ARBORICULTURAL METHOD STATEMENT

BRITISH STANDARD 5837(2012)

This method statement is in accordance with British Standard 5837: Trees in relation to design, demolition and construction - Recommendations (2012) which provides a methodology for the assessment and protection of trees and other significant vegetation on development sites.

TREE SURGERY WORKS

Only tree works specified within this document may be carried out. Any uncertainty regarding trees to be pruned will be immediately confirmed with the arboricultural consultant and local authority tree officer

All tree works will be carried out in accordance with the recommendations given in the current BS 3998 (2010).

All tree works should be carried out in accordance with the Wildlife and Countryside Act 1981 (as amended) and the Habitat Regulations 2010.

SITE SUPERVISION

All key / critical activities that will affect trees during construction will be inspected and monitored by the approved arboricultural consultant and reports issued to the client and local authority.

Supervision visits will occur as follows;

•Inspection of tree works, tree protection prior to demolition and construction works •Monthly visits to inspect tree protection measures

•During works that may affect retained trees

PROTECTIVE FENCING

No materials or equipment other than those required to erect protective fencing, will be delivered to the site before the fencing is installed. The position of protective fencing for demolition is shown on this drawing.

Protective fencing will be constructed of robust barriers fit for the purpose of excluding demolition and construction traffic. Signs will be fixed to every third panel stating 'Tree Protection Area Keep Out - Any incursion into the protected area must be with the agreement of the local authority or arboricultural consultant'.

The main contractor will inform the local authority officer and the arboricultural consultant that tree protection is in place before demolition or site clearance works commence.

No alteration, removal or repositioning of the tree protection for demolition will take place during the demolition phase without the prior consent of the arboricultural consultant.

SERVICES AND DRAINAGE

Methods of working for installation of the drainage runs or services will follow the guidance within Table 3 of BS 5837 (2012), or National Joint Utilities Group (NJUG) Guidelines for the planning, installation and maintenance of utility apparatus in proximity to trees. Volume 4, issue 2, London NJUG 2007.

No works will occur within the tree protection zone without prior agreement from the arboricultural consultant. No machinery will be permitted within the TPZ at any time.

GENERAL PROTECTION METHODS

No fires will be permitted within 20m of the crown of any tree.

No changes in soil levels will take place within the tree protection zones without prior written consent of the local authority.

No materials, vehicles, plant or personnel will be permitted into the tree protection zones at any time without the prior consent of the arboricultural consultant.

Any liquid materials spilled on site will be immediately cleared up and removed from the site. If liquid fuel or cement products are spilled within 2m of the tree protection zone, the contractor will report the incident to the arboricultural consultant immediately.

The contractor will report any damage to trees or shrubs, whether caused by construction activities or from any other cause, to the arboricultural consultant immediately.





APPENDIX B - SCHEDULES

Tree Schedule 170202-PD-10a

Tree Work Schedule 170202-PD-12a

| Tree ID | No | . Species | Height (m) | Stem diameter (cm) | No. of Stems | NN | | PREAD (r | m) / W NW | Crown clearance (m) | L.B. (m) | Life stage | Condition Notes | Survey date | RPA (m ²) | RPR (m) | Life expectancy (yrs) | BS Category |
|-------------|----|---------------------------|------------|--------------------|--------------|-----|-----|----------|--------------|------------------------|----------|-----------------|---|----------------|-----------------------|---------|--------------------------|-------------|
| Tree T1 | 1 | Tilia sp. (Lime sp.) | 15.0 | 61 | 1 | 4.5 | 4.5 | 4.5 | 4.5 | 6.0 | 5W | Mature | Structural condition Fair. Physiological condition Fair. Arboricultural work - Recent. Bark wound - Mechanical. Crown reduction - Recent. Epicormic growth - Base / bole / principal stems. lamp column within crown extents Location - street tree, off site Condition - Stem bifurcates at 4m. | 10/02/2017 | 168.3 | 7.3 | 40+ | B2 |
| Tree T2 | 1 | Tilia sp. (Lime sp.) | 13.0 | 54 | 1 | 5.0 | 4.5 | 4.5 | 4.5 | 6.0 | 5E | Mature | Structural condition Fair. Physiological condition Fair. Arboricultural work - Recent. Crown reduction - Recent. Decay / structural defect - Minor. Epicormic growth - Base / bole / principal stems. Location - street tree, off site Condition - Stem bifurcates at 3.5m. Decay - Two Ganoderma brackets at base on west side. | 10/02/2017 | 131.9 | 6.5 | 10-20 | C1 |
| Tree T3 | 1 | Tilia sp. (Lime sp.) | 13.0 | 55 | 1 | 5.5 | 5.5 | 4.0 | 5.5 | 6.5 | 5E | Mature | Structural condition Fair. Physiological condition Fair. Arboricultural work - Recent. Crown reduction - Recent. Decay / structural defect - Minor. Epicormic growth - Base / bole / principal stems. Structural impact - Footpath / highway / drive disturbance. Location - street tree, off site Condition - Stem bifurcates at 4.5m. Condition - Swellings/burrs in main stem. | 10/02/2017 | 136.8 | 6.6 | 40+ | B2 |
| Shrub S4 | 1 | Sambucus nigra (Elder) | 5.5 | 19 СОМ | 4 | 3.0 | 3.0 | 2.5 | 3.0 | 2.0 | | Early Mature | Structural condition Poor. Physiological condition Poor. Crown conflict - Structure / boundary / wire / tree. Deadwood - Minor. Inappropriate species / location. Unable to inspect tree(s) closely due to inaccessibility. | 10/02/2017 | 18.1 | 2.4 | 10-20 | C1 |

Stem green Estimated value

Stem AVE Average stem diameter for tree groups

Stem COM Combined stem diameter in accordance with BS5837

L.B. Height of lowest branch attachment (m) - where relevant

The survey information in this schedule has been gathered following a BS5837 survey for planning purposes. Where hazardous trees have been noted recommendations for works may have been made but this survey cannot be relied upon as a full health and safety assessment of the trees.

