Arboricultural Method Statement

In support of the BS5837:2012 Arboricultural Impact Assessment (UTM-2026-BS5837-001)

Site Summary

Site Address	1 Balloon Street, Manchester
OS Grid Reference	SJ 84140 98833
Local Planning Authority	Manchester City Council
Tree(s) Covered	T001 — Tree of Heaven (Ailanthus altissima), BS5837 Category B2
Modified (Functional) RPA	Polygon containing the full 191 m² area, plotted entirely on the public footway side of the brick retaining wall. The wall is treated as a hard cut; the compound side receives no functional RPA allocation. See AIA Sections 3.2 to 3.4 for derivation.

1. Introduction

1.1 Purpose of this Method Statement

1.1.1 This Arboricultural Method Statement (AMS) has been prepared by Urban Tree Management in support of the BS5837:2012 Arboricultural Impact Assessment (AIA) for the proposed plant compound refurbishment at 1 Balloon Street, Manchester (UTM-2026-BS5837-001). It sets out the working methods, sequencing, supervision protocols, and method-specific safeguards that shall apply to all construction activity within or adjacent to the modified Root Protection Area (RPA) of the retained tree (T001).

1.1.2 The AMS has been prepared in accordance with BS5837:2012 paragraph 6.2 and Annex E. It is intended to discharge any pre-commencement planning condition relating to tree protection and is to be read in conjunction with:

- The AIA (UTM-2026-BS5837-001);
- The Tree Constraints Plan (TCP) — issued under separate cover;
- The Tree Protection Plan (TPP) — issued under separate cover;
- The architectural and structural drawings issued by the design team.

1.2 Scope

1.2.1 This AMS covers:

- Site set-up, induction, trunk protection and functional RPA demarcation;
- Demolition of existing railings and localised brickwork break-out;
- Trial pit excavation adjacent to the existing fence line;
- Excavation of new RC pad bases and screen-post foundations within the modified RPA;
- Mass fill, sub-base and concrete blinding operations beneath new concrete elements;
- Installation of new services (electrical, refrigerant pipework, condensate drainage and any other utility) within the modified RPA;
- Use of temporary ground protection where hard landscaping is removed within the modified RPA;
- Overhead lifting operations and protection of the canopy of T001;
- Reinstatement and post-construction monitoring.

1.3 Roles and Responsibilities

Table 1.1 — Roles and Responsibilities

Project Arboriculturalist	Carl Riva MArborA — Urban Tree Management. Responsible for supervision of all works within the modified RPA, sign-off of method statement variations, approval of root-encounter decisions, and the post-construction inspection regime.
Principal Contractor	Responsible for site safety, induction of operatives, implementation of this AMS, and notification of the Project Arboriculturalist in advance of works within the modified RPA.
Site Manager	Day-to-day responsibility for compliance with this AMS, the integrity of trunk protection and temporary ground protection, and the recording of arboricultural supervision visits.
Structural Engineer	Responsible for the foundation design and screen-post detailing. Liaison with the Project Arboriculturalist where any structural detail interacts with the modified RPA.
Client / Principal Designer	Responsible for appointing the Project Arboriculturalist and ensuring that the AMS is incorporated into the construction phase plan.

1.4 Notification and Communication

1.4.1 The Principal Contractor shall give the Project Arboriculturalist a minimum of 48 hours' written notice of any of the following:

- Installation, removal or any maintenance of trunk protection;
- Installation or removal of temporary ground protection or functional RPA demarcation barriers;
- Commencement of any excavation within the modified RPA;
- Commencement of any services installation within the modified RPA;
- Any lifting operation where the load path or slew arc is within 5m of the Canopy Protection Zone (lifting plan to be issued in advance);
- Any proposed variation to the methods set out in this AMS.

1.4.2 No works listed at Section 1.4.1 above shall commence until the Project Arboriculturalist has confirmed attendance or has issued written authorisation to proceed without attendance.

2. Pre-Commencement Requirements

2.1 Site Induction

2.1.1 Prior to mobilisation, the Principal Contractor shall ensure that all operatives, supervisors and visiting personnel receive a site induction that includes:

- Identification of the retained tree (T001) and the position of the modified RPA;
- The location and extent of trunk protection, temporary ground protection and functional RPA demarcation barriers;
- The activities that are prohibited within the modified RPA (storage, plant access, mixing, washing-out, fires, fuel transfer);
- The procedure for reporting a root encounter or any incident of damage to T001;
- The name and contact details of the Project Arboriculturalist.

