

# BLADE

## ARBORICULTURAL METHOD STATEMENT

NIGRA HOUSE

WOKINGHAM

RG41 1QJ

ON BEHALF OF

TUNGSTEN PROPERTIES

AUGUST 2024

V2

BIODIVERSITY  
LANDSCAPE  
ARBORICULTURE  
DESIGN  
ECOLOGY

| Report Data     |                                  |
|-----------------|----------------------------------|
| Title           | Arboricultural Method Statement  |
| Site Address    | Nigra House, Wokingham, RG41 1QJ |
| Client          | Tungsten Properties              |
| Blade Reference | 318_T                            |
| Date Created    | 02/08/2024                       |
| Surveyor        | George Pickering                 |
| Author          | George Pickering                 |

| Version | Document Title                  | Author           | Date Issued |
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|         |                                 |                  |             |

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## 1.0 BACKGROUND AND INSTRUCTION

- 1.1. This report has been prepared by George Pickering *BSc (Hons)*. George holds the LANTRA certificate in Professional Tree Inspection.
- 1.2. Wokingham Borough Council granted planning permission on 24<sup>th</sup> June 2024 for a *"Full application for the proposed demolition of the existing building and the erection of 1 no. building for employment purposes (Use Classes E(g)(ii), (iii), B2 and B8) with new vehicular access and associated infrastructure works including service yard, car parking, boundary treatments and landscaping."* (application ref:240575).
- 1.3. The approved planning application was supported by an Arboricultural Impact Assessment (AIA), produced by Ascerta in February 2024 ref: P.1948.24.
- 1.4. This Arboricultural Method Statement (AMS) and Tree Protection Plan have been prepared by BLADE Trees Ltd on behalf of Tungsten Properties, to satisfy condition 5 of the Approved Planning Application at Nigra House, Wokingham (hereafter referred to as the 'site').

## 2.0 PLANNING HISTORY

### Planning Application

- 2.1. Wokingham Borough Council granted planning permission on 24<sup>th</sup> June 2024 for a *"Full application for the proposed demolition of the existing building and the erection of 1 no. building for employment purposes (Use Classes E(g)(ii), (iii), B2 and B8) with new vehicular access and associated infrastructure works including service yard, car parking, boundary treatments and landscaping."* (application ref:240575).
- 2.2. This AMS and the associated documents have been prepared to address planning condition no.5 of the Approved Development which relate to trees. This is:
- 2.3. *5. 5. a) No development or other operation shall commence on site until an Arboricultural Method Statement and Scheme of Works which provides for the retention and protection of trees, shrubs and hedges growing on or adjacent to the site in accordance with BS5837:2012 has been submitted to and approved in writing by the local planning authority. No development or other operations shall take place except in complete accordance with the details as so-approved (hereinafter referred to as the Approved Scheme).*
- 2.4. *b) No operations shall commence on site in connection with development hereby approved (including any tree felling, tree pruning, demolition works, soil moving, temporary access construction and or widening or any other operation involving use of motorised vehicles or construction machinery) until the tree protection works required by the Approved Scheme are in place on site.*

- 2.5. *c) No excavations for services, storage of materials or machinery, parking of vehicles, deposit or excavation of soil or rubble, lighting of fires or disposal of liquids shall take place within an area designated as being fenced off or otherwise protected in the Approved Scheme. Public: Information that can be seen and used by everyone Public: Information that can be seen and used by everyone inside and outside the Council. inside and outside the Council. d) The fencing or other works which are part of the Approved Scheme shall not be moved or removed, temporarily or otherwise, until all works including external works have been completed and all equipment, machinery and surplus materials removed from the site, unless the prior approval in writing of the local planning authority has first been sought and obtained.*
- 2.6. *Reason: Reason: In the interests of visual amenity. Relevant policy: Core Strategy policy CP3 and Managing Development Delivery Local Plan policies CC03 and TB21 (and TB06 for garden development).*

### Purpose

- 2.7. The tree survey and AMS has been carried out in accordance with the recommendations outlined within British Standard BS5837:2012 'Trees in relation to design, demolition and construction – Recommendations'.
- 2.8. This AMS report includes:
- A baseline survey data of existing trees, including a Tree Schedule and Tree Constraints Plan (TCP).
  - An Arboricultural Method Statement specifically in relation to the physical protection of trees, to reduce the impact on retained trees, and those located adjacent to the Site; and
  - A Tree Protection Plan

## 3.0 PLANNING POLICY AND LEGISLATION

### National Planning Policy Framework (NPPF)

- 3.1. The following paragraphs within the NPPF set out policies which guide the planning policy and decision-making process of Local Planning Authorities in relation to trees. These are:

#### Paragraph 136

- 3.2. 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.

#### Paragraph 180 (b & d)

- 3.3. Planning policies and decisions should contribute to and enhance the natural and local environment by:

*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;*

*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;*

#### Paragraph 186

- 3.4. When determining planning applications, Local Planning Authority's (LPA) should apply the following principles:

*a) If significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternate site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;*

*b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;*

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.*

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.*

## **Tree Preservation Orders and Conservation Areas**

- 3.5. Based on a check using the online map provided by Wokingham Borough Council, no trees on or adjacent to the Site are the subject of a Tree Preservation Order.
- 3.6. The site is not within a Conservation Area.
- 3.7. All statutory controls must be reviewed in detail ahead of undertaking any tree works relevant to this arboricultural report.

## **Protected Wildlife and Trees**

### **Bats**

- 3.8. All species of British bat are listed as European Protected Species (EPS) on Schedule 2 of the Conservation Regulations (Annex IV (a) to the Habitats Directive). This affords bats protection under The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. Prior to undertaking any tree works or tree removal further advice should be sought from a suitably qualified ecologist.

### **Nesting Birds**

- 3.9. The main bird nesting season is between March and August inclusive. Current legislation relating to breeding birds, under the Wildlife and Countryside Act 1981 (as amended) and the Countryside and Rights of Way Act 2000, confirms that birds, as well as their nests and eggs are protected. Prior to undertaking any tree works or tree removal further advice should be sought from a suitably qualified ecologist.

### **Felling Licence**

- 3.10. Tree felling is also restricted under the Forestry Act 1967. Under this act, there is an exemption from the need for a felling licence for "Felling trees immediately required for the purpose of carrying out development authorised by planning permission (granted under the Town and Country Planning Act 1990) ..."
- 3.11. If full planning permission is granted, then any trees which require felling to implement the approved plans are exempt from this statutory protection. Outline planning permission does not provide an exemption to the regulations that control tree felling in the Forestry Act 1967.

## 4.0 ARBORICULTURAL SUPERVISION

- 4.1. To ensure that all tree protection measures are correctly implemented, and no foreseeable damage occurs to retained trees, a scheme for arboricultural supervision and a process for monitoring and reporting has been set out within this AMS.
- 4.2. All elements of the arboricultural supervision will be undertaken by the retained arboricultural consultant or Project Arboriculturist (PA). The PA will be a suitably qualified arboriculturist from BLADE Trees Ltd.