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| Tree ID Group G5 | Nc 20 10 10 10 | <u>Species</u> Prunus cerasifera (Cherry Plum (Myrobalan)) Acer pseudoplatanus (Sycamore) Fraxinus excelsior (Ash) Sambucus nigra (Elder) Tilia sp. (Lime sp.) | (m) Height (m) | AVE 2. Stem diameter (cm) | No. of Stems | N NE | EROWN S | PREAD (| m) / w NW | ل Crown clearance ت (m) | L.B. (m) | Life stage Semi Mature | Condition Notes Structural condition Fair. Physiological condition Fair. Crown conflict - Structure / boundary / wire / tree. Inappropriate species / location. Self-sown group consisting mainly of cherry, lime and sycamore Dimensions - Height and stem diameter are average for group. Unable to inspect tree(s) closely due to dense undergrowth/shrubs. Species quantity estimated | Survey date 10/02/2017 | RPA (m ²) | RPR (m) | 4 Life + expectancy (yrs) | Category C1/C2 |
|------------------------|----------------------------|---|----------------|---------------------------|--------------|------|---------|---------|--------------|----------------------------|----------|------------------------------|--|------------------------------|-----------------------|---------|------------------------------|-------------------|
| Tree T6 | 1 | Prunus cerasifera (Cherry Plum (Myrobalan)) | 5.0 | 19 COM | 15 | 3.0 | 3.0 | 3.0 | 3.0 | 0.5 | | Semi Mature | Structural condition Fair. Physiological condition Fair. Coppice stool - Regrown. Multi-stemmed. | 10/02/2017 | 17.0 | 2.3 | 10-20 | C1 |
| Tree T7 | 1 | Acer pseudoplatanus (Sycamore) | 8.0 | 20 COM | 5 | 4.0 | 3.0 | 4.0 | 4.0 | 1.0 | | Semi Mature | Structural condition Poor. Physiological condition Fair. Decay / structural defect - Base. Multi-stemmed. | 10/02/2017 | 18.8 | 2.4 | 10-20 | C1 |
| Shrub S8 | 1 | Sambucus nigra (Elder) | 5.5 | 23 COM | 7 | 3.5 | 3.5 | 3.5 | 3.5 | 1.5 | | Early Mature | Structural condition Fair. Physiological condition Fair. Multi- stemmed. Unable to inspect tree(s) closely due to inaccessibility. Dimensions - Estimated due to inaccessibility. | 10/02/2017 | 25.7 | 2.9 | 10-20 | C2 |
| Tree T9 | 1 | Fraxinus excelsior (Ash) | 10.0 | 19 | 1 | 5.0 | 5.0 | 5.0 | 5.0 | 4.0 | | Semi Mature | Structural condition Fair. Physiological condition Fair. Dimensions - Crown dimensions estimated due to inaccessibility. Unable to inspect tree(s) closely due to dense undergrowth/shrubs. Condition - Stem bifurcates at 4m. | 10/02/2017 | 16.3 | 2.3 | 40+ | C1/C2 |

Stem green Estimated value

Stem AVE Average stem diameter for tree groups

Stem COM Combined stem diameter in accordance with BS5837

L.B. Height of lowest branch attachment (m) - where relevant

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| Tree ID | No | . Species | Height (m) | Stem diameter (cm) | No. of Stems | N NE | CROWN | | (m) V W NW | Crown clearance (m) | L.B. (m) | Life stage | Condition Notes | Survey date | RPA (m ²) | RPR (m) | Life expectancy (yrs) | BS Category |
|--------------|----|---|------------|--------------------|--------------|------|-------|--------|---------------|------------------------|----------|-----------------|--|----------------|-----------------------|---------|--------------------------|-------------|
| Shrub S10 | 1 | Sambucus nigra (Elder) | 5.5 | 21 COM | 7 | 4.5 | 4.5 | 4.5 | 4.5 | 1.0 | | Early Mature | Structural condition Fair. Physiological condition Fair. Crown dimensions - Estimated due to inaccessibility. Unable to inspect tree(s) closely due to dense undergrowth/shrubs. | 10/02/2017 | 20.3 | 2.5 | 10-20 | C1/C2 |
| Shrub S11 | 3 | | 4.0 | 7 AVE | | | | | | 1.0 | | Early Mature | Structural condition Fair. Physiological condition Fair. Multi- stemmed. Dimensions - Height and stem diameter are average for group. Unable to inspect tree(s) closely due to inaccessibility. | 10/02/2017 | | | 20-40 | C2 |
| Tree T12 | 1 | Salix caprea (Goat Willow/Great Sallow) | 10.0 | 22 COM | 4 | 4.5 | 2. | 0 4.23 | 3 4.5 | 1.5 | | Early Mature | Structural condition Fair. Physiological condition Fair. Crown conflict - Structure / boundary / wire / tree. Inappropriate species / location. Multi-stemmed. Location - Estimated as tree not plotted on topographical survey. Unable to inspect tree(s) closely due to ivy/climbing plant(s). | 10/02/2017 | 21.9 | 2.6 | 20-40 | C1 |
| Tree T13 | 1 | Salix caprea (Goat Willow/Great Sallow) | 11.0 | 56 COM | 8 | 6.5 | 6.5 | 6.5 | 6.5 | 1.5 | | Early Mature | Structural condition Fair. Physiological condition Fair. Multi- stemmed. Unable to inspect tree(s) closely due to ivy/climbing plant(s). Crown dimensions mensions - Estimated due to inaccessibility. | 10/02/2017 | 144.8 | 6.8 | 20-40 | C1 |
| Tree T14 | 1 | Salix caprea (Goat Willow/Great Sallow) | 10.0 | 40 | 1 | 7.0 | 5.0 | 2.0 | 6.67 | 0.5 | | Early Mature | Structural condition Fair. Physiological condition Fair. Crown conflict - Structure / boundary / wire / tree. Inappropriate species / location. Location - off site Unable to inspect tree(s) closely due to inaccessibility. Location - Growing through fence. | 10/02/2017 | 72.4 | 4.8 | 20-40 | C1 |
| Tree T15 | 1 | Acer pseudoplatanus (Sycamore) | 13.5 | 56 COM | 8 | 7.5 | 5.5 | 5.5 | 5.5 | 0.5 | 1W | Early Mature | Structural condition Fair. Physiological condition Fair. Coppice stool - Coppice origin / Mature stems. Multi- stemmed. Unable to inspect tree(s) closely due to ivy/climbing plant(s). | 10/02/2017 | 144.8 | 6.8 | 20-40 | C1/C2 |

