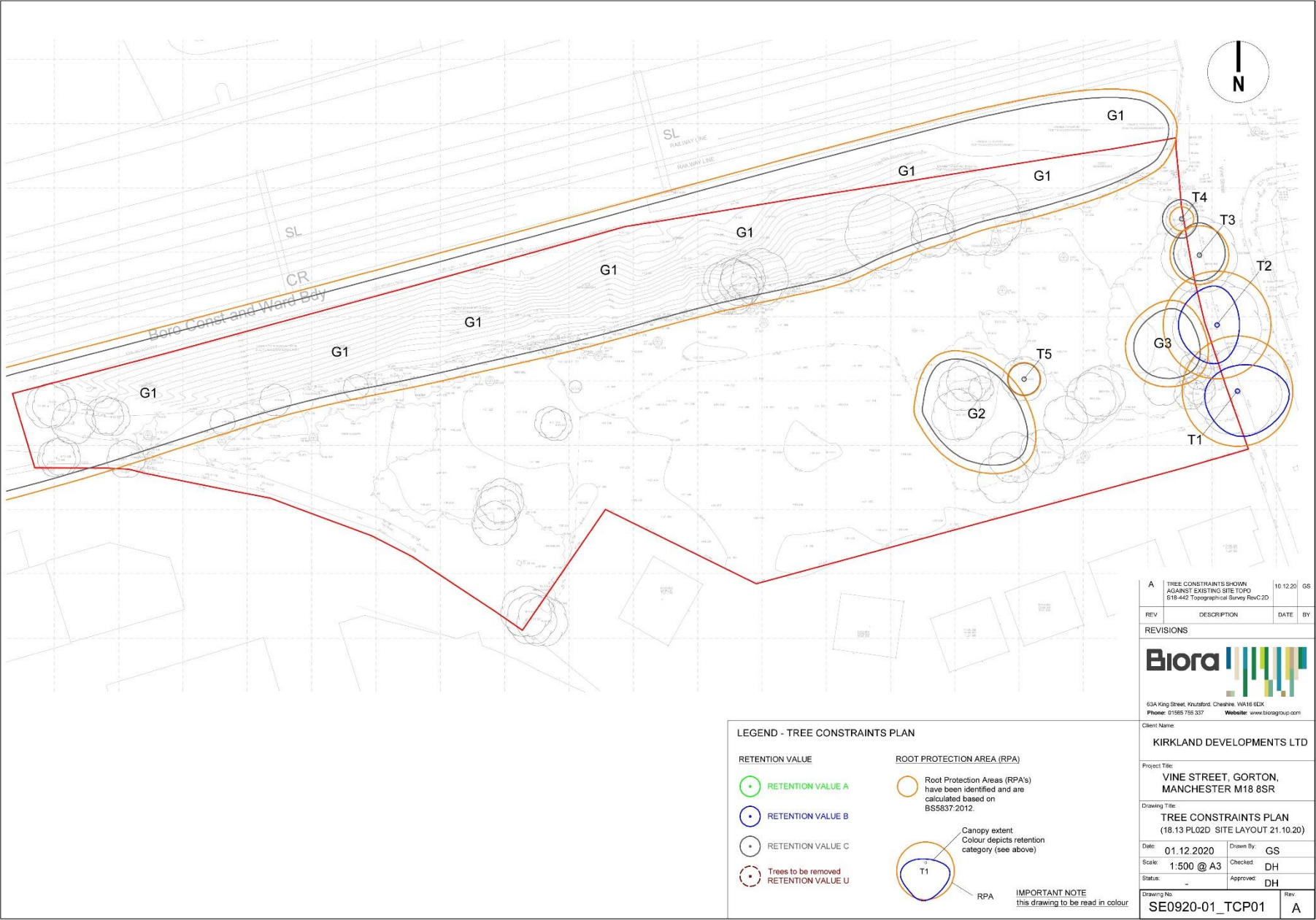


*Plate 9: G2*



*Plate 10: G2*

APPENDIX 3: TREE CONSTRAINTS PLAN





## APPENDIX 4: OUTLINE ARBORICULTURAL METHOD STATEMENT

### Timing of Works

The phasing of works should be carried out in accordance with the Table below:

#### Timing of Works

| Stage | Works                                               |
|-------|-----------------------------------------------------|
| 1     | Site induction                                      |
| 2     | Carry out tree works                                |
| 3     | Install temporary tree protection fencing           |
| 4     | Inspection by arboricultural consultant             |
| 5     | Carry out construction works                        |
| 6     | Remove tree protection fencing once works completed |
| 7     | Final inspection by arboricultural consultant       |

### Site Induction

Prior to works commencing, all contractors should attend a site induction. All contractors should be briefed on arboricultural concerns arising from the development proposals, including tree root protection areas (RPAs). This method statement should be issued to all contractors on the site.