2.1.2 A signed induction register shall be maintained by the Principal Contractor and made available to the Project Arboriculturalist on request.

2.2 Trunk Protection (in lieu of Perimeter Fencing)

2.2.1 The plant compound at 1 Balloon Street is a constrained operational space which must remain accessible for working throughout the construction period. Heras-type perimeter fencing of the full Construction Exclusion Zone would unduly restrict legitimate site usage and is therefore not practicable. In accordance with BS5837:2012 paragraph 6.2.2.3, trunk protection has been specified as the primary physical protective measure for T001, supplemented by temporary ground protection (Section 2.3) and the precautionary excavation methods set out at Section 3.

2.2.2 Trunk protection specification:

- Padding layer — a continuous wrap of hessian, breathable membrane or proprietary padded sleeve around the full circumference of the stem, of sufficient thickness (minimum 30mm compressed depth) to absorb incidental impact from plant, materials or operatives;
- Outer layer — vertical timber battens, minimum 50mm × 100mm section, of length sufficient to extend from ground level to a minimum of 2.0m above ground level. Battens shall be installed around the full circumference at no greater than 150mm spacing centre-to-centre;
- Binding — galvanised wire or non-corrosive strapping bound horizontally around the timber battens at no greater than 600mm vertical spacing, sufficient to retain the assembly in position without compressing the bark beneath the padding;
- No fixings of any kind — nails, screws, staples, cable ties through bark — shall be driven into, through, or attached to the stem or any branch of T001;
- The trunk protection shall be installed by, or under the supervision of, the Project Arboriculturalist.

2.2.3 Demarcation of the functional RPA:

- Where any segment of the functional RPA on the public-facing side of the retaining wall is at risk of incursion by site traffic, materials or operatives — for example during delivery, unloading or scaffold erection — lightweight scaffold-tube barrier (or equivalent demountable system such as plastic chapter-eight barriers) shall be installed at the limit of the functional RPA;
- Demarcation barriers may be temporarily moved to permit authorised access through approved temporary ground protection (Section 2.3), but shall be re-set at the end of each working operation and shall not be left displaced overnight.

2.2.4 Use of the retaining wall as a protective boundary:

- Where the existing brick retaining wall provides a continuous hard physical separation between T001 and the works (along the eastern elevation of the compound), the wall stands as the protective boundary on that elevation and no additional demarcation is required;
- This shall be confirmed in writing by the Project Arboriculturalist at the pre-commencement inspection.

2.2.5 Inspection and maintenance of trunk protection:

- The Site Manager shall inspect the trunk protection at the start of each working day and after any incident of plant or material movement adjacent to T001;
- Any displacement, slippage, splitting of battens, or visible compression of the padding shall be reported to the Project Arboriculturalist within four working hours and rectified before further works proceed in the vicinity;

- A weekly written record of trunk-protection condition shall be maintained as part of the site records and made available to the Project Arboriculturalist on request;
- Trunk protection shall not be removed, slackened, or partially dismantled for any reason without the prior written authorisation of the Project Arboriculturalist. Any unauthorised interference shall be reported as an incident within four working hours.

2.2.6 Signage:

- "Tree Protection — Do Not Damage" signage in durable A4 format shall be fixed to the trunk protection assembly itself (not to the tree) and at any point where site personnel routinely enter the vicinity of T001;
- Signage shall include the contact name and number of the Project Arboriculturalist.

2.3 Temporary Ground Protection — Pre-Installation

2.3.1 Where works within the modified RPA require either (a) the removal of existing hard landscaping or (b) repeated foot or wheelbarrow access across an exposed soil surface, temporary ground protection shall be installed before any such activity commences. The specification is:

- A geotextile separation layer (terram or equivalent, minimum 140 g/m²) laid first to provide separation between the protective layer and the existing surface;
- A load-spreading layer above the geotextile — either heavy-duty steel road plates, composite trackway panels (e.g. Mega Deck, Ground-Guards or equivalent), or interlocking timber bog-mats. Plywood sheeting alone is not acceptable;
- Joints between panels shall be staggered and the surface shall be continuous and flat across the working area;
- The full extent of the protected area shall be agreed with the Project Arboriculturalist and marked on the working copy of the TPP.

2.3.2 Temporary ground protection shall remain in place for the full duration of works in that area and shall not be lifted until all such activity has ceased and reinstatement (if applicable) is complete.