Stem green Estimated value

Stem AVE Average stem diameter for tree groups

Stem COM Combined stem diameter in accordance with BS5837

L.B. Height of lowest branch attachment (m) - where relevant

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| Tree ID Shrub S16 | No 5 | . Species Ligustrum ovalifolium (Privet/Garden Privet) | 0.6 Height (m) | Stem diameter (cm) | No. of Stems | N NE | EROWN S | SPREAD E S SV | (m) W W NW | G Crown clearance | L.B. (m) | Life stage Early Mature | Condition Notes Structural condition Fair. Physiological condition Fair. Shrub group consisting mainly of privet and brambles Dimensions - Height and stem diameter are average for group. Location - Estimated as tree not plotted on topographical survey. | Survey date 10/02/2017 | RPA (m ²) | RPR (m) | Life expectancy (yrs) | LD BS Category |
|-------------------------|---------|--|----------------|--------------------|--------------|------|---------|------------------|---------------|-------------------|----------|-------------------------------|---|------------------------------|-----------------------|---------|--------------------------|----------------|
| Tree T17 | 1 | Fraxinus excelsior (Ash) | 10.5 | 39 COM | 7 | 5.5 | 5.5 | 5.5 | 5.5 | 1.0 | | Early Mature | Structural condition Fair. Physiological condition Fair. Multi- stemmed. Unable to inspect tree(s) closely due to ivy/climbing plant(s). | 10/02/2017 | 71.3 | 4.8 | 20-40 | C1/C2 |
| Group G18 | 1 | Sambucus nigra (Elder) | 5.0 | 19 COM | 6 | 4.0 | 4.0 | 2.5 | 3.66 | 0.5 | | Early Mature | Structural condition Fair. Physiological condition Fair. Crown conflict - Structure / boundary / wire / tree. Multi-stemmed. Unbalanced crown - Minor. Ivy extending into crown | 10/02/2017 | 17.4 | 2.4 | 10-20 | C1/C2 |
| Tree T19 | 1 | Acer pseudoplatanus (Sycamore) | 9.0 | 18 | 1 | 4.0 | 4.0 | 4.0 | 4.0 | 5.0 | | Early Mature | Structural condition Fair. Physiological condition Fair. Location - on site boundary, ownership unclear Unable to inspect tree(s) closely as tree situated on neighbouring property. Condition - Stem bifurcates at 3.5m. | 10/02/2017 | 14.7 | 2.2 | 20-40 | C1/C2 |
| Tree T20 | 1 | Fraxinus excelsior (Ash) | 9.5 | 30 | 1 | 5.0 | 5.0 | 5.0 | 5.0 | 1.5 | | Early Mature | Structural condition Fair. Physiological condition Fair. Ivy extending into crown. Location: situated on site boundary, ownership unclear Condition - Stem bifurcates at 2m. Location - Growing through fence. Unable to inspect tree(s) closely due to inaccessibility. | 10/02/2017 | 40.7 | 3.6 | 20-40 | C1/C2 |
| Tree T21 | 1 | Acer pseudoplatanus (Sycamore) | 11.0 | 23 COM | 3 | 4.5 | 4.5 | 4.5 | 4.5 | 2.0 | | Early Mature | Structural condition Fair. Physiological condition Fair. Foreign object - Ingrown metal. Location - Growing through fence. Location - situated on site boundary Unable to inspect tree(s) closely due to inaccessibility. | 10/02/2017 | 25.5 | 2.8 | 20-40 | C1 |

Stem green Estimated value

Stem AVE Average stem diameter for tree groups

Stem COM Combined stem diameter in accordance with BS5837

L.B. Height of lowest branch attachment (m) - where relevant

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| Tree ID | No |). Species | Height (m) | Stem diameter (cm) | No. of Stems | | | | m) / w NW | Crown clearance (m) | L.B. (m) | Life stage | Condition Notes da | vey | RPA (m ²) | RPR (m) | Life expectancy (yrs) | BS Category |
|--------------|----|--|------------|--------------------|--------------|------|-----|-----|--------------|------------------------|----------|-----------------|--|-------|-----------------------|---------|--------------------------|-------------|
| Tree T22 | 1 | Salix sp. (Willow sp.) | 5.0 | 35 | 1 | 7.78 | 5.0 | 5.0 | 5.0 | 0.0 | | Late Mature | Structural condition Poor. Physiological condition Dead. Dead tree / trees. Fallen tree / trees - Partial collapse. Tree crown has fallen into site. Location - Estimated as tree not plotted on topographical survey. Location - off site Unable to inspect tree(s) closely as tree situated on neighbouring property. | /2017 | 55.4 | 4.2 | 0-10 | U |
| Group G23 | 4 | Acer pseudoplatanus (Sycamore) Fraxinus excelsior (Ash) | 10.0 | 20 AVE | | | | | | 2.0 | | Early Mature | Structural condition Fair. Physiological condition Fair. Location: off-site Dimensions - Height and stem diameter are average for group. Location - Estimated as tree not plotted on topographical survey. Unable to inspect tree(s) closely as tree situated on neighbouring property. | /2017 | | | 40+ | C1/C2 |
| Tree T24 | 1 | x Cupressocyparis leylandii (Leyland Cypress) | 14.5 | 50 | 1 | 6.5 | 6.5 | 6.5 | 6.5 | 1.5 | | Early Mature | Structural condition Fair. Physiological condition Fair. Location - Estimated as tree not plotted on topographical survey. Location - off site Location - Estimated as tree not plotted on topographical survey. | /2017 | 113.1 | 6.0 | 40+ | B2 |
| Tree T25 | 1 | Pinus nigra (Black Pine) | 13.5 | 30 | 1 | 5.0 | 5.0 | 5.0 | 5.0 | 6.0 | | Early Mature | Structural condition Fair. Physiological condition Fair. Location - off site Unable to inspect tree(s) closely as tree situated on neighbouring property. | /2017 | 40.7 | 3.6 | 40+ | B2 |
| Tree T26 | 1 | Crataegus monogyna (Common Hawthorn/Quick/May) | 7.0 | 24 COM | 6 | 5.0 | 4.0 | 5.0 | 5.0 | 1.0 | | Mature | Structural condition Fair. Physiological condition Fair. Multi- stemmed. Suppressed crown - Minor. Unbalanced crown - Minor. Ash stem growing with hawthorn clump Ivy extending into crown Location - Growing on steep slope. Unable to inspect tree(s) closely due to inaccessibility. | /2017 | 27.1 | 2.9 | 20-40 | C1 |

Stem green Estimated value

Stem AVE Average stem diameter for tree groups

Stem COM Combined stem diameter in accordance with BS5837

L.B. Height of lowest branch attachment (m) - where relevant

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made but this survey cannot be relied upon as a full health and safety assessment of the trees. Generated By