### Scheme of arboricultural supervision

- 4.3. Based on the provisional timings for the stages of development available currently, a framework for site supervision has been provided in Table 1.
- 4.4. Details of any required variation of the supervision scheme will be reported to the Local Planning Authority by the Project Arboriculturist and agreed in writing where required.
- 4.5. There will be a phased approach to implementation of the Approved Development and current project timetables are available for the works associated with the construction of the proposed building and the associated landscaping.
- 4.6. Timescales and further details for Tree Protection for later phases will be provided in line with the process outlined in this AMS.

Table 1 – Arboricultural supervision scheme

| Operation                | Details                                                                                                                                                                                                                                                                                                                                                                                                                              | Date                             |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|
| Pre-commencement meeting | <p>Pre-commencement meeting with key personnel responsible for implementation of development and tree protection.</p> <p>Personnel: Client, Site Manager, Main Contractor, Project Arboriculturist.</p> <p>Check installation of Tree Protection Fencing.</p> <p>Check facilitation tree removal / tree pruning (where appropriate).</p> <p>Agree any further works required prior to commencement of demolition / construction.</p> | TBC as per construction schedule |
| During construction      | <p>Oversight of specific site operations</p> <p>Personnel: Site Manager, Main Contractor, Project Arboriculturist</p> <ul style="list-style-type: none"><li>Supervision of working within RPAs</li></ul>                                                                                                                                                                                                                             | TBC as per construction schedule |

|                                   |                                                                                                                                                                                                                                      |                                  |
|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|
| Monitoring of specific operations | <p>Monitoring of installation of cellular tree root protection.</p> <p>Personnel: Site Manager, Main Contractor, Project Arboriculturist</p> <p>Set out plan for work being undertaken within RPAs, in accordance with this AMS.</p> | TBC as per construction schedule |
|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|

### Supervision recording

- 4.7. Following each supervision visit, a supervision record sheet will be completed by the Project Arboriculturist. A copy of the supervision sheet will be issued to the site manager and other parties as required and retained by the project arboriculturist.
- 4.8. Details of the operations, development progress, observations and any reported issues will be recorded and where required recommendations will be made for remedial work or any required amendments to the tree protection and/or methods set out within this AMS.
- 4.9. During supervision visits the Project Arboriculturist will take photographs as required to provide additional evidence of the implementation of tree protection measures.
- 4.10. The record sheets and photographs will provide an auditable trail of evidence that all required tree protection measures have been adhered to. Record sheets will be provided to the Local Planning Authority as required.

### Reporting process

- 4.11. The reporting process set out here should be adhered to when possible to enable quick and effective communication of matters relating to tree protection and the implementation of tree protection measures.
- 4.12. The Site manager will be responsible for reporting any queries or incidents relating to trees to the Project Arboriculturist.
- 4.13. The Project Arboriculturist will contact the Tree Officer at the Local Planning Authority to discuss any issues or agree amendments to the tree protection measures set out within this AMS.
- 4.14. Any variation of the Approved Development which may impact upon trees should be reported to the Project Arboriculturist.

- 4.15. Any damage to the stem, branches or roots of any retained tree should be reported to the Project Arboriculturist. Where required, recommendations for remedial work will be made and reported to the Tree Officer.

## 5.0 ARBORICULTURAL ASSESSMENT

### Method of data collection

- 5.1. The tree survey was undertaken on 31<sup>st</sup> July 2024.
- 5.2. The trees on the Site were surveyed in accordance with the requirements of BS5837:2012. The survey recorded trees either as individual specimens or as groups, where these trees were aerodynamically, culturally or visually important as groups. The tree numbers associated with each tree are cross-referenced within the Tree Schedule and Plans at Appendix 1 and 2 respectively.

### Summary of data

#### Trees

- 5.3. The survey recorded 1no. individual tree of category B retention value.

#### Groups

- 5.4. The survey recorded 7no. groups of trees, comprising of 3no. category B, 3no. category C and 1no. category U retention value.

#### Hedgerows

- 5.5. 1no. hedgerows was also recorded however this was not given a retention value.
- 5.6. Full details for all trees, groups and hedgerows can be found in the BS5837:2012 Tree Schedule at Appendix 1.
- 5.7. It should be noted that Table 1 of BS5837:2012 only gives recommendations in relation to remaining years. A tree may be considered to have a longer remaining life, however, may still be considered to be of a lower category given its maturity, condition or overall impact to the application site.
- 5.8. The location of the trees and their associated constraints including canopy spreads and root protection areas are illustrated on the Tree Constraints Plan at Appendix 2. The Arboricultural Impact Plan at Appendix 2 illustrates the impact of the proposed development.

## 6.0 IMPACT APPRAISAL

- 6.1. The impact of the proposed development upon existing trees, groups and hedges is illustrated on the Arboricultural Impact Plan at Appendix 2.
- 6.2. Tree removal was agreed within the AIA, which was submitted in support of the Approved Development.
- 6.3. Table 2 details the removals and part-removals required to implement the Proposed Development.

Table 2 - Tree Removal / part-removal for Proposed Development

|                                                       | Retention Category |        |    |    |       |
|-------------------------------------------------------|--------------------|--------|----|----|-------|
| Table text                                            | A                  | B      | C  | U  | Total |
| Trees / Groups to be removed for Proposed Development | -                  | T1, G5 | G2 | G3 | 4     |
| Part-removal of groups for Proposed Development       | -                  | G1     | G4 | -  | 2     |
| Total                                                 | 0                  | 3      | 2  | 1  | 6     |

- 6.4. None of the trees proposed for removal are considered aged or veteran and therefore the principles for refusal within the NPPF would not be considered applicable.

### Root Protection Areas (RPAs)

- 6.5. The RPA is an area equivalent to a circle with a radius 12 times the diameter of the trees measured at 1.5 metres for single stemmed trees. For trees with more than one stem, one of two calculation methods should be used. In all cases, the stem diameter(s) should be measured in accordance with Annex C, and the RPA should be guided from Annex D of BS5837:2012.
- 6.6. The RPA is an area in which no ground works should be undertaken without due care in relation to the retained tree(s) and this is to avoid soil compaction, changes in levels or soil contamination which could alter the trees condition and/or stability. The shape of the RPA and its exact location will depend upon arboricultural considerations and ground conditions.
- 6.7. The RPA for the trees has been calculated as prescribed by BS5837:2012 and are shown as circles for polygons on the Tree Constraints Plan at Appendix 2. These plans illustrate the relationship between the RPAs associated with the trees and the proposed development.

- 6.8. In addition to the illustration of RPAs on the plans at Appendix 2, the numerical RPA values are provided within the Tree Schedule at Appendix 1. Within the schedule both RPA radius in metres from the main stem and total area for the RPA as square metres.

### New RPA Incursions

- 6.9. As a result of the proposed development there will be 2 new RPA incursion as detailed below:

- G4a (Cherry plum, Common ash, Norway maple) – New maximum incursion of 8.2m<sup>2</sup> out of a total RPA of 55m<sup>2</sup> = New maximum RPA incursion of 15%

Mitigation – Parking installed using dig tree root protection.