### Tree Works

It is recommended that trees posing a constraint to development, in addition to trees with limited life expectancy, are removed prior to the commencement of any further works on the site. Table 6, below, shows a summary of trees scheduled for removal. Trees identified for removal can be viewed in [Appendix 5: Tree Protection Plan](#).

Trees recommended for removal include T3, T4 and T5; G2, G3 and part of G1.

All tree works should be carried out by a suitably qualified and fully insured arboricultural contractor.

At the time of writing, trees recommended for removal are not afforded protection by TPOs and are not within a Conservation Area. This may be subject to change, and any legal designations afforded trees should be verified with the local authority prior to works commencing. Killing or damaging a protected tree is a criminal offence which can result in an unlimited fine.

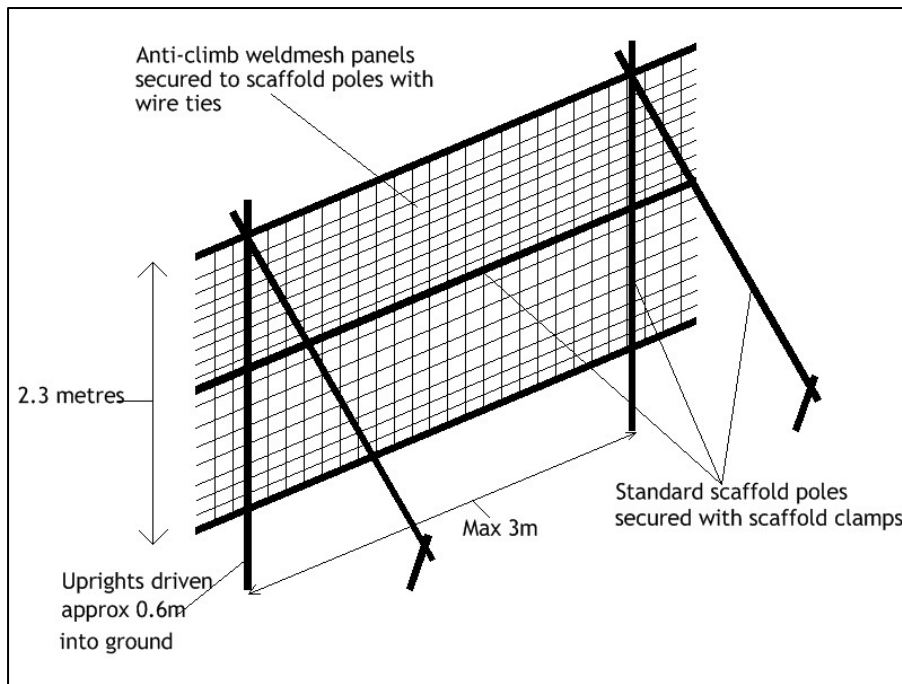
### Tree Protection

Prior to machinery entering the site, it will be necessary to ensure that all trees scheduled for retention are adequately protected. This will require the installation of temporary of tree protection fencing, which must remain in place during development works. The location of tree protection fencing can be viewed in [Appendix 5: Tree Protection Plan](#).

Tree protection fencing should consist of a vertical scaffold framework, well braced to resist impacts. The vertical poles should be spaced at a maximum interval of 3 m and driven securely into the ground. Onto this framework, welded mesh panels should be fixed (see Figure 3, below).

Laminated waterproof A3 signs should be fixed securely to fencing panels on each enclosure at 9m intervals. The signs should clearly read: 'Protected Tree Zone, no storage or operations within fenced off areas'.

Once the construction works have been completed, the tree protection fencing may be removed. This should be done with care to ensure that no damage to trees is caused.



### Temporary Protective Fencing

#### General Precautionary Measures

Prior to the commencement of development works, a site storage area should be designated. This should be outside the tree protection fencing.

No materials hazardous to tree health, such as oil, bitumen or cement should be stored within the RPAs of trees.

No fires should be lit within the site.

Where there is a risk of polluted water runoff into RPAs, heavy duty plastic sheeting and sandbags must be used to contain any spillages and prevent contamination.

If any breach in the tree protection measures occurs, it is the site manager's responsibility to report this to an arboricultural consultant so the appropriate measures may be taken.

#### Further Inspections

It is recommended that inspections by an arboricultural consultant are undertaken:

Upon installation of tree protection fencing to determine if it is satisfactory.

Upon completion of the development works.

After each inspection a letter accompanied by photographic evidence should be submitted by the arboricultural consultant to the local authority tree officer to confirm if the method statement has been followed correctly and to state whether trees have been adversely impacted by development works. The letter should be supplemented by photographic evidence.

#### Project Arboriculturist Details

If any issue regarding tree protection arises during the course of development works, the project arboriculturist should be contacted using the details below:

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APPENDIX 5: TREE PROTECTION PLAN