| Tree ID Tree T27 | No. | . Species Fraxinus excelsior (Ash) | Height (m) | b Stem diameter (cm) | L No. of Stems | CROWN N NE E 7.0 7.0 | SPREAD SE S SV 7.0 | (m) V W NW 7.0 | 0 (m) | L.B. (m) | Life stage Early Mature | Condition Notes Structural condition Fair. Physiological condition Fair. Fork - Weak with included bark. Condition - Stem bifurcates at 1.5m. Base if tree growing within adjacent hawthorn clump | Survey date 10/02/2017 | (m ₂) (m ₂) (m ₂) (m ₂) | 8°F (m) | Life expectancy (yrs) | Category S C1/C2 |
|------------------------|------------------|---|------------|------------------------|----------------|----------------------------|--------------------------|----------------------|-------|----------|-------------------------------|--|------------------------------|--|---------|--------------------------|------------------------|
| Tree T28 | 1 | Fraxinus excelsior (Ash) | 9.5 | 20 | 1 | 4.5 4.5 | 4.5 | 4.5 | 0.5 | 1N | Early Mature | Structural condition Fair. Physiological condition Fair. Leaning trunk - Major. Rubbing limbs. Ivy extending into crown Location - Growing on steep slope. Location - Growing through fence. Location - off site Unable to inspect tree(s) closely as tree situated on neighbouring property. | 10/02/2017 | 18.1 | 2.4 | 40+ | C1/C2 |
| Group G29 | 5 1 5 1 | Salix caprea (Goat Willow/Great Sallow) Chamaecyparis lawsoniana (Lawson Cypress) Fraxinus excelsior (Ash) Ficus carica (Common Fig) | 9.0 | 15 AVE | | | | | 1.0 | | Early Mature | Structural condition Fair. Physiological condition Fair. Group mainly located off-site Species quantity estimated Dimensions - Height and stem diameter are average for group. | 10/02/2017 | | | 20-40 | C2 |
| Tree T30 | 1 | Fraxinus excelsior (Ash) | 12.0 | 36 | 1 | 7.0 7.0 | 7.0 | 7.0 | 0.0 | | Early Mature | Structural condition Fair. Physiological condition Fair. Ivy extending into crown Location - Growing on steep slope. Unable to inspect tree(s) closely due to dense undergrowth/shrubs. | 10/02/2017 | 58.6 | 4.3 | 40+ | C1/C2 |

Stem green Estimated value

Stem AVE Average stem diameter for tree groups

Stem COM Combined stem diameter in accordance with BS5837 L.B.

Height of lowest branch attachment (m) - where relevant

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| Tree ID | No | . Species | Height (m) | Stem diameter (cm) | No. of Stems | C N NE | ROWN S | PREAD (n | n) | Crown clearance (m) | L.B. (m) | Life stage | Condition Notes | Survey date | RPA (m ²) | RPR (m) | Life expectancy (yrs) | BS Category |
|-------------|----|--|------------|--------------------|--------------|-----------|--------|----------|--------|------------------------|----------|-----------------|--|----------------|-----------------------|---------|--------------------------|-------------|
| Tree T31 | 1 | Crataegus monogyna (Common Hawthorn/Quick/May) | 9.0 | 41 COM | 10 | 4.0 | 4.0 | 4.0 | 4.0 | 1.5 | | Early Mature | Structural condition Fair. Physiological condition Fair. Multi- stemmed. Suppressed crown - Minor. Unbalanced crown - Minor. Location - Growing on steep slope. | 10/02/2017 | 76.5 | 4.9 | 20-40 | C1 |
| Tree T32 | 1 | Acer pseudoplatanus (Sycamore) | 16.0 | 36 COM | 6 | 5.0 | 7.0 | 5.0 | 5.0 | 4.0 | | Early Mature | Structural condition Fair. Physiological condition Fair. Form - Poor crown structure. Multi-stemmed. Rubbing limbs. Ivy extending into crown Location - Growing on steep slope. | 10/02/2017 | 61.1 | 4.4 | 40+ | B2 |
| Tree T33 | 1 | Fraxinus excelsior (Ash) | 15.0 | 33 COM | 3 | 7.5 | 7.5 | 7.5 | 7.5 | 1.5 | | Early Mature | Structural condition Fair. Physiological condition Fair. Multi- stemmed. Crown dimensions - Estimated due to inaccessibility. Location - Growing on steep slope. | 10/02/2017 | 52.3 | 4.1 | 20-40 | C1/C2 |
| Tree T34 | 1 | Acer pseudoplatanus (Sycamore) | 14.0 | 32 COM | 5 | 4.0 | 6.0 | 5.0 | 5.0 | 5.0 | | Early Mature | Structural condition Fair. Physiological condition Fair. Multi- stemmed. Location - Growing on steep slope. Ivy extending into crown | 10/02/2017 | 48.2 | 3.9 | 20-40 | C1/C2 |
| Tree T35 | 1 | Crataegus monogyna (Common Hawthorn/Quick/May) | 9.0 | 17 COM | 3 | 3.5 | 3.5 | 3.5 | 4.5 | 0.5 | | Early Mature | Structural condition Poor. Physiological condition Fair. Decay / structural defect - Open cavity / cavities. Multi- stemmed. Rubbing limbs. Location - Growing on steep slope. | 10/02/2017 | 13.9 | 2.1 | 10-20 | C1 |
| Tree T36 | 1 | Acer pseudoplatanus (Sycamore) | 12.0 | 21 | 1 | 5.5 | 4.0 | 5.5 | 5.5 | 1.5 | | Early Mature | Structural condition Fair. Physiological condition Fair. Unbalanced crown - Minor. Location - Growing on steep slope. | 10/02/2017 | 20.0 | 2.5 | 40+ | B2 |
| Tree T37 | 1 | Acer pseudoplatanus (Sycamore) | 14.0 | 43 COM | 4 | 6.0 | 6.0 | 6.0 | 6.0 | 4.0 | | Early Mature | Structural condition Poor. Physiological condition Fair. Fork - Weak with included bark. Multi-stemmed. Rubbing limbs. Unable to inspect tree(s) closely due to ivy/climbing plant(s). | 10/02/2017 | 87.1 | 5.3 | 20-40 | C1/C2 |
| Tree T38 | 1 | Acer pseudoplatanus (Sycamore) | 16.0 | 61 COM | 6 | 5.5 | 5.5 | 5.5 | 5.5 | 4.0 | | Early Mature | Structural condition Fair. Physiological condition Poor. Die- back - Throughout crown. Decline - Suspected. Deadwood - Minor. Multi-stemmed. ivy extending into crown | 10/02/2017 | 169.6 | 7.3 | 0-10 | U |

Stem green Estimated value

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Stem AVE Average stem diameter for tree groups

Stem COM Combined stem diameter in accordance with BS5837

L.B. Height of lowest branch attachment (m) - where relevant

purposes. Where hazardous trees have been noted recommendations for works may have been made but this survey cannot be relied upon as a full health and safety assessment of the trees.