- G4b (Cherry plum, Common ash, Norway maple) – New maximum incursion of 30.5m<sup>2</sup> out of a total RPA of 41m<sup>2</sup> = New maximum RPA incursion of 74%

Mitigation – Parking and cycle area to be installed using dig tree root protection.

- 6.10. Further details on the no-dig tree root protection are provided within Section 7 of this AMS.

### Facilitation Tree Pruning

- 6.11. In order to provide sufficient clearance for construction and future use of the Proposed Development, trees may require minor pruning work to be carried out.

- 6.12. Required tree pruning is likely to include the following:

- G1 (mixed group) - Prune back canopy to provide minimum 2m clearance from approved building.
- H1 (mixed) – Cut back hedge to provide sufficient clearance from approved yard area.

- 6.13. A final specification for facilitation tree pruning should be determined by the Project Arboriculturist following a pre-commencement site meeting with the appointed contractor.

- 6.14. Further requirements for facilitation pruning may be identified during the course of construction and should be addressed by ongoing liaison with the Project Arboriculturist.

### Future growth

- 6.15. Due to the location of retained trees, future growth of trees is not considered to be an issue to the Proposed Development.

- 6.16. Minor pruning of lateral branches will address any issues where the canopy of trees encroaches towards the proposed buildings.

## 7.0 TREE PROTECTION

- 7.1. Full details of tree protection measures including construction methods, schedule of arboricultural supervision and specific forms of tree protection should be provided within a detailed Arboricultural Method Statement following planning approval at the detailed planning stage.
- 7.2. To ensure all tree protection measures are implemented, arboricultural supervision should be undertaken by an appointed Project Arboriculturist (PA). The PA will be a suitably qualified arboriculturist appointed by the client / contractor / other party responsible for implementation of tree protection measures.

### Tree Protection Fencing

- 7.3. The principal protection for the retained trees is provided by Tree Protection Fencing (TPF) positioned to form a Construction Exclusion Zone (CEZ) around retained trees. No access should be allowed to the other than for operations specified in the approved documents or those agreed with the LPA later.
- 7.4. The CEZ must be in place prior to the commencement of construction work on site. The TPF must not be moved or relocated without approval from the Project Arboriculturist and, where necessary, approval from the Local Planning Authority.
- 7.5. The following points are critical to the function of the CEZ:
- The TPF shall be maintained throughout the development phase
  - No materials, machinery, temporary structures, chemicals or fuel shall be stored within the CEZ
  - No excavations or increases in soil level within the CEZ are permitted without prior written approval from the LPA
  - Care should be taken to ensure that wide or tall loads or plant with booms, jibs and counterweights do not come into contact with retained trees. Any transit or traverse of plant in close proximity to trees should be conducted under the supervision of a banks person to ensure that adequate clearance from trees is maintained at all times
  - Material which will contaminate the soil such as concrete mixing, diesel oil and vehicle washing must not be discharged within 10m of the tree stems. In the event of an accident or spillage the PA must be notified
  - Fires must not be lit in a position where their flames can extend to within 5m of foliage, branches or trunk. This will depend on the size of the fire and the wind direction
- 7.6. The TPF specification should be fit for the purpose of excluding construction activity and appropriate to the degree and proximity of work taking place around the retained trees.

- 7.7. The most common specification as illustrated in BS5836:2012 Figure 3b comprises welded mesh panels (Heras Fencing) on rubber or concrete feet, the panels should be joined together using a minimum of two anti-tamper couplers, installed so that they can only be removed from within the fence. The distance between fence couplers should be at least 1m and should be uniform throughout the fence. The panels should be supported on the inner side by stabilizer struts, which should normally be attached to a base plate secured with ground pins. Where the fencing is to be erected on retained hard surfacing or it is otherwise unfeasible to use ground pins, e.g. due to the presence of underground services, the stabilizer struts should be mounted on a block tray. (See example at Appendix 3)
- 7.8. Weatherproof signage will be attached to the fencing with words such as 'Construction Exclusion Zone - No Access'.
- 7.9. At the end of the project the TPF will be removed only after confirmation by the Project Arboriculturist that this is appropriate.

### **Removal / Replacement of hard surfacing**

- 7.10. The removal of existing surfacing within the RPAs of retained trees should be carried out with arboricultural supervision initially.
- 7.11. Temporary tree trunk protection should be in place prior to the commencement of this stage of demolition.
- 7.12. The removal of existing surfacing should be carried out beginning closest to the trees and working backwards, away from the trees so no machinery stands on the exposed ground. The use of large plant machinery should be avoided where possible.
- 7.13. Tree Protection Fencing of the default specification should be in place during the removal of the existing surfacing and moved accordingly to protect the exposed ground as the removal progresses.
- 7.14. Where new surfacing is to be laid, the existing sub-base should be retained and augmented as required.
- 7.15. If the sub-base is removed and the exposed ground is to be trafficked by construction machinery then temporary ground protection should be installed within the RPAs to minimise the risk of damage to tree roots or ground compaction. As a temporary solution, the Greenfix Geoweb Tree Root Protection should be finished with a 30mm gravel overfill of the same stone type as the main fill (4-20mm clean angular stone – low fines).

### Tree Root Protection (cellular)

- 7.16. To facilitate the installation of new permeable parking spaces and cycle storage area within the RPA of retained trees, a cellular confinement tree root protection system will be used. The location of this Tree Root Protection is shown on the Draft Tree Protection Plan at Appendix 3.
- 7.17. For the purposes of this AMS, Greenfix Geoweb has been recommended. Should a comparable alternative system be used, an updated installation method statement should be submitted to the LPA and approved in writing before the installation commences.
- 7.18. For this application, the depth of system to be used is:
- 75mm – Suitable for pedestrians and cycles traffic (up to 1t gross weight) – for new cycle storage and pavement
  - 100mm – Suitable for light vehicle traffic (up to 6t gross weight) – for new parking area.
- 7.19. The top surface for all areas will be a permeable asphalt, self-bound gravel or similar permeable surface..
- 7.20. The manufacturers recommended method statement for installation of the system can be found at Appendix 4.

### Post Construction

- 7.21. Following completion of the proposed development and removal of tree protection measures, an assessment of the trees should be undertaken to highlight any required remedial work.
- 7.22. All remedial tree work should be carried out in accordance with British Standard 3998:2010 'Tree work – Recommendations'.

## 8.0 REFERENCES

- British Standard 5837:2012 'Trees in Relation to Design, Demolition and Construction - Recommendation'
- British Standard 3998:2010 'Tree work - Recommendations'
- BS8545:2014 Trees: from nursery to independence in the landscape - Recommendations
- National Planning Policy Framework (NPPF) 2023
- The Forestry Act 1967
- The Town and Country Planning Act 1990
- The Town and Country Planning (Tree Preservation) (England) Regulations 2012.