3. Construction Method Statements

3.0.1 The following method statements apply to each operation that has the potential to affect T001. Where multiple operations occur in sequence, the methods are cumulative — i.e. compliance with one method does not relieve the contractor of compliance with another.

3.0 Sequence of Operations and Hold Points

3.0.2 Works shall proceed in the phased sequence set out in Table 3.1 below. The sequence has been ordered to ensure that all tree-protection measures are in place before any RPA-affecting activity commences, and that key arboricultural inspections take place before each operation that cannot be reversed (membrane installation, concrete placement, backfill, fencing removal).

3.0.3 Each phase has an identified hold point. A hold point is a stage in the works at which the operation in question shall not proceed until the Project Arboriculturalist has either attended site and authorised continuation, or has issued written authorisation to proceed without attendance. Hold points are not waivable by the Principal Contractor or the Site Manager.

3.0.4 Where the Principal Contractor wishes to vary the sequence — for example to take advantage of plant availability, weather windows, or coordination with other trades —

the variation shall be submitted in writing to the Project Arboriculturalist a minimum of five working days in advance, and shall not be implemented without written agreement.

Table 3.1 — Sequence of Operations and Hold Points

Phase 1 — Pre-Commencement	Site induction, installation of trunk protection on T001, installation of functional RPA demarcation barriers where required, and installation of any required temporary ground protection. HOLD POINT: Project Arboriculturalist site visit and written sign-off of trunk protection, demarcation and ground-protection extent before any subsequent phase commences.
Phase 2 — Above-Ground Demolition	Removal of existing metal railings in hand-liftable lengths only. No excavation in this phase. Concrete post footings to be cut at ground level and left in situ where reasonably practicable. HOLD POINT: None within this phase; however, no excavation may commence (Phase 3 onwards) until Phase 1 sign-off is in place.
Phase 3 — Trial Pit Investigation	Hand-dug trial pit (1.0m × 1.0m) adjacent to existing fence line in 200mm lifts. HOLD POINT: Project Arboriculturalist on site for the first lift, and for any subsequent lift in which roots ≥25mm are encountered. Backfill of the pit shall not commence until the Project Arboriculturalist has authorised it.
Phase 4 — Brickwork Break-Out and Pad-Base Excavation	Localised brickwork break-out for new RC padstones (hand tools, dust suppression in continuous use). Hand-dug pad-base excavations (1.0m × 1.6m × 0.4m deep) in 200mm lifts. HOLD POINT: Project Arboriculturalist site visit to inspect each excavation at full depth and to authorise placement of the non-permeable membrane. No membrane shall be installed without this authorisation.
Phase 5 — Membrane, Blinding, Mass Fill, Sub-Base and Structural Concrete	Installation of 1000-gauge polythene membrane against excavation sides and base. 50mm GEN 1 blinding. 0.26m mass fill in 75mm well-compacted layers. 150mm MOT Type 1 sub-base in 75mm lifts. Reinforcement and structural concrete. HOLD POINT: Project Arboriculturalist inspection of the membrane installation immediately before placement of the blinding layer. Concrete shall not be poured before this inspection has been recorded.
Phase 6 — Screen-Post Foundations and Services Installation	Excavation of screen-post foundations to structural engineer's details (hand-dug, supervised). Installation of any new services (electrical, refrigerant pipework, condensate drainage, communications) within the modified RPA. HOLD POINT: Project Arboriculturalist agreement, in writing and before excavation, of (a) the screen-post foundation design where it interacts with the modified RPA, and (b) the proposed services routes and installation methods (avoidance / trenchless / hand-dug trench) per Section 3.7.
Phase 7 — Reinstatement of Hard Landscaping	Reinstatement of any hard landscaping removed for working access or services installation, on a like-for-like basis or with a no-dig porous surfacing system as agreed at Phase 6. Removal of all spoil and arisings from within the modified RPA. HOLD POINT: Project Arboriculturalist inspection of completed reinstatement, including continuity of finish at the modified RPA boundary, before authorisation to remove protective measures.

Phase 8 — Removal of Protective Measures	Removal of trunk protection, demarcation barriers, signage and temporary ground protection. Stem inspection on removal of trunk protection. HOLD POINT: Written authorisation from the Project Arboriculturalist. Protective measures shall not be removed without this authorisation, and shall not be removed before all activity in Phases 2 to 7 has demonstrably ceased.
Phase 9 — Post-Construction Monitoring	Project Arboriculturalist inspection of T001 at three months and again at twelve months following practical completion. Written records issued to the Client and, on request, to the LPA in discharge of any relevant planning condition. HOLD POINT: Not applicable — monitoring phase only.