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| Tree ID Tree T39 | No. Species 1 Acer pseudoplatanus (Sycamore) | 6 Height (m) | R Stem diameter (cm) | L No. of Stems | N N 4.5 | CROWN S E E SE 4.5 | PREAD (r S SW 4.5 | m) | o Crown clearance G (m) | (E) . E . 1.5 | Life stage Early Mature | Condition Notes Structural condition Fair. Physiological condition Fair. Unable to inspect base of tree closely due to dense undergrowth/shrubs. | Survey date 10/02/2017 | (m ²) 21.9 | (m) XAX 2.6 | b Lifec expectancy (yrs) | BS Category |
|------------------------|--|--------------|----------------------|----------------|------------|--------------------------|-------------------------|--------|----------------------------|---------------------|-------------------------------|---|------------------------------|---------------------------|----------------|---|-------------|
| Tree T40 | 1 Crataegus monogyna (Common Hawthorn/Quick/May) | 8.0 | 45 COM | 9 | 5.0 | 5.0 | 5.0 | 5.0 | 1.0 | | Mature | Structural condition Fair. Physiological condition Fair. Multi- stemmed. Ivy extending into crown Crown dimensions - Estimated due to inaccessibility. Location - Growing on bank of stream. | 10/02/2017 | 91.6 | 5.4 | 20-40 | B2 |
| Tree T41 | 1 Acer pseudoplatanus (Sycamore) | 15.0 | 38 COM | 2 | 5.0 | 6.0 | 5.0 | 5.0 | 4.0 | | Early Mature | Structural condition Fair. Physiological condition Fair. Ivy extending into crown Unable to inspect tree(s) closely due to ivy/climbing plant(s). Location - Growing on steep slope. | 10/02/2017 | 68.2 | 4.7 | 20-40 | B2 |
| Tree T42 | 1 Acer pseudoplatanus (Sycamore) | 14.0 | 45 | 1 | 6.5 | 6.5 | 6.5 | 5.5 | 3.0 | | Early Mature | Structural condition Fair. Physiological condition Fair. Ash tree with significant lean growing from base of tree Location - Growing on steep slope. | 10/02/2017 | 91.6 | 5.4 | 20-40 | B2 |
| Tree T43 | 1 Crataegus monogyna (Common Hawthorn/Quick/May) | 8.0 | 25 COM | 10 | 5.0 | 5.0 | 5.0 | 4.0 | 1.0 | | Mature | Structural condition Fair. Physiological condition Fair. Multi- stemmed. Location - Growing on steep slope. Unable to inspect tree(s) closely due to ivy/climbing plant(s). Crown dimensions - Estimated due to inaccessibility. | 10/02/2017 | 29.0 | 3.0 | 20-40 | B2 |

Stem green Estimated value

Stem AVE Average stem diameter for tree groups

Stem COM Combined stem diameter in accordance with BS5837

L.B. Height of lowest branch attachment (m) - where relevant

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| Tree ID | No. Species | Height (m) | Stem diameter (cm) | No. of Stems | CI N NE | ROWN S | PREAD (| m) V W NW | Crown clearance (m) | L.B. (m) | Life stage | Condition Notes Sur | rey te | RPA (m ²) | RPR (m) | Life expectancy (yrs) | BS Category |
|--------------|--|------------|--------------------|--------------|------------|--------|---------|--------------|------------------------|----------|-----------------|---|-----------|-----------------------|---------|--------------------------|-------------|
| Group G44 | 20 Salix caprea (Goat Willow/Great Sallow) 20 Prunus cerasifera (Cherry Plum (Myrobalan)) | 10.0 |) 15 AVE | | | | | | 0.5 | | Early Mature | Structural condition Fair.10/02Sections of group are inaccessible due to dense growth.10/02Group contains several fallen trees.Species quantity estimatedDimensions - Height and stem diameter are average for group.Location - Growing on steep slope. | 2017 | | | 20-40 | B2 |
| | 20 Fraxinus excelsior (Ash) | | | | | | | | | | | | | | | | |
| | 30 Crataegus monogyna (Common Hawthorn/Quick/May) | | | | | | | | | | | | | | | | |
| | 10 Cerasus avium (Wild Cherry) | | | | | | | | | | | | | | | | |
| | 30 Acer pseudoplatanus (Sycamore) | | | | | | | | | | | | | | | | |
| Tree T45 | 1 Acer pseudoplatanus (Sycamore) | 10.0 |) 19 COM | 2 | 5.5 | 5.5 | 5.5 | 5.5 | 1.5 | | Early Mature | Structural condition Fair. Physiological condition Fair. Competition - Adjacent trees. Twin-stemmed. Unable to inspect tree(s) closely as tree situated on neighbouring property. Dimensions - Estimated due to inaccessibility. | 2017 | 16.7 | 2.3 | 20-40 | C1 |
| Tree T46 | 1 Chamaecyparis lawsoniana (Lawson Cypress) | 10.0 |) 17 COM | 3 | 5.0 | 5.0 | 5.0 | 5.0 | 1.5 | | Early Mature | Structural condition Fair. Physiological condition Fair. Competition - Adjacent trees. Dimensions - Estimated as off-site tree. Unable to inspect tree(s) closely as tree situated on neighbouring property. | 2017 | 13.9 | 2.1 | 40+ | C1/C2 |

Stem green Estimated value

Stem AVE Average stem diameter for tree groups

Stem COM Combined stem diameter in accordance with BS5837

L.B. Height of lowest branch attachment (m) - where relevant

The survey information in this schedule has been gathered following a BS5837 survey for planning purposes. Where hazardous trees have been noted recommendations for works may have been made but this survey cannot be relied upon as a full health and safety assessment of the trees.

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| Tree ID Tree | Nc |). Species Prunus cerasifera | .6 Height (m) | Stem diameter (cm) | ы No. of Stems | N 1 6.5 | CROV NE E 6.5 | VN SP | READ (S SW 6.5 | m) / W NW 6.5 | G Crown clearance G (m) | L.B. (m) | Life stage Early | Condition Notes Structural condition Fair. Physiological condition Fair. | Survey date 10/02/2017 | 6 ⁰² RPA (m ²) | (m) NAN 4.0 | 0 Life bectancy (yrs) | BS Category |
|-----------------|----|------------------------------------|---------------|--------------------|----------------|------------|---------------------|-------|-----------------------|---------------------|----------------------------|----------|---------------------|--|------------------------------|---------------------------------------|----------------|--------------------------|-------------|
| T47 | | (Cherry Plum (Myrobalan)) | | СОМ | | | | | | | | | Mature | Dimensions - Estimated as off-site tree. Location - Estimated as tree not plotted on topographical survey. | | | | | |
| Tree T48 | 1 | Prunus sp. (Cherry sp.) | 10.0 | 35 | 1 | 5.5 | 5.5 | | 5.5 | 5.5 | 2.0 | | Mature | Structural condition Fair. Physiological condition Fair. Crown reduction - Recent. Dimensions - Estimated as off-site tree. Location - Estimated as tree not plotted on topographical survey. | 10/02/2017 | 55.4 | 4.2 | 10-20 | C1/C2 |
| Tree T49 | 1 | Acer pseudoplatanus (Sycamore) | 11.0 | 25 COM | 2 | 4.5 | 4.5 | | 4.5 | 5.5 | 1.5 | | Early Mature | Structural condition Fair. Physiological condition Fair. Ivy extending into crown Dimensions - Estimated as off-site tree. Location - Estimated as tree not plotted on topographical survey. | 10/02/2017 | 28.3 | 3.0 | 20-40 | C1/C2 |
| Shrub S50 | 1 | Corylus avellana (Common Hazel) | 5.5 | 22 COM | 10 | 4.0 | 4.0 | | 4.0 | 4.0 | 1.0 | | Mature | Structural condition Fair. Physiological condition Fair. Multi- stemmed. Dimensions - Estimated as off-site tree. Location - Estimated as tree not plotted on topographical survey. | 10/02/2017 | 22.2 | 2.7 | 10-20 | C1/C2 |
| Tree T51 | 1 | Betula pendula (Silver Birch) | 13.0 | 20 | 1 | 4.0 | 4.0 | | 4.0 | 6.0 | 1.5 | | Early Mature | Structural condition Fair. Physiological condition Fair. Dimensions - Estimated as off-site tree. Location - Estimated as tree not plotted on topographical survey. | 10/02/2017 | 18.1 | 2.4 | 20-40 | B1 |
| Tree T52 | 1 | Prunus sp. (Cherry sp.) | 8.0 | 18 COM | 2 | 4.5 | 6.0 | | 4.5 | 4.5 | 1.5 | | Mature | Structural condition Fair. Physiological condition Fair. Dimensions - Estimated as off-site tree. Location - Estimated as tree not plotted on topographical survey. | 10/02/2017 | 14.7 | 2.2 | 10-20 | C1/C2 |