## 9.0 CAVEATS AND LIMITATIONS

- 9.1. The report is for the sole use of the client and its reproduction or use by anyone else is forbidden unless written consent is given by the author.
- 9.2. This is an arboricultural report and as such no reliance should be given to comments relating to buildings, engineering, soils ecological or archaeological data. If either is commented upon within the report further professional advice should be sought.
- 9.3. This is not a Tree Risk Assessment. As such this report should not be taken to mean or imply that any of the inspected trees should be considered safe. A Tree Risk Assessment can be provided but would be subject to additional survey requirement and further fees.
- 9.4. Trees are growing dynamic structures. Whilst reasonable effort has been made to identify defects within the trees inspected, no guarantee can be given as to the absolute safety or otherwise of any individual tree. No tree is ever absolutely safe due to the unpredictable laws and forces of nature. As a result of this, natural failure of intact trees will occur; extreme climatic conditions can cause damage to even apparently healthy trees.
- 9.5. For the purposes of this survey all dimensions of trees and their associated parts are based on estimation unless otherwise stated.
- 9.6. Trees are living organisms whose health, condition and structure can change quickly and without warning. Therefore, the contents of this report are valid for a period of one year from the date of this survey.

# APPENDIX 1

## Tree Survey Schedule

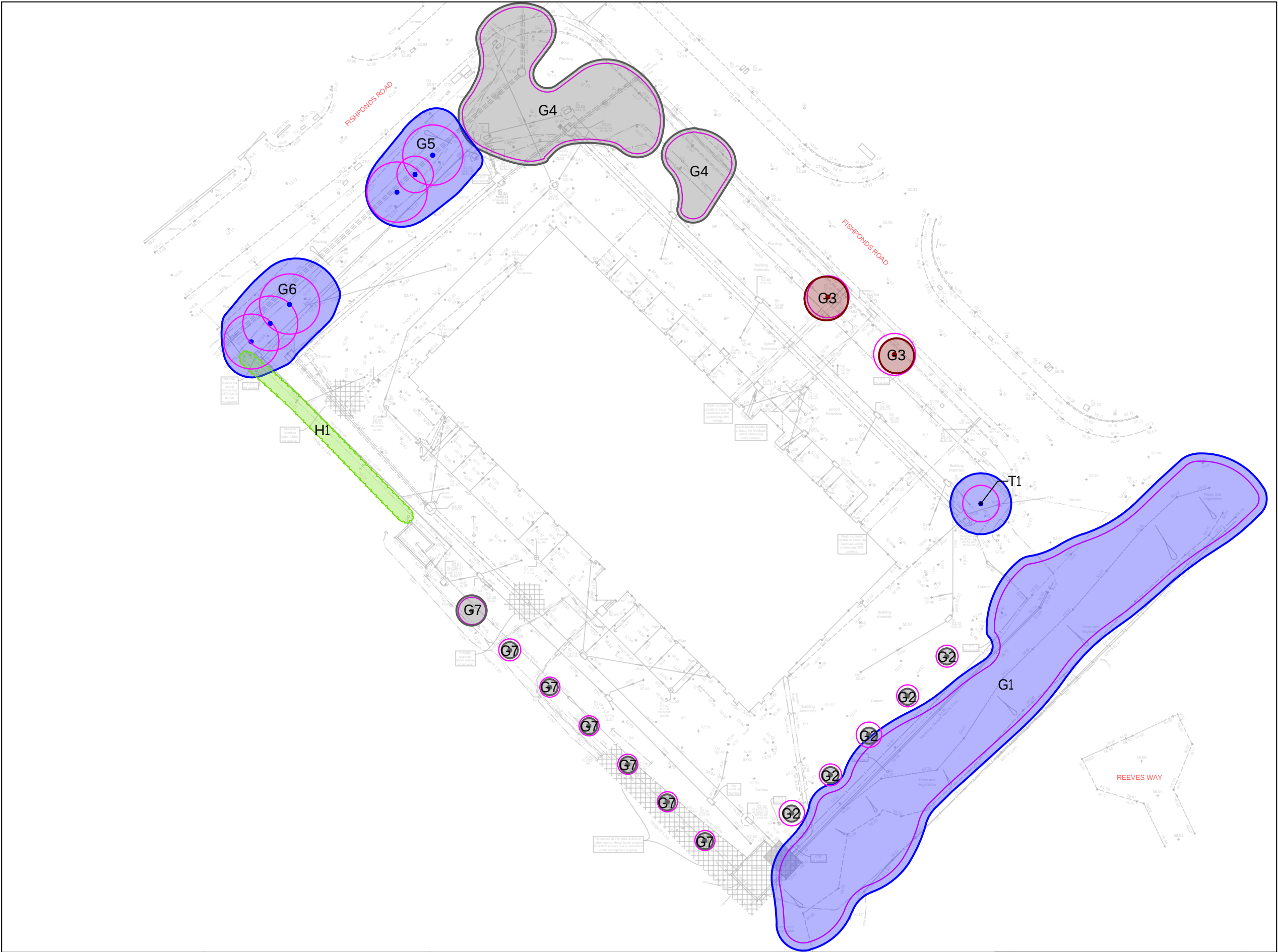
| Client:                  | Tungsten Properties                                                            |                |                    |                      |      |       |      |                      |            |                         | Site:                | Nigra House, Wokingham                                                                                                                                                                                                            |                                                             |                                          |                  |                            |             |  |  |  |  |  |  |  |  |  |
|--------------------------|--------------------------------------------------------------------------------|----------------|--------------------|----------------------|------|-------|------|----------------------|------------|-------------------------|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|------------------------------------------|------------------|----------------------------|-------------|--|--|--|--|------------------------------------------------------------------------------------|--|--|--|--|
| Date of Survey:          | 31/07/2024                                                                     |                |                    |                      |      |       |      |                      |            |                         | Consultants:         | George Pickering                                                                                                                                                                                                                  |                                                             |                                          |                  |                            |             |  |  |  |  |                                                                                    |  |  |  |  |
| Tagged                   | N/A                                                                            |                |                    |                      |      |       |      |                      |            |                         |                      |                                                                                                                                                                                                                                   |                                                             |                                          |                  |                            |             |  |  |  |  |                                                                                    |  |  |  |  |
| Sequential Reference No. | Species                                                                        | Height (m)     | Stem Diameter (mm) | Branch Spread (m)    |      |       |      | Canopy Clearance (m) | Life Stage | Physiological Condition | Structural Condition | Comments / Notes                                                                                                                                                                                                                  | Management Recommendations (Priority)                       | Estimated Remaining Contribution (Years) | Category Grading | Root Protection Radius (m) | TPO Present |  |  |  |  |                                                                                    |  |  |  |  |
|                          |                                                                                |                |                    | North                | East | South | West |                      |            |                         |                      |                                                                                                                                                                                                                                   |                                                             |                                          |                  |                            |             |  |  |  |  |                                                                                    |  |  |  |  |
| T1                       | Norway maple                                                                   | 6              | 210                | 4                    | 4    | 4     | 4    | 2.5                  | S/Mat      | Good                    | Good                 | Stands within planting pit. Black paving to south and hard standing to west of tree. Tree is well established. Good radial canopy.                                                                                                | Remove tree to facilitate proposed development              | 40+ years                                | B1               | 2.4                        | None        |  |  |  |  |                                                                                    |  |  |  |  |
| G1                       | Sycamore, Silver birch, Common hazel, Common ash, Pedunculate oak, Goat willow | Ave 15         | Min 90 - Max 330   | See associated plans |      |       |      | 1.5                  | Mat        | Good                    | Fair                 | Located to east of site. Trees are grown densely together with dense ivy throughout. Some ash associated with group showing some signs of dieback. One branch to west of group has failed into site. Offers good screening value. | Partial removal of trees to facilitate proposed development | 10 to 20 years                           | B2               | See associated plans       | None        |  |  |  |  |                                                                                    |  |  |  |  |
| G2                       | Norway maple                                                                   | Ave 5          | Min 120 - Max 140  | See associated plans |      |       |      | 2                    | S/Mat      | Fair                    | Fair                 | Part of the landscaping on site. Trees are generally low quality with one dead tree located within group. Limited Arboricultural merit and easily replaced.                                                                       | Remove trees to facilitate proposed development             | 10 to 20 years                           | C1               | See associated plans       | None        |  |  |  |  |                                                                                    |  |  |  |  |
| G3                       | Grey alder                                                                     | Min 5 - Max 8  | Min 230 - Max 350  | See associated plans |      |       |      | 1.5                  | E/Mat      | Poor                    | Poor                 | Located on site boundary. One tree has a severely reduced canopy with minor deadwood associated. Both trees are in poor quality. dense ivy associated with main stems.                                                            | Remove trees to facilitate proposed development             | <10 years                                | U                | See associated plans       | None        |  |  |  |  |                                                                                    |  |  |  |  |
| G4                       | Norway maple, Cherry plum, Common ash                                          | Min 5 - Max 12 | Min 150 - Max 300  | See associated plans |      |       |      | 2                    | E/Mat      | Good                    | Fair                 | Part of the landscaping on site. Trees form the boundary screening with adjacent industrial units. Ash associated with group showing signs of minor dieback.                                                                      | Partial removal of trees to facilitate proposed development | 10 to 20 years                           | C1, 2            | See associated plans       | None        |  |  |  |  |                                                                                    |  |  |  |  |
| G5                       | Norway maple                                                                   | Ave 12         | Min 210 - Max 300  | See associated plans |      |       |      | 3                    | E/Mat      | Good                    | Good                 | Part of the landscaping on site. Trees form a mutual canopy. Good aesthetic value to site. Tree has previously been canopy raised with some occlusion associated.                                                                 | Remove trees to facilitate proposed development             | 20 to 40 years                           | B1               | See associated plans       | None        |  |  |  |  |                                                                                    |  |  |  |  |
| G6                       | Norway maple                                                                   | Ave 12         | Ave 300            | See associated plans |      |       |      | 2                    | E/Mat      | Good                    | Good                 | Part of the landscaping on site. Trees form a mutual canopy. Good aesthetic value to site. Tree has previously been canopy raised with some occlusion associated.                                                                 | No work recommended at time of survey.                      | 20 to 40 years                           | B1               | See associated plans       | None        |  |  |  |  |                                                                                    |  |  |  |  |
| G7                       | Norway maple                                                                   | Ave 4          | Ave 110            | See associated plans |      |       |      | 2                    | S/Mat      | Fair                    | Fair                 | Part of the landscaping planting. Trees are in moderate health with some dieback associated. Trees have neighbouring development storage around base. Limited Arboricultural merit.                                               | No work recommended at time of survey.                      | 10 to 20 years                           | C1, 2            | See associated plans       | None        |  |  |  |  |                                                                                    |  |  |  |  |
| H1                       | Butterfly bush species, Silver birch, Sycamore, Firethorn                      | Ave 1          | Ave 70             | See associated plans |      |       |      | 0                    | S/Mat      | Fair                    | Fair                 | Ornamental boundary hedge. Maintained at approx. 1m.                                                                                                                                                                              | No work recommended at time of survey.                      | 10 to 20 years                           | -                | See associated plans       | None        |  |  |  |  |                                                                                    |  |  |  |  |