3.0.5 Activities within different phases may run in parallel only where: (a) they are not subject to a hold point that has yet to be discharged; (b) they do not require shared access through the modified RPA; and (c) the Project Arboriculturalist has agreed the proposed parallel running in writing.

3.0.6 A working copy of Table 3.1 above shall be kept on site for the duration of the works, marked up by the Site Manager to record the date that each hold point was discharged and the name of the Project Arboriculturalist visit reference associated with that discharge. The completed table shall form part of the records issued to the LPA at the discharge of conditions stage (Section 7.3).

3.1 Demolition of Existing Railings

3.1.1 Existing metal railings shall be removed in lengths short enough to be lifted manually by two operatives. No mechanical plant shall be used for railing removal within the modified RPA.

3.1.2 Where railing posts are set in concrete footings within the modified RPA, the concrete shall be cut at or just below existing ground level and the footing left in situ. Footings shall not be excavated out unless their full removal is structurally necessary, and where removal is unavoidable the excavation shall follow the hand-dig protocol at Section 3.3.

3.1.3 All demolition arisings shall be removed from site or to a designated holding area outside the modified RPA at the end of each working day. No storage of arisings shall be permitted within the modified RPA.

3.2 Localised Brickwork Break-out

3.2.1 Localised break-out of existing brickwork to receive new RC padstones (each 440mm × 215mm × 215mm) shall be carried out using hand-held breakers or angle grinders only. Percussive plant of greater than 5kg weight class shall not be used within the modified RPA.

3.2.2 Dust suppression (water mist or vacuum extraction) shall be in continuous use throughout brickwork break-out to prevent the deposition of fine cementitious dust onto the rooting plate or trunk of T001.

3.2.3 Spoil from break-out shall be collected directly into wheelbarrows or buckets and removed from the modified RPA at the end of each operation. Spoil shall not be allowed to accumulate against the base of the retaining wall.

3.3 Trial Pit Excavation (1.0m × 1.0m, adjacent to existing fence line)

3.3.1 The trial pit shall be hand-dug under the direct supervision of the Project Arboriculturalist. A 48-hour notification is required prior to commencement.

3.3.2 Excavation shall proceed in 200mm lifts. At each lift the excavation face shall be inspected for roots before further removal.

3.3.3 Where roots are encountered:

- Roots of less than 25mm diameter may be cleanly severed using sharp secateurs or a pruning saw in accordance with BS3998:2010. The cut shall be made on the development side of the root, leaving the longer length attached to the tree;
- Roots of 25mm diameter or greater shall not be severed without the express authorisation of the Project Arboriculturalist. Works shall pause at that location and a decision shall be made to either retain the root (by adjusting the pit position, hand-tunnelling beneath, or root bridging) or to authorise severance with a clean cut;
- All cut surfaces shall be left clean. Wound paints, sealants or dressings shall not be applied.

3.3.4 The trial pit shall not be left open for more than 24 hours. Where the pit cannot be backfilled within 24 hours, the exposed root face shall be protected by:

- Damp hessian sheeting laid directly against the soil and root face, kept moist throughout the period of exposure;
- A polythene over-sheet to retain moisture;
- Boarded covering at the pit mouth to exclude site traffic and prevent debris ingress.

3.3.5 Backfill shall comprise the originally excavated material, lightly tamped (not power-compacted) to avoid root damage and excessive densification of the rooting zone.

3.4 RC Pad-Base Excavations (1.0m × 1.6m × 0.4m deep)

3.4.1 Pad-base excavations within the modified RPA shall be hand-dug under arboricultural supervision. The 200mm-lift, root-encounter, hessian-protection and 24-hour limit protocols at Sections 3.3.2 to 3.3.4 above apply in full.

3.4.2 Excavation faces shall be kept vertical and the spoil heap shall be located outside the modified RPA. If site geometry forces temporary spoil placement within the modified RPA, it shall be stored on top of temporary ground protection and removed at the end of each working day.

3.4.3 Once the excavation is at full depth and any roots within the footprint have been addressed in accordance with Section 3.3.3, a non-permeable polythene membrane (minimum 1000-gauge) shall be laid against the excavation sides and base. The membrane shall be sized to extend a minimum of 200mm above the eventual top-of-concrete level to prevent contact between fresh concrete and the surrounding soil.

