



## Arboricultural Method Statement

**Sandeep Grewal**

**62 Station Road  
Hayes  
London  
UB3 4DF**

**19 July 2024**

**Phil Gower Dip Arb Lv4 (ABC) MArborA**

## Table of Contents

|   |           |
|---|-----------|
| <b>Introduction .....</b>   | <b>4</b>  |
| <b>Tree Survey.....</b>   | <b>7</b>  |
| <b>Arboricultural Impact Assessment.....</b>                                | <b>8</b>  |
| <b>Arboricultural Method Statement .....</b>                                | <b>9</b>  |
| Sequencing of works .....   | 10        |
| Protective Measures .....   | 11        |
| Demolition.....   | 14        |
| Construction.....   | 14        |
| Prohibition.....  | 15        |
| Site Management.....  | 16        |
| Services.....   | 17        |
| Monitoring and Supervision.....   | 18        |
| <b>Arboricultural Monitoring &amp; Supervision Sign-Off Checklist .....</b> | <b>20</b> |
| <b>Appendices.....</b>  | <b>21</b> |
| <b>Appendix 1: Tree Schedule .....</b>                                      | <b>22</b> |
| <b>Appendix 2: Arboricultural Impact Assessment.....</b>                    | <b>24</b> |
| <b>Appendix 3: Tree Protection Plan .....</b>                               | <b>26</b> |
| <b>Appendix 4: Tree Protection Notice .....</b>                             | <b>28</b> |
| <b>Appendix 5: Contact Details .....</b>                                    | <b>30</b> |
| <b>Document Production Record .....</b>                                     | <b>32</b> |
| Table 1: Documents referred to.....   | 6         |
| Table 2: Documents upon which this tree survey has been based .....         | 7         |
| Table 3: Documents upon which this tree survey has been based .....         | 8         |
| Table 4: Documents upon which this tree survey has been based .....         | 9         |
| Table 5: Sequencing of works .....  | 10        |

Figure 1: OS Map showing the site location (Bing Maps) ..... 4

Figure 2: Proposed scheme, 2230-pl-08 (ABA Chartered Surveyors) ..... 5

Figure 3: Default specification for protective barrier fencing (BS5837) ..... 12

Figure 4: Example of protective barrier fencing with above-ground stabilising system (BS5837) ..... 12

## Introduction

Arbtech Consulting Limited (Arbtech) received written instruction on 05 July 2024 from Sandeep Grewal to attend 62 Station Road, Hayes, London, UB3 4DF (the site) to undertake an arboricultural survey guided by British Standard 5837:2012: Trees in Relation to Design, Demolition and Construction – Recommendations of all trees, hedges and major shrub groups growing on and/or within influencing distance of the site and to produce a Schedule of Trees, Tree Constraints Plan (TCP), Arboricultural Impact Assessment (AIA), Arboricultural Method Statement (AMS) and Tree Protection Plan (TPP).

## Executive Summary

This report describes the extent and effect of the proposed development on individual trees and groups of trees within and adjacent to the site.

Trees within the site were surveyed using a methodology guided by British Standard 5837:2012 'Trees in relation to design, demolition and construction – Recommendations' ("BS5837").

Subsequently, this report has been produced, balancing the layout of the proposed development against the competing needs of trees. This report comprises all of the requisite elements of an arboricultural implications assessment, method statement and supporting plans.