## **APPENDIX 2**

Tree Constraints Plan

Arboricultural Impact Plan

Tree Protection Plan



**KEY.**

Trees / Groups

- Canopy Spread
- Tree Stem
- Root Protection Area (RPA)
- Veteran Tree RPA

A Category Tree  
(High quality / retention value)

B Category Tree  
(Moderate quality / retention value)

C Category Tree  
(Low quality / retention value)

U Category Tree  
(No remaining retention value)

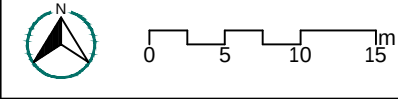
Hedgerows  
(Not assigned BS5837:2012 category)



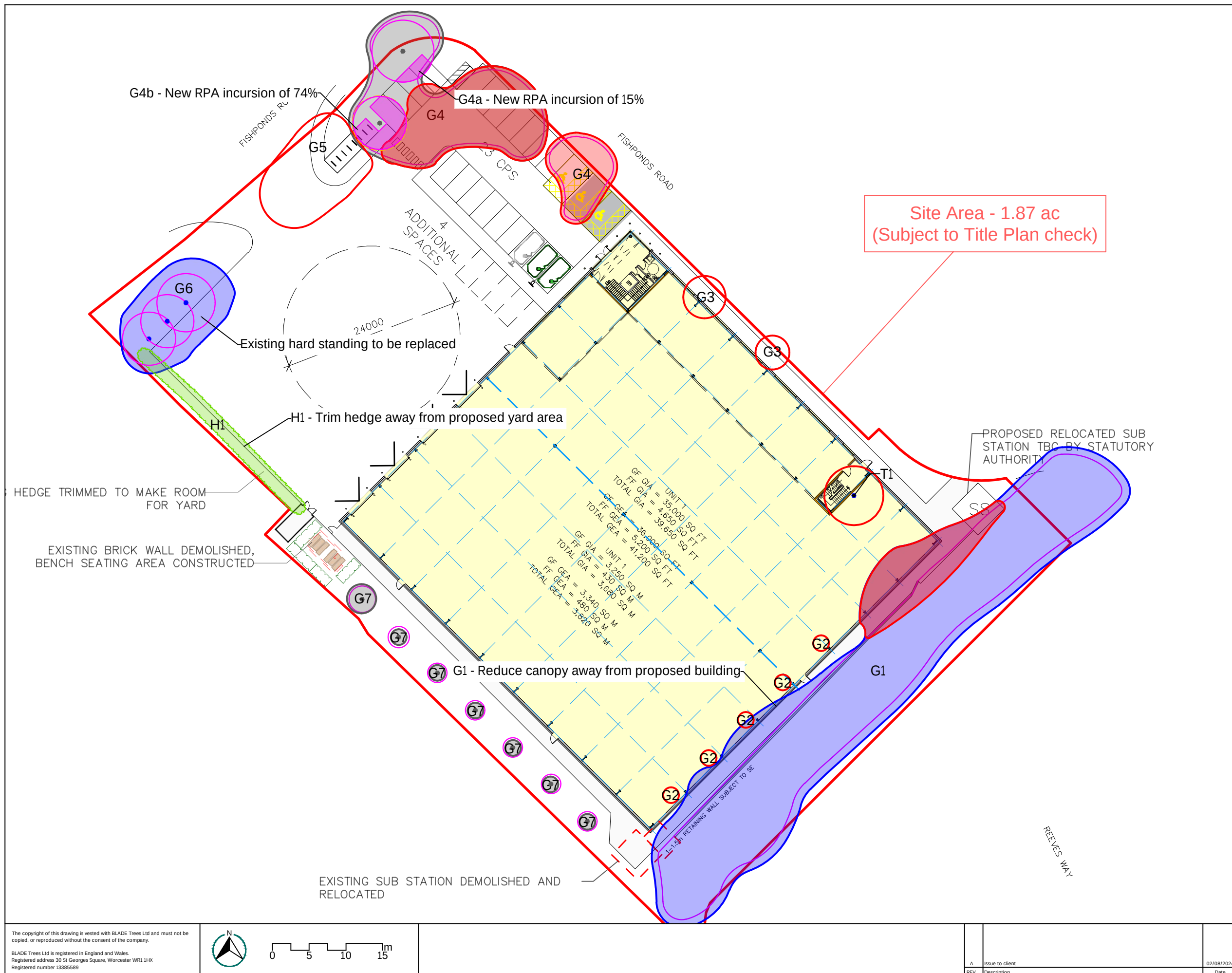
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| CLIENT<br>Tungsten Properties                                                    |               |                |                  |                  |
| PROJECT<br>Nigra House, Wokingham                                                |               |                |                  |                  |
| DRAWING TITLE<br>Tree Constraints Plan                                           |               |                |                  |                  |
| DRAWING STATUS<br>Planning                                                       |               |                |                  |                  |
| DRAWING NO.<br>318-T-D-PL-TCP                                                    |               |                |                  | REVISION<br>V1   |
| DRAWN<br>GP                                                                      | CHECKED<br>SH | SCALE<br>1:500 | PAPER SIZE<br>A1 | DATE<br>AUG-2024 |