3.4.4 A 50mm GEN 1 concrete blinding layer shall then be placed onto the membrane, followed by reinforcement and structural concrete in accordance with the structural engineer's details.

3.4.5 Concrete plant shall not be brought within the modified RPA. Concrete shall be placed by pump or by chute from outside the modified RPA. Washing-out of any plant or chute shall take place at a designated wash-out point outside the modified RPA and not less than 10m from the trunk of T001.

3.5 Mass Fill, Sub-Base and Blinding

3.5.1 The approximately 0.26m of mass fill between the underside of the new pads and the underside of the existing boundary wall foundation shall be installed in 75mm well-compacted layers.

3.5.2 Compaction within the modified RPA shall use hand-tamper or vibrating plate (maximum 80kg class) only. Roller compactors are not permitted within the modified RPA.

3.5.3 The 150mm MOT Type 1 sub-base layer shall similarly be placed in 75mm lifts. All sub-base material shall be brought to the working area in barrows or by chute from outside the modified RPA.

3.6 Screen-Post Foundations

3.6.1 Foundations for the new perforated metal screen posts shall be excavated by hand under arboricultural supervision in accordance with the protocols at Section 3.3. The dimensions and depths shall follow the structural engineer's details and shall be reviewed by the Project Arboriculturalist before excavation commences.

3.6.2 Where the structural engineer's details specify a foundation that would result in unacceptable root severance, an alternative design (such as shallower pad-and-grillage, ground-screw or paired-bracket footing) shall be agreed between the engineer and the Project Arboriculturalist before excavation.

3.7 Services Installation Within the Modified RPA

3.7.1 Where new services (electrical supply to plant, refrigerant pipework, condensate drainage, communications or any other utility) are to be installed within the modified RPA, the installation shall follow the principles of NJUG Volume 4 (2007) — Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees — and BS5837:2012 Annex E.

3.7.2 Hierarchy of methods:

- First, the proposed service route shall be reviewed to determine whether it can be re-routed to avoid the modified RPA. The reviewed route shall be agreed with the Project Arboriculturalist before any excavation;
- Where avoidance is not reasonably practicable, the service shall be installed by trenchless techniques (such as directional drilling, mole-ploughing or pipe-jacking) at a depth sufficient to pass beneath any structural roots — typically not less than 600mm below existing ground level;
- Where a trenched method is unavoidable, the trench shall be excavated by hand under direct arboricultural supervision in accordance with Section 3.3.

3.7.3 Trench specification (where unavoidable):

- Minimum depth: 600mm below existing ground level where the trench crosses the modified RPA, unless otherwise agreed in writing with the Project Arboriculturalist;
- Trench width: the minimum required to install the service safely — typically not more than 300mm;
- Multiple services to be carried in a single trench wherever possible to minimise total ground disturbance;
- Spoil to be placed on temporary ground protection outside the trench line; spoil shall not be heaped against the base of the retaining wall or against the trunk of T001.

3.7.4 Bedding and backfill:

- Service bedding shall be granular (sharp sand or pea gravel) — concrete bedding shall not be used within the modified RPA;
- Service surround shall be granular to a minimum cover of 100mm above the service;
- Backfill above the surround shall comprise the originally excavated material, lightly tamped only;
- Marker tape (yellow for electrical, blue for water, etc.) shall be laid 300mm above each service in accordance with NJUG colour conventions.

3.7.5 Reinstatement:

- Original ground level shall be reinstated without additional surcharge;
- Any hard landscaping removed for access shall be replaced on a like-for-like basis or with a no-dig porous surfacing system specified by the Project Arboriculturalist;
- Where the existing surface was bound (asphalt, concrete) and a no-dig system is specified instead, the new surface shall be a permeable cellular system laid over the geotextile, with no additional excavation beyond the trench line itself.

3.8 Hard Landscaping Removal Within the Modified RPA

3.8.1 For the avoidance of doubt: removal of any existing hard landscaping within the modified RPA — whether for services installation, working access, foundation excavation or any other reason — shall not be carried out without prior written notice to, and authorisation from, the Project Arboriculturalist.