- Stem green Estimated value
- Stem AVE Average stem diameter for tree groups

Stem COM Combined stem diameter in accordance with BS5837

L.B. Height of lowest branch attachment (m) - where relevant

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| Tree ID Tree T53 | Nc 1 | . Species Pyrus sp. (Pear sp.) | .6 Height (m) | Stem diameter (cm) | L No. of Stems | N N 5.5 | CROWN S E E SE 5.5 | PREAD (I S SW 5.5 | m) / W NW 5.5 | T Crown clearance (m) | L.B. (m) | Life stage Mature | Condition Notes Structural condition Fair. Physiological condition Fair. Dimensions - Estimated as off-site tree. Location - Estimated as tree not plotted on topographical | Survey date 10/02/2017 | 255 RPA (m ²) | (ш) XAX 4.2 | 0 b b b b b b b b b b b b b b b b b b b | BS Category |
|------------------------|---------|--------------------------------------|------------------|--------------------|----------------|------------|--------------------------|-------------------------|---------------------|-----------------------|----------|----------------------|--|------------------------------|---------------------------|----------------|--|-------------|
| | | | | | | | | | | | | | survey. Condition - Stem bifurcates at 1.5m. | | | | | |
| Tree T54 | 1 | Malus sp. (Apple sp.) | 8.0 | 40 | 1 | 4.5 | 3.0 | 4.5 | 4.5 | 1.0 | | Mature | Structural condition Fair. Physiological condition Fair. Ivy extending into crown Dimensions - Estimated as off-site tree. Location - Estimated as tree not plotted on topographical survey. | 10/02/2017 | 72.4 | 4.8 | 10-20 | C1/C2 |
| Tree T55 | 1 | Malus sp. (Apple sp.) | 8.0 | 40 | 1 | 4.5 | 4.5 | 5.5 | 3.0 | 0.5 | | Mature | Structural condition Fair. Physiological condition Fair. Ivy extending into crown Dimensions - Estimated as off-site tree. Location - Estimated as tree not plotted on topographical survey. | 10/02/2017 | 72.4 | 4.8 | 10-20 | C1/C2 |
| Tree T56 | 1 | Betula pendula (Silver Birch) | 10.0 | 20 | 1 | 5.0 | 5.0 | 5.0 | 5.0 | 2.5 | | Early Mature | Structural condition Fair. Physiological condition Fair. Dimensions - Estimated as off-site tree. Location - Estimated as tree not plotted on topographical survey. | 10/02/2017 | 18.1 | 2.4 | 20-40 | B2 |
| Tree T57 | 1 | Quercus sp. (Oak sp.) | 18.0 | 60 | 1 | 10.0 | 10.0 | 10.0 | 10.0 | 4.0 | | Mature | Structural condition Fair. Physiological condition Fair. Storm damage. Dimensions - Estimated as off-site tree. Location - Estimated as tree not plotted on topographical survey. | 10/02/2017 | 162.9 | 7.2 | 40+ | B1/B2 |
| Tree T58 | 1 | Fraxinus excelsior (Ash) | 5.0 | 8 COM | 4 | 2.4 | 1.7 | 1.7 | 1.7 | 0.0 | | Semi Mature | Structural condition Fair. Physiological condition Fair. scrub growth | 18/07/2018 | 2.9 | 1.0 | 10-20 | C2 |
| Tree T59 | 1 | Fraxinus excelsior (Ash) | 4.0 | 11 СОМ | 2 | 1.7 | 2.3 | 1.9 | 2.1 | 0.0 | | Semi Mature | Structural condition Fair. Physiological condition Fair. Scrub growth. | 18/07/2018 | 5.8 | 1.4 | 10-20 | C2 |

Stem green Estimated value

Stem AVE Average stem diameter for tree groups

Stem COM Combined stem diameter in accordance with BS5837 L.B.

Height of lowest branch attachment (m) - where relevant

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| Tree ID | No | . Species | Height (m) | Stem diameter (cm) | No. of Stems | N | C | ROWN | SP | READ S | D (m) | WN | IW C | Crown clearance (m) | L.B. (m) | Life stage | e Condition Notes | BS Category |
|-------------|----|-----------------------------|------------|--------------------|--------------|-----|---|------|----|-----------|-------|-----|------|------------------------|----------|----------------|---|-------------|
| Tree T60 | 1 | Fraxinus excelsior (Ash) | 4.5 | 17 COM | 12 | 2.8 | | 2.2 | | 2.9 | 2 | 2.3 | | 0.0 | | Semi Mature | Structural condition Fair. Physiological condition Fair. Stems 18/07/2018 13.6 2.1 10-20 (emerging from beneath metal plate | C2 |
| Tree T61 | 1 | Prunus sp. (Cherry sp.) | 3.0 | 7 | 1 | 1.7 | | 1.7 | | 1.7 | 1 | 1.7 | | 1.5 | | Semi Mature | Structural condition Fair. Physiological condition Fair. Small 18/07/2018 2.2 0.8 10-20 (| C2 |

Stem green Estimated value

L.B.

Stem AVE Average stem diameter for tree groups

Stem COM Combined stem diameter in accordance with BS5837

Height of lowest branch attachment (m) - where relevant

The survey information in this schedule has been gathered following a BS5837 survey for planning purposes. Where hazardous trees have been noted recommendations for works may have been made but this survey cannot be relied upon as a full health and safety assessment of the trees.