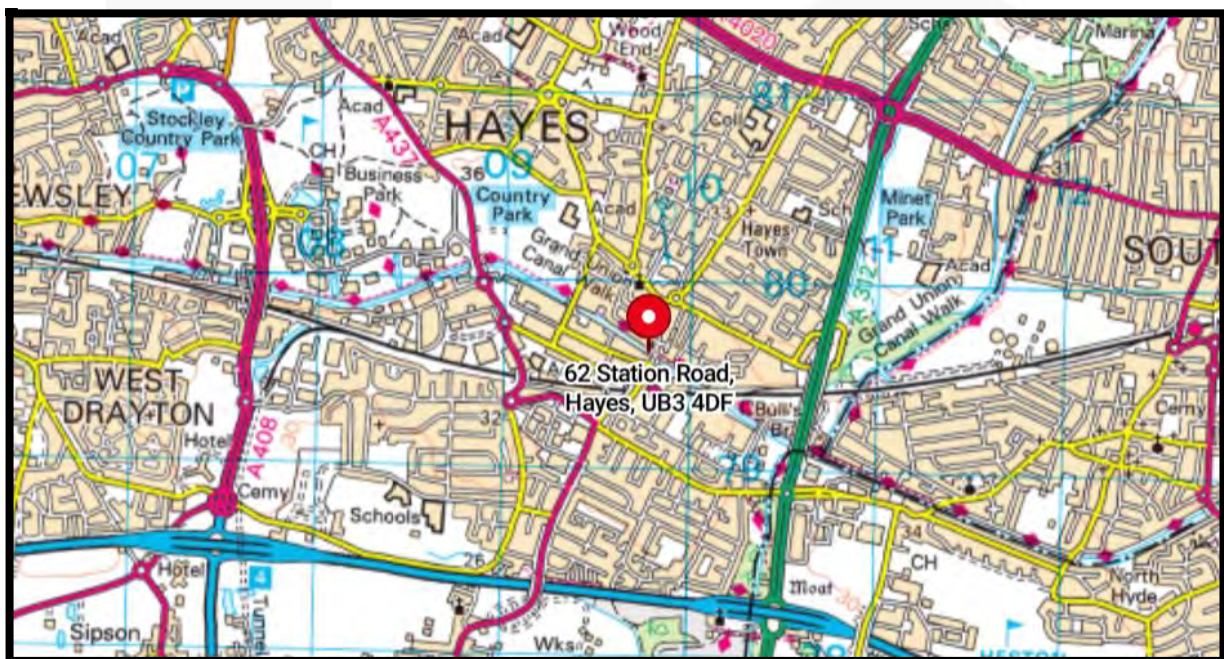


Figure 1: OS Map showing the site location (Bing Maps)

**Site Description:** Site is currently a disused Barclays Bank with basement parking, ground level and first floor. To the south is the Grand Union Canal.