3.8.2 Method for hard-landscaping removal:

- Bound surfaces (asphalt, concrete) shall be saw-cut to a clean edge before removal to prevent uncontrolled fracture of adjacent material;
- Slabs and blocks shall be lifted by hand or with hand tools (pry bars, slab lifters). Mechanical breakers shall not be used within the modified RPA unless of the class specified at Section 3.2.1 and only where unavoidable;
- Once the bound surface is removed, the exposed sub-base shall be inspected for the presence of roots. If roots are encountered the protocol at Section 3.3.3 applies. If no roots are present at sub-base depth, the sub-base may be left in situ and temporary ground protection installed directly over it;
- On completion of the works requiring the surface to be open, the hard landscaping shall be reinstated as specified at Section 3.7.5 or as otherwise agreed with the Project Arboriculturalist.

4. Arboricultural Supervision

4.1 Supervision Visits

4.1.1 The Project Arboriculturalist shall attend site to supervise the following operations:

- Installation of trunk protection, functional RPA demarcation barriers and temporary ground protection — pre-commencement inspection and written sign-off;
- First-lift excavation of the trial pit, and each subsequent lift where roots have been encountered;
- Each pad-base excavation — at least the first-lift and final-depth inspections;
- Each screen-post foundation excavation;
- Commencement of any services trench within the modified RPA;
- Any removal of hard landscaping within the modified RPA;
- Any lifting operation (crane, telehandler, hoist, mobile elevating work platform) where the load path, slew arc or recovery position is within 5m of the Canopy Protection Zone defined in AIA Section 4.6;
- Removal of trunk protection, demarcation barriers and temporary ground protection at the end of works (including stem inspection on removal of trunk protection).

4.1.2 Additional supervision visits may be called for by the Project Arboriculturalist where unexpected ground conditions, root encounters, or method variations arise.

4.2 Supervision Records

4.2.1 A written record shall be maintained for every supervision visit. Each record shall identify:

- The date and time of the visit and the operation being supervised;
- The names of the operatives present;
- The methods observed and any deviations from this AMS;
- Any roots encountered (size, position, action taken);
- Any non-conformities identified and the corrective action required;
- Any photographs taken in support of the record.

4.2.2 Supervision records shall be supplied to the Local Planning Authority on completion of the works, in support of the discharge of any planning condition relating to tree protection.

4.3 Root-Encounter Decision Protocol

Table 4.1 — Root-Encounter Decision Protocol

Root < 25mm diameter	May be cleanly severed using sharp tools in accordance with BS3998:2010. Record location, diameter, and method.
Root 25mm – 50mm diameter	Pause works. Project Arboriculturalist to inspect and authorise either retention (by re-routing the excavation, hand-tunnelling, or root bridging) or clean severance with written record.
Root > 50mm diameter	Pause works. Project Arboriculturalist to inspect. Severance is not authorised without consultation with the Client and, if material, with the LPA. Retention by design variation is the default expectation.
Multiple roots in a single excavation	Pause works. Project Arboriculturalist to assess cumulative impact and determine whether the excavation may proceed, requires re-design, or requires escalation.
Cut-surface treatment	Leave clean. Do not apply wound paint, sealant or dressing. Backfill or hessian protection within the timeframes set at Section 3.3.4.

5. Activities Prohibited Within the Modified RPA

5.1.1 The following activities are prohibited within the modified RPA at all times during the construction period:

- Storage of materials, plant, fuels, oils, chemicals, soil, spoil, scaffolding or welfare units;
- Mixing of concrete, mortar or any other binder material;
- Washing-out of concrete plant, screed mixers or paint kettles;
- Lighting of fires;
- Refuelling of plant or vehicles;
- Movement of tracked or wheeled plant exceeding 1.5 tonnes operating weight, other than across approved temporary ground protection;
- Unauthorised excavation, level change or addition of fill;
- Use of percussive plant exceeding 5kg weight class, other than as specified at Section 3.2.1;
- Fixing of signage, notices, brackets, cabling or any other item to the trunk or branches of T001;
- Pruning of T001, other than as specified at Section 4.6 of the AIA and only with the prior written agreement of the Project Arboriculturalist.

6. Incident and Damage Reporting

6.1.1 Any of the following events shall be reported to the Project Arboriculturalist within four working hours of occurrence:

- Damage to, displacement of, or unauthorised removal of trunk protection, functional RPA demarcation barriers or temporary ground protection;
- Unauthorised excavation, plant access or material storage within the modified RPA;
- Severance of a root of 25mm diameter or greater without prior authorisation;
- Spillage of fuel, oil, concrete, cement, paint or other contaminant within the modified RPA;
- Mechanical damage to the trunk, branches, or exposed roots of T001;
- Any other event with the potential to affect the health, structural integrity or retention of T001.