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Summary table with retention category

| | Group | Shrub | Tree | Total |
|-------|-------|-------|------|-------|
| B1 | 0 | 0 | 1 | 1 |
| B1/B2 | 0 | 0 | 1 | 1 |
| B2 | 1 | 0 | 12 | 13 |
| C1 | 0 | 2 | 11 | 13 |
| C1/C2 | 3 | 2 | 19 | 24 |
| C2 | 1 | 2 | 4 | 7 |
| U | 0 | 0 | 2 | 2 |
| Total | 5 | 6 | 50 | 61 |

Summary table with life stage

| | Group | Shrub | Tree | Total |
|--------------|-------|-------|------|-------|
| Early Mature | 4 | 5 | 30 | 39 |
| Late Mature | 0 | 0 | 1 | 1 |
| Mature | 0 | 1 | 12 | 13 |
| Semi Mature | 1 | 0 | 7 | 8 |
| Total | 5 | 6 | 50 | 61 |

| Table 1 of BS5837 (2012) Cascad | le chart for tree quality assessment | | | |
|--|--|---|---|---------------|
| Category and definition | Criteria (including subcategories whe | ere appropriate) | Identificatio | on on plan |
| Trees unsuitable for retention (see note) | | | | |
| Category U Those in such a condition that they cannot realistically be retained as living trees in the context of the current land us for longer than 10 years | Trees that have a serious, irremedial including those that will become unvious of companion shelter cannot be Trees that are dead or are showing s Trees infected with pathogens of sign suppressing adjacent trees of better NOTE Category U trees can have extended on the series of the ser | ble, structural defect, such that their early loss is iable after removal of other category U trees (e.g mitigated by pruning) signs of significant, immediate, and irreversible of nificance to health and/or safety of other trees n quality kisting or potential conservation value which it m | expected due to collapse, g. where, for whatever reason, t overall decline earby, or very low quality trees ight be desirable to preserve; se | he RED |
| | 1 Mainly arboricultural qualities | 2 Mainly landscape qualities | 3 Mainly cultural values, including conservation | |
| Trees to be considered for retention | | | | |
| Category A | Tree that are particularly good examples of their species, especially if rare or unusual; | Trees, groups or woodlands of particular visual importance as arboricutural and/or | Trees, groups or woodlands of significant | GREEN |
| Trees of high quality | or those that are essential components of | landscape features. | conservation, historical, | |
| with an estimated remaining life expectancy of at least 40 years | groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue). | | commemorative or other value (e.g. veteran trees or wood-pasture). | |
| Category B | Trees that might be included in category A, | Trees present in numbers, usually growing | Trees with material | BLUE |
| Trees of moderate quality with an estimated remaining life expectancy of at least 20 years | but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation. | as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality. | conservation or other cultural value. | DLUL |
| Category C | Unremarkable trees of very limited merit or | Trees present in groups or woodlands, but | Trees with no material | GRFY |
| Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm | such impaired condition that they do not qualify in higher categories. | without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits. | conservation or other cultural value. | |

170202-PD-12a - Planning Tree Works Schedule

Former Reservoir Gondar Gardens NW6 1QG

| ID | No | o. / Species | BS5837 Category | Purpose of works Recommended works | Status |
|-----|----|---|--------------------|--|----------|
| S4 | 1 | Sambucus nigra Elder | C1 | To facilitate development Fell - Ground level. and grind stump | Proposed |
| G5 | 10 | Acer pseudoplatanus Sycamore | C1/C2 | To facilitate development Fell - Ground level. and grind stump | Proposed |
| | 10 | Fraxinus excelsior Ash | | | |
| | 20 | Prunus cerasifera Cherry Plum (Myrobalan) | | | |
| | 10 | Sambucus nigra Elder | | | |
| | 10 | Tilia sp. Lime sp. | | | |
| T6 | 1 | Prunus cerasifera | C1 | To facilitate development | |
| | | Cherry Plum (Myrobalan) | | Fell - Ground level. and grind stump | Proposed |
| T7 | 1 | Acer pseudoplatanus | C1 | To facilitate development | |
| | | Sycamore | | Fell - Ground level. and grind stump | Proposed |
| S8 | 1 | Sambucus nigra | C2 | To facilitate development | |
| | | Elder | | Fell - Ground level. and grind stump | Proposed |
| Т9 | 1 | Fraxinus excelsior | C1/C2 | To facilitate development | |
| | | Ash | | Fell - Ground level. and grind stump | Proposed |
| S10 | 1 | Sambucus nigra | C1/C2 | To facilitate development | |
| | | Elder | | Fell - Ground level. and grind stump | Proposed |
| S11 | 3 | Elaeocarpus sp. | C2 | To facilitate development | |
| | | | | Fell - Ground level. and grind stump | Proposed |
| T12 | 1 | Salix caprea | C1 | To facilitate development | |
| | | Goat Willow/Great Sallow | | Fell - Ground level. and grind stump | Proposed |
| T13 | 1 | Salix caprea | C1 | To facilitate development | |
| | | Goat Willow/Great Sallow | | Fell - Ground level. and grind stump | Proposed |
| T14 | 1 | Salix caprea | C1 | To facilitate development | |
| | | Goat Willow/Great Sallow | | Lift low canopy - Specified extent. crown lift to 3 metres above ground level on site side. | Proposed |
| T15 | 1 | Acer pseudoplatanus | C1/C2 | To facilitate development | |
| | | Sycamore | | Lift low canopy - Specified extent. to 2.5m above ground level | Proposed |
| S16 | 5 | Ligustrum ovalifolium Privet/Garden Privet | C1 | To facilitate development Fell - Ground level. and grind stump | Proposed |
| T17 | 1 | Fraxinus excelsior Ash | C1/C2 | To facilitate development Lift low canopy - Specified extent. to 2.5m above ground level | Proposed |
| T45 | 1 | Acer pseudoplatanus Sycamore | C1 | To facilitate development Lift low canopy - Specified extent to 2.5m above ground level | Proposed |



| ID | N | o. / Species | BS5837 Category | Purpose of works Recommended works | Status |
|-----|---|--------------------------|--------------------|---|----------|
| T46 | 1 | Chamaecyparis lawsoniana | C1/C2 | To facilitate development | |
| | | Lawson Cypress | | Lift low canopy - Specified extent to 2.5m above ground level | Proposed |
| T58 | 1 | Fraxinus excelsior | C2 | To facilitate development | |
| | | Ash | | Fell - Ground level. | Proposed |
| T59 | 1 | Fraxinus excelsior | C2 | To facilitate development | |
| | | Ash | | Fell - Ground level. | Proposed |
| T60 | 1 | Fraxinus excelsior | C2 | To facilitate development | |
| | | Ash | | Fell - Ground level. | Proposed |
| T61 | 1 | Prunus sp. | C2 | To facilitate development | |
| | | Cherry sp. | | Fell - Ground level. | Proposed |

Tree work analysis (trees and trees in groups)

| | To facilitate development | Total |
|--|---------------------------|-------|
| Fell - Ground level | 15 | 15 |
| Lift low canopy - Specified extent | 5 | 5 |
| Total | 20 | 20 |



APPENDIX C – CELL WEB DOCUMENT

CI/SfB

Common Arrangement R12

Uniclass L81208/L81210





Tree Root Protection System



Geosynthetics





The CellWeb[™] TRP cellular confinement system protects tree roots from the damaging effects of compaction and desiccation, while creating a stable, load-bearing surface for vehicular traffic.