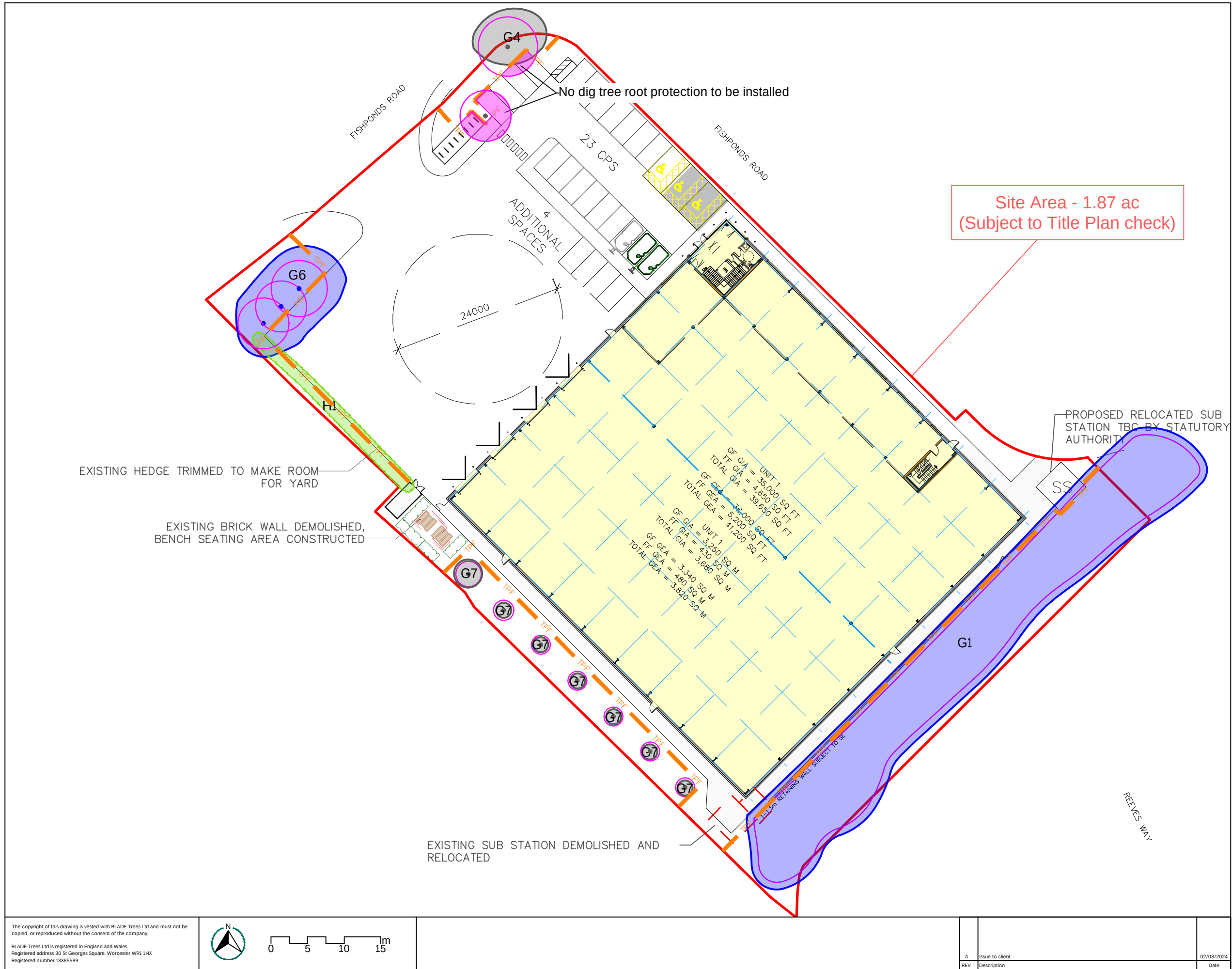
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|     |                 |            |
|-----|-----------------|------------|
| A   | Issue to client | 02/08/2024 |
| REV | Description     | Date       |





**KEY.**

Trees / Groups

- Canopy Spread
- Tree Stem
- Root Protection Area (RPA)
- Veteran Tree RPA

- A Category Tree (High quality / retention value)
- B Category Tree (Moderate quality / retention value)
- C Category Tree (Low quality / retention value)
- U Category Tree (No remaining retention value)
- Hedgerows (Not assigned BS5837:2012 category)

Tree Protection

- Tree Protection Fencing
- No dig tree root protection

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CLIENT  
Tungsten Properties