6.1.2 On receipt of an incident report, the Project Arboriculturalist shall attend site at the earliest opportunity, assess the damage, and specify any remedial measures required. Where the incident is material, a written report shall be issued to the Client and, if required, to the LPA.

7. Post-Construction

7.1 Reinstatement and Removal of Protective Measures

7.1.1 Trunk protection, functional RPA demarcation barriers and temporary ground protection shall be removed only on completion of all works within or adjacent to the modified RPA, and only with the written authorisation of the Project Arboriculturalist.

7.1.2 On removal of trunk protection, the stem of T001 shall be visually inspected for abrasion, compression bruising, bark damage or any other injury arising from the construction period. Any damage observed shall be recorded photographically and noted in the post-construction inspection record. Where material damage is identified, the Project Arboriculturalist shall specify any remedial action required.

7.1.3 Reinstatement of hard landscaping shall be inspected by the Project Arboriculturalist prior to the issue of authorisation to remove protective measures.

7.2 Monitoring Inspections

7.2.1 The Project Arboriculturalist shall undertake a post-construction inspection of T001 within three months of practical completion. The inspection shall consider:

- Crown condition and any visible response to construction-period stress (dieback, leaf reduction, premature autumn colouration);
- Trunk and basal condition for any new mechanical damage;
- Ground condition at the rooting plate for any new heave, settlement or compaction.

7.2.2 A further inspection shall be undertaken at 12 months following practical completion. Findings of both inspections shall be recorded in writing and supplied to the Client. If significant deterioration is observed, additional inspections and remedial works shall be specified.

7.3 Discharge of Planning Conditions

7.3.1 On completion of the works, the supervision record set (Section 4.2) and the post-construction inspection records (Section 7.2) shall be made available to the LPA in support of the discharge of any planning condition relating to tree protection.

8. Caveats and Limitations

8.1.1 The findings, observations and recommendations made in this report are based on a ground-based visual assessment carried out at the time of the site visit. Whilst all reasonable skill, care and diligence has been applied in accordance with industry best practice and the relevant British Standards, the report does not account for the effects of subsequent extreme weather events, vandalism, accidents, or any other changes to the site or its trees that occur after the date of the survey.

8.1.2 No warranty is given in respect of changes to site conditions or to the tree stock that may take place after the date of the survey. Where site conditions are altered, or where works are undertaken to any tree referenced in this report that fall outside the scope of the recommendations made herein, the comments and observations contained within this report should not be relied upon.

8.1.3 The contents of this report shall be considered valid for a period of 12 months from the date of the survey, or until such time as site conditions change or works are carried out to any tree referenced herein, whichever is the sooner. Any reliance placed on this report beyond that period or following such changes is not the responsibility of Urban Tree Management.

8.1.4 Unless expressly stated otherwise in the relevant caption, all photographs reproduced within this report were taken by the author at the time of the site visit and are intended for illustrative purposes only.

8.1.5 Tree positions shown on plans accompanying this report are indicative only. Where no topographical survey has been provided, tree locations have been recorded using handheld GPS equipment, which is less accurate than a measured topographical survey. No warranty is given as to the absolute accuracy of tree positions plotted on this basis.

8.1.6 This is an arboricultural report. Its scope is limited to the identification and assessment of arboricultural features within the site in accordance with BS5837:2012. It does not constitute, and should not be relied upon as, an ecological assessment, a landscape appraisal, a structural or engineering assessment, a soil investigation, or advice on the suitability of foundations in proximity to trees. Where any of these matters are referenced within this report, comments are general in nature and the reader is advised to obtain professional advice from a suitably qualified specialist.

8.1.7 This report does not constitute a tree risk assessment. Where concerns regarding tree condition or risk are identified, separate detailed inspections should be commissioned using an appropriate methodology (such as QTRA or equivalent).

8.1.8 This report has been prepared for the exclusive use of the named Client and their agents in connection with the project to which it relates. It may not be relied upon by any other party, nor used for any other purpose, without the prior written consent of Urban Tree Management.

8.1.9 Information obtained from third parties (including, but not limited to, local authority mapping, planning portal records, the Woodland Trust Ancient Tree Inventory, MAGIC mapping and Ordnance Survey data) is believed to be accurate at the time of consultation. However, Urban Tree Management accepts no liability for any inaccuracy, omission, or subsequent change in such third-party information.

Appendix 1: Glossary of Terms

The following definitions apply to terms used throughout this report. Definitions are based on BS5837:2012 and standard arboricultural consultancy practice.