CellWeb[™] offers an alternative to the traditional methods of constructing roadways and building foundations that involve excavation, which can result in tree root severance and soil compaction from the passage of vehicles. Such damage can severely influence tree health, and in extreme cases leads to death. CellWeb[™] can be sensitively installed close to and under the canopies of trees without negative effects.

Trees are valuable landscape features and a vital environmental resource. Increasingly, contractors are being required to ensure the health and survival of trees during and beyond the construction period. Although this is enshrined in BS 5837: Trees in Relation to Construction: Recommendations (2005) and Tree Preservation Order legislation, it presents several issues when implementing construction projects near to trees:

- Root severance caused by excavation, leaving trees open to decay, less stable and with a diminished capacity to utilise soil water and nutrients.
- Destruction of soil structure and compaction due to the passage of heavy vehicles, restricting the flow of water and air to tree roots.
- Need for construction access, new roadways and hard surfaces that require engineering-standard load-bearing foundations that meet building regulations.
- Need for high-performance, cost-effective driveways and roadways in the vicinity of tree roots.



Potential loss of existing tree due to poor construction techniques.

The CellWeb[™] system overcomes these issues and helps contractors to comply with tree health guidelines by creating a load-bearing base that is water-permeable, stable and durable.

With no need for excavation, the system is quick and easy to install, reducing construction time and saving costs and making it suitable for temporary and permanent solutions.



Glynebourne Wood.

Pedestrian path to recreational woodland built using a CellWebTM foundation which was covered with DuoBlock and then filled with woodchip to create a porous surface.

Product features



CellWeb™ comprises an expandable cellular mattress that is then filled with a clean stone sub-base and above a Treetex T300 Geotextile.

The honeycomb-like structure is made of robust highdensity polyethylene (HDPE) that is simply stretched out and filled with clean angular material. Just like traditional roadways, the strength of the structure comes from the binding together of the infill, but with CellWeb™ this is achieved without compaction and without reduction in permeability.

Perforated cell walls allow the angular infill to bind with the contents of the adjacent cell, but with sufficient space for the movement of water and air to nearby tree roots. As the infill contains no fines and the geotextile layers prevent clogging from particles washing into the system, the structure remains permeable to water over time and protects the roots for the lifetime of the tree.

As well as being quick and easy to install, CellWeb™ also dramatically cuts down the depth of sub-base required, in most cases by as much as 50%, further reducing costs. CellWeb™ significantly reduces surface rutting, increasing the long-term performance of the finished surface and ensuring that tree roots remain protected from vertical loads.

CellWeb can be used as a permanent solution or alternatively the system can be used in a temporary situation. In a temporary application the system can be used for the required period of time, then removed for use on another site or recycled, thereby adding to CellWeb's green credentials.

- No excavation Soil structure remains undisturbed; risk of root damage minimised.
- Porous infill Allows tree roots to conduct moisture and gas exchange.
- No compaction No need to compact the infill to achieve a load-bearing structure.
- Lateral stability Structure remains rigid to vertical loads.





Please call 01455 617 139

or email sales@geosyn.co.uk for further information.

Wide product range Large stock holding

Next day delivery

Hydrological benefits

Water is a shrinking resource in the urban environment. As the extent of the built environment increases, more and more ground is being covered by impermeable hard surfaces that repel rainwater runoff, preventing it from reaching the roots of vegetation, and in particular trees. Rapid water runoff stretches the capacity of stormwater drains and frequently results in drainage management issues that are rarely resolved in favour of adjacent trees.

Using CellWeb[™] mitigates these issues by promoting both the vertical and the lateral movement of water, whether the system is installed above or below ground. The 'pores' that are created by the spaces between the infill stones and the cell perforations even allow water to flow to adjacent tree roots that are effectively 'trapped' under areas of impermeable hard standing. CellWeb[™] therefore helps to promote root growth and allows roots to continue to grow within areas of hard surfacing.











Design & installation

Final surfacing

The benefits of the CellWeb[™] system to trees can only be maintained if a suitably porous final surface is selected. An ideal surfacing is the DuoBlocks grass reinforcement and gravel retention system, a visually attractive surface that has the advantage of being fully porous. Alternatives include block paviors, porous asphalts and loose or bonded gravel.

Call the Geosynthetics sales team on 01455 617 139 for more advice on surfacing options and other products and systems.

Advice and product selection

Geosynthetics Limited has been supplying the CellWeb[™] system for many years and has acquired solid experience in its application. No two contracts are the same, and we understand the factors that need to be taken into account to specify the right CellWeb[™] product.

We provide a FREE consultation, design and advisory service to find the solution that is most cost-effective and beneficial for your site. Our service includes product selection, CAD drawings and full instructions to help you from project conception to completion.

Call our sales office on 01455 617 139 for specification details and project-specific design assistance.

CellWeb[™] in action: Access road for the Lake District National Parks Authority.



Site before construction pictured above.



Installation of the CellWeb™ system.



Four years later.

Technical specification

Product Specifications

| Properties | Standard Cell |
|--------------------------|-----------------------------------|
| Material | Virgin HDPE |
| Wall thickness | 1.25mm |
| Seam welding | Ultrasonic to 100% of seam length |
| Cell depth | 75, 100, 150, 200 and 300mm |
| Width of expanded panel | 2.56m |
| Length of expanded panel | 8.1m |
| Cell diameter (expanded) | 259 x 224mm |

Certified Quality

CellWeb[™] is manufactured in accordance with the ISO 9001 Quality Management System in a comprehensive range of cell diameters and depths.



Geosynthetics Ltd



Geosynthetics

Geosynthetics Limited

Fleming Road, Harrowbrook Industrial Estate Hinckley, Leicestershire LE10 3DU.

Tel: 01455 617 139

Fax: 01455 617 140 Email: sales@geosyn.co.uk

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The Barn, FeltimoresPark, Chalk Lane, Harlow, Essex CM17 0PF 0845 094 3268 | info@tma-consultants.co.uk | www.timmoyaassociates.co.uk

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