## Proposed Scheme

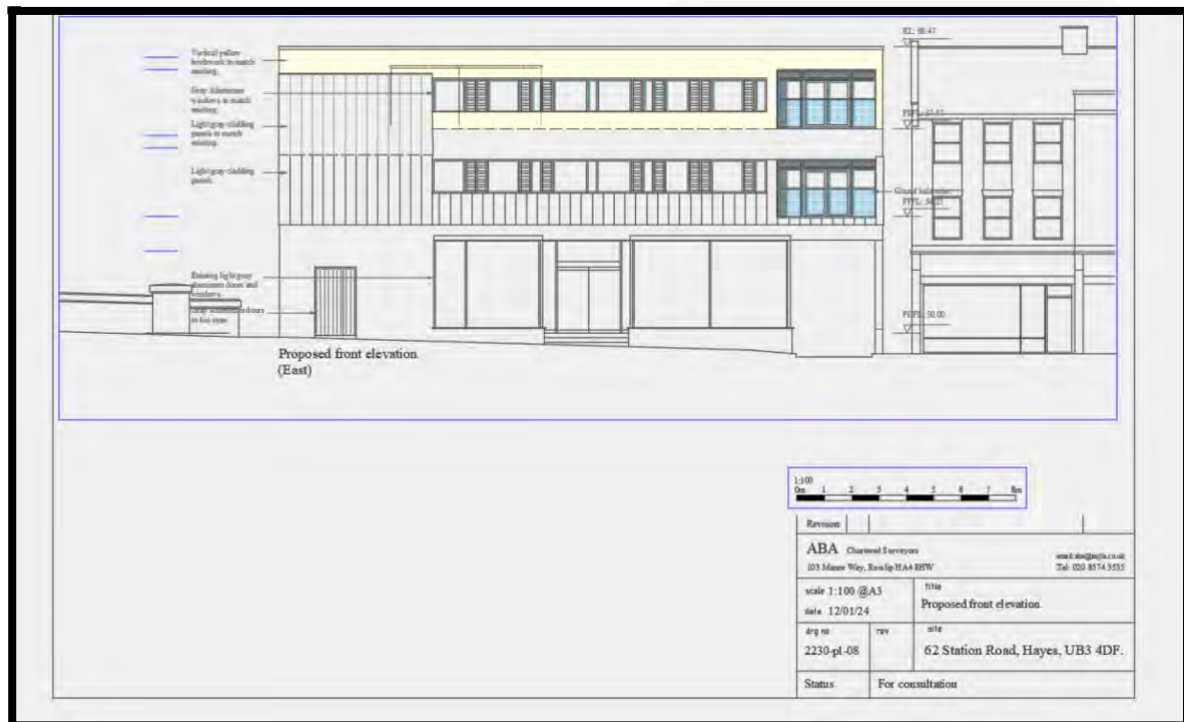







Figure 2: Proposed scheme, 2230-pl-08 (ABA Chartered Surveyors)

**Description:** It is proposed to change the use of the first floor and build an additional storey to create 8 residential units.

**Checklist for submission to Local Planning Authority**

|   |   |
|---|---|
| <b>Tree Survey (including schedule)</b>       |  |
| <b>Tree Constraints Plan (TCP)</b>            |  |
| <b>Arboricultural Impact Assessment (AIA)</b> |  |
| <b>Arboricultural Method Statement (AMS)</b>  |  |
| <b>Tree Protection Plan (TPP)</b>             |  |

This report and its appendices precisely follow the strategy for arboricultural appraisal intended to provide local planning authorities with evidence that trees have been properly considered throughout the development process.

It is the conclusion of this report that the overall quality and longevity of the amenity contribution provided for by the trees and groups of trees within and adjacent to the site will not be adversely affected as a result of the local planning authority consenting to the proposed development. It is considered that any issues raised in this report, or beyond the scope of it, can be dealt with by planning conditions.

**Table 1: Documents referred to**

| <b>Document</b>                  | <b>Reference No.</b> |
|----------------------------------|----------------------|
| Survey base drawing              | O/S Tile             |
| Proposed layout drawing          | 2330-p1-01           |
| Proposed elevation drawings      | 2230-p1-08           |
| British Standard 5837:2012       | “BS5837”             |
| Tree Survey Schedule             | Arbtech TS 01        |
| Arboricultural Impact Assessment | Arbtech AIA 01       |
| Tree Protection Plan             | Arbtech TPP 01       |



## Tree Survey

An arboricultural survey guided by British Standard 5837:2012: Trees in Relation to Design, Demolition and Construction - Recommendations of all trees within impacting distance of the site was undertaken by Rob Dennis on 10 July 2024.

A total of 1no. individual trees and 2no. groups of trees were surveyed.

For full details of all the trees surveyed, see Appendix 1: Tree Schedule.

Table 2: Documents upon which this tree survey has been based

| Document            | Originator       | Reference Number | Title   |
|---------------------|------------------|------------------|---------|
| Survey base drawing | Ordinance Survey | --               | OS Tile |

**Survey Limitations:** The survey was made at ground level using visual observation only. Detailed examinations, such as climbing inspections and advanced decay detection equipment, were not employed, though they may form part of the survey's management recommendations. Measurements were taken using specialist tapes, lasers, and GPS devices. Where this was not possible, measurements are estimated. Inaccessible trees will have the best estimates made about their location, physical dimensions, and characteristics. Trees have been grouped where BS5837 guides us that it is expedient to do so. Trees have been excluded from the survey if they are found by us to be sufficiently far away from the proposed developable area or if they are outside of the red line boundary plan showing the expectations of our client for the extent of the survey.

**Scope:** Pre-development tree surveys make arboricultural management recommendations based exclusively upon the condition of the individual tree or group of trees relative to their present context (*i.e., not in relation to the proposed development*).

**Legal Status:** No statutory protection check has been performed. BS5837 does not draw any distinction between trees subject to statutory protection, such as a Tree Preservation Order ("TPO"), and those trees without, starting at Annex B:

*The potential effect of development on trees, whether statutorily protected (e.g. by a tree preservation order or by their inclusion within a conservation area) or not, is a material consideration that is taken into account in dealing with planning applications.* Consequently, we do not seek to offer any comparison between or infer any difference in the quality or importance of TPO trees and other trees.