PROJECT  
Nigra House, Wokingham

DRAWING TITLE  
Tree Protection Plan

DRAWING STATUS  
Planning

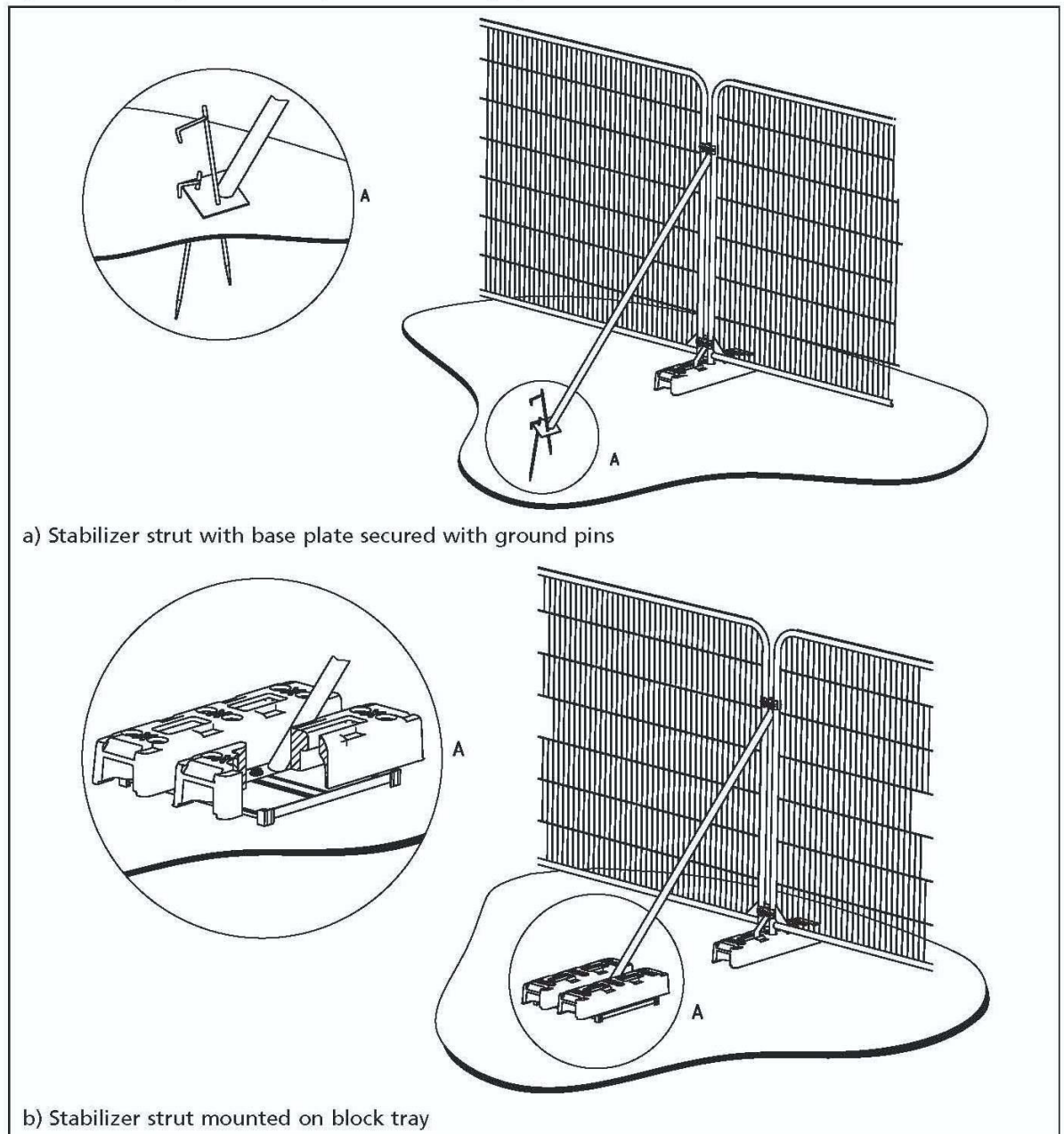
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| DRAWING NO.<br>318-T-D-PL-TTP | REVISION<br>V1 |                |                  |                  |
| DRAWN<br>GP                   | CHECKED<br>SH  | SCALE<br>1:500 | PAPER SIZE<br>A3 | DATE<br>AUG-2024 |

## APPENDIX 3

### Tree Protection Specification

BS5837:2012 – Figure 3

Figure 3 Examples of above-ground stabilizing systems



## **APPENDIX 4**

### **Greenfix Geoweb Installation Method**

**PRESTO**



# INSTALLATION GUIDE

■ **simplified**



## GEOWEB® Tree Root Protection



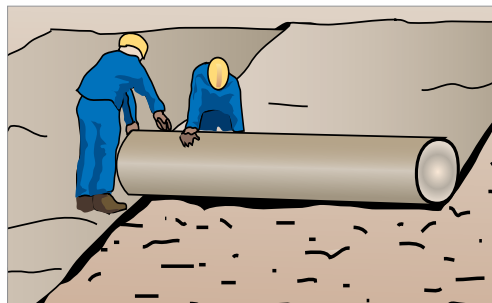


# GEOWEB® Tree Root Protection

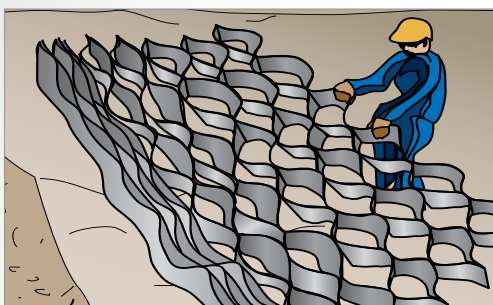
- 1 Prepare subgrade. Remove debris, rocks.



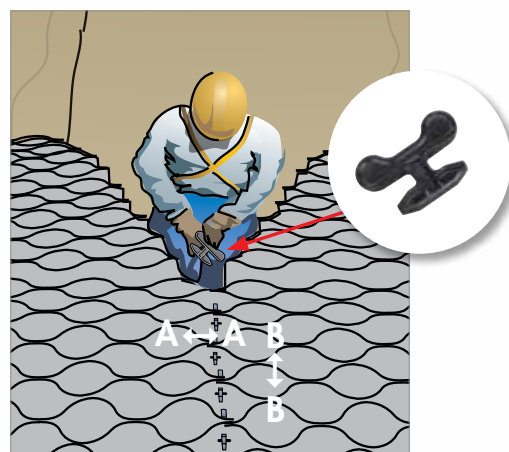
- 2 Install TRP4000 geotextile.  
Overlaps by minimum 300 mm.



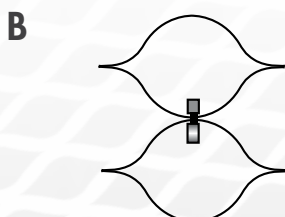
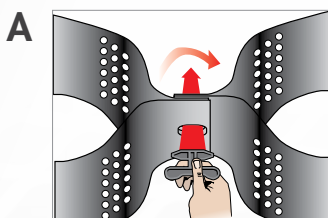
- 3 Partially expand GEOWEB® sections.