Term	Acronym	Definition
Ancient Tree	—	A tree that has passed beyond maturity into its third age and shows aged characteristics in comparison with others of the same species. Often of biological, cultural, or aesthetic significance.
Ancient Woodland	AW	A wooded area that has had continuous tree cover since at least 1600 AD in England and Wales, or 1750 in Scotland.
Arboricultural Impact Assessment	AIA	A formal assessment of the direct and indirect impacts of a proposed development on existing trees, prepared in accordance with BS5837:2012.
Arboricultural Method Statement	AMS	A document setting out the working methods to be applied where development activity has the potential to affect retained trees, including any works within or near Root Protection Areas.
Arboriculturist	—	A person who, through relevant qualifications, training and experience, has gained professional expertise in the cultivation, management and study of trees.
BS5837:2012	—	The current British Standard "Trees in relation to design, demolition and construction — Recommendations" providing guidance on integrating trees into the development process.
Construction Exclusion Zone	CEZ	The area, established by Tree Protection Fencing and based on the Root Protection Area, from which all construction activity is excluded for the duration of works.
Crown	—	The foliage-bearing portion of a tree, formed by its branches and excluding the clear stem or trunk.
Crown Lift	—	The selective removal of the lowest branches of a tree to provide vertical clearance beneath the crown, often expressed as a height above ground level.
Crown Reduction	—	A pruning operation that reduces the overall height and/or spread of a tree’s crown by shortening branches back to suitable growth points, while retaining the main framework.
Dead Wood	—	Non-living branches or stems within a tree, occurring as a result of natural ageing, shading, or external influences. Retention of dead wood is often beneficial for biodiversity where safe to do so.
Fungi	—	Multicellular organisms that grow within dead organic matter or living organisms. Wood-decay fungi are specialised forms that have co-evolved with woody plants and are an important consideration in tree assessment.
Included Bark	—	Bark that becomes trapped between two adjacent parts of a tree, typically at a tight fork or branch union. Creates a structural weakness because the parts are not bound together by woody tissue.

Term	Acronym	Definition
Local Planning Authority	LPA	The local government body responsible for determining planning applications and discharging planning conditions in a given area.
Occlusion	—	The progressive closure of a wound on a woody plant by the formation of new wood and bark around it.
Quantified Tree Risk Assessment	QTRA	A method for the systematic, quantified assessment of the risk of harm posed by trees, expressed as a probability of significant harm in a given timeframe.
Root Protection Area	RPA	The minimum area around a tree, calculated in accordance with BS5837:2012, deemed to contain sufficient roots and rooting volume to maintain the tree's viability. Treated as a priority for protection during development.
Stem	—	The principal woody trunk of a tree, or one of several such trunks of similar size and status.
Subsidence	—	In relation to soil or structures: a downward movement of the ground, sometimes associated with the extraction of moisture from shrinkable clay soils by tree roots. In relation to branches: a progressive downward bending due to increasing weight.
Tree	—	For the purposes of BS5837:2012, a woody plant which typically has a single stem and which, at maturity, attains a height of at least 4 metres and a stem diameter at 1.5m above ground level of at least 75mm.
Tree Constraints Plan	TCP	A plan illustrating the above- and below-ground constraints presented by trees on or adjacent to a site, used to inform the design of a proposed development.
Tree Preservation Order	TPO	A written order made by a local planning authority that protects specific trees, groups, areas or woodlands from being cut down, topped, lopped, uprooted, wilfully damaged or wilfully destroyed without the authority's written consent.
Tree Protection Fencing	TPF	Robust fencing erected at the limit of the Root Protection Area to enclose the Construction Exclusion Zone and physically protect retained trees during demolition and construction.
Tree Retention and Removal Plan	TRRP	A plan illustrating which trees are to be retained, which are to be removed, and where tree protection measures are to be installed during development.
Veteran Tree	—	A tree which exhibits features of biological, cultural or aesthetic value characteristic of, but not exclusive to, individuals surviving beyond the typical age range for the species.
Visual Tree Assessment	VTA	A method for the assessment of tree condition through the visual identification of body-language indicators of mechanical and physiological stress, developed by Mattheck and Breloer.

Term	Acronym	Definition
Vitality	—	In tree assessment, an overall appraisal of physiological function. High vitality is associated with healthy growth, full foliage, and resilience to environmental stresses.
Vigour	—	The rate of shoot extension, leaf production, or diameter increment in a tree, used as one indicator of overall vitality.