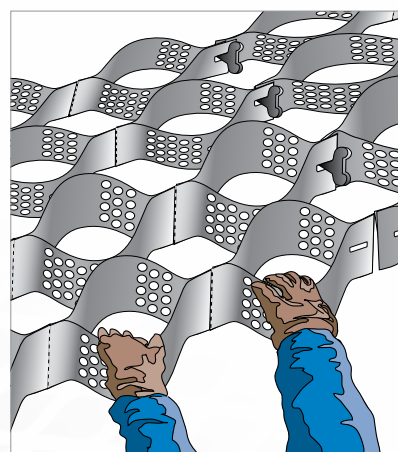
- 4 Connect GEOWEB® sections with ATRA® keys.



- 5 Connect side to side (A) and end to end (B).



- 6 Fully expand GEOWEB® sections.



## IMPORTANT NOTE:

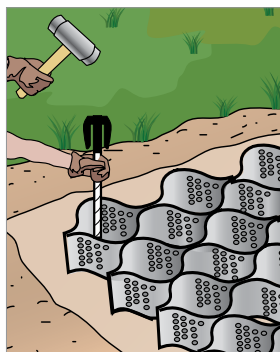
The simplified installation guide provided by Presto GEOSYSTEMS® is intended as a general guideline only. The contractor should follow contract plans and specifications and refer to detailed installation guidelines for more information.

- 7** Hold sections open. Use Options A, B, C or D.

**A** T-Bars



**B** ATRA® anchors



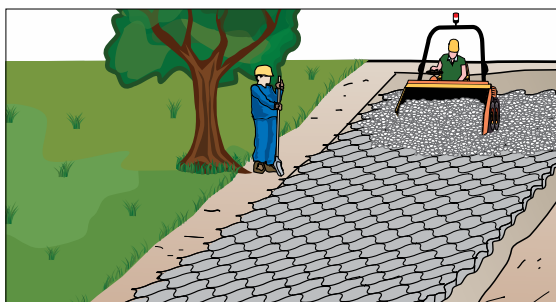
**C** Wood Stakes



**D** Infill Select Cells



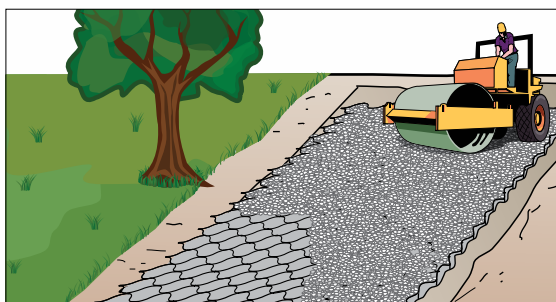
- 8** Infill GEOWEB® cells.



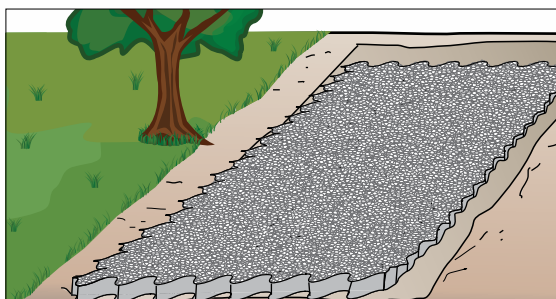
- 9** Spread Infill ensuring a 25 mm overfill at all times.



- 10** If required, use a 4t smooth, non-vibrating roller on overfilled GEOWEB® system. Refill as needed to ensure a 25 mm overfill.



- 11** Surface option ready to install according to specification.



**Greenfix**  
Soil Stabilisation and Erosion Control Specialists

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tel: 01608 666027  
www.greenfix.co.uk

**Geoweb infill material for Tree Root Protection**  
**Clean Angular Stone 4-20mm**

Specification for open graded infill material for Geoweb cellular confinement within tree root protection applications. The no fines material is to ensure high ratio void space which corresponds with ideal soil void ratios for tree root health.

Material to BS EN1342 or BS EN12620. Crushed gravel is not permitted.

| Properties of material                                            | Test        | Value              |
|-------------------------------------------------------------------|-------------|--------------------|
| Grading of particle size                                          | BS EN 13242 | Grading 4-20mm     |
| Fines Content                                                     | BS EN 13242 | f <sub>4</sub>     |
| Shape flatness index                                              | BS EN 13242 | F <sub>450</sub>   |
| Resistance to fragmentation                                       | BS EN 13242 | LA <sub>10</sub>   |
| Resistance to wear                                                | BS EN 13242 | M <sub>10</sub> 20 |
| Water absorption rate BS EN 1097-6:2000 clause 7                  | BS EN 13242 | WA <sub>2</sub> 2  |
| For typical WA > 2% magnesium sulphate soundness                  | BS EN 13242 | MS <sub>18</sub>   |
| Acid soluble sulphate content air-cooled blast furnace slag       | BS EN 13242 | ASo <sub>1</sub>   |
| Acid soluble sulphate content non air cooled blast furnace slag   | BS EN 13242 | ASo <sub>2</sub>   |
| Total sulphur aggregates other than air cooled blast furnace slag | BS EN 13242 | <1% by mass        |
| Total sulphur air cooled blast furnace slag                       | BS EN 13242 | <2% by mass        |

| Sieve Size mm | Percentage of 4-20mm passing |
|---------------|------------------------------|
| 40            | 100                          |
| 31.5          | 98 - 100                     |
| 20            | 90 - 99                      |
| 10            | 25 - 70                      |
| 4             | 0 - 15                       |
| 2             | 0 - 5                        |
| 1             | -                            |

Air cooled blast furnace and steel slag should be free from Dicalcium silicate and iron disintegration in accordance with BS EN 13242:2002, 6.4.2.2 v5  
Leaching of materials for blast furnace slag and other recycled materials should meet requirements of the Environmental waste acceptance criteria for inert waste when tested in accordance with BS EN 12457-3  
On poor site conditions which require compaction, this should be minimum 4 passes of a smooth wheeled roller at max weight 1000kg/m width without vibration.

For assistance on correct 4–20mm clean angular stone infill specification, please contact Greenfix technical team.

## MATERIALS SUPPLIED BY **Greenfix**

GEOWEB®



TRP4000  
Non-woven Geotextile



ANCHORS



ATRA® KEY



### ADDITIONAL MATERIALS REQUIRED

4–20mm clean, angular stone



### LIMITED WARRANTY

Presto GEOSYSTEMS® warrants each GEOWEB® section which it ships to be free from defects in materials and workmanship at the time of manufacture. Presto's exclusive liability under this warranty or otherwise will be to furnish without charge to Presto's customer at the original f.o.b. point a replacement for any section which proves to be defective under normal use and service during the 10-year period which begins on the date of shipment by Presto. Presto reserves the right to inspect any allegedly defective section in order to verify the defect and ascertain its cause.

This warranty does not cover defects attributable to causes or occurrences beyond Presto's control and unrelated to the manufacturing process, including, but not limited to, abuse, misuse, mishandling, neglect, improper storage, improper installation, improper alteration or improper application.

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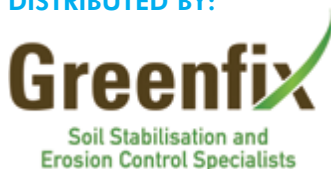
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