## Arboricultural Impact Assessment

An Arboricultural Impact Assessment (AIA) guided by British Standard 5837:2012: Trees in Relation to Design, Demolition and Construction - Recommendations was undertaken by Phil Gower on 19 July 2024 to determine the potential conflicts between the proposed development scheme and existing trees located on and near the site and has subsequently produced this Arboricultural Method Statement to demonstrate how the proposed scheme can be successfully implemented without causing harm to retained trees.

Table 3: Documents upon which this tree survey has been based

| Document                    | Originator              | Reference Number | Title               |
|-----------------------------|-------------------------|------------------|---------------------|
| Survey base drawing         | Ordnance Survey         | --               | OS Tile             |
| Proposed layout drawing     | ABA Chartered Surveyors | 2330-p1-01       | Proposed Layout     |
| Proposed elevation drawings | ABA Chartered Surveyors | 2230-p1-08       | Proposed Elevations |

Several issues may need to be addressed in an Arboricultural Impact Assessment between the trees and the proposed development; these are as follows:

- The effect and extent of the proposed development within the root protection areas (RPAs) of retained trees;
- The potential conflicts of the proposed development with canopies of retained trees and;
- The likelihood of any future remedial works to retained trees beyond those that would have been scheduled as part of usual management.



## Arboricultural Method Statement

This Arboricultural Method Statement (Arbtech AMS 01) demonstrates how any aspect of the development that could potentially result in tree loss or damage may be implemented and provides an adequate level of protection for trees that are to be retained during the proposed works.

Details of key site personnel, including the Site/Project Manager, will be submitted to the Council's Tree Officer before site works commence. This Arboricultural Method Statement (Arbtech AMS 01) is to be approved and agreed to in writing by all key personnel before the commencement of any site works.

No site personnel are to be present, and no demolition, site clearance, building work, or material delivery is to occur until the protective measures are in accordance with this Arboricultural Method Statement (Arbtech AMS 01) and the Tree Protection Plan (Arbtech TPP 01). Unless otherwise specified, protective measures will remain unaltered and in situ for the entire duration of the construction.

Table 4: Documents upon which this tree survey has been based

| Document                    | Originator              | Reference Number | Title               |
|-----------------------------|-------------------------|------------------|---------------------|
| Survey base drawing         | Ordinance Survey        | --               | OS Tile             |
| Proposed layout drawing     | ABA Chartered Surveyors | 2330-p1-01       | Proposed Layout     |
| Proposed elevation drawings | ABA Chartered Surveyors | 2230-p1-08       | Proposed Elevations |

## Sequencing of works

A logical sequence of events is to be observed and shall be phased as follows:

Table 5: Sequencing of works

| Stage    | Event   |
|----------|---|
| Stage 1. | Pre-commencement site meeting.  |
| Stage 2. | Undertake and complete demolition of existing site features (if applicable) |
| Stage 3. | Undertake and complete construction works                                   |
| Stage 4. | Removal of all machinery and materials from the site.                       |
| Stage 5. | Site completion and sign-off from Project Arboriculturalist.                |

## Protective Measures

The protected area is sacrosanct and will not be invaded by the storage of materials, the mixing of concrete or other products, the access of machinery, equipment, or pedestrians, or any other way disturbed by construction activity.

The existing site boundary measures are to be retained for the duration of the development. If, for any reason, the existing boundary measures are not to be used, protective barrier fencing is to be installed along the line of the boundaries and is only to be removed upon the written permission of the Project Arboriculturist upon the completion of the development or immediately before the installation of the permanent boundary measures.

No equipment, vehicles, or plant shall operate within the construction exclusion zone. Booms, hoists, and rigs should be kept as far away from the canopies of retained trees as possible at all times. Where it is necessary to operate within 5m of a tree canopy, it will be done with the utmost caution and under the control of a banksman. Damage to trees will be considered a breach of this Tree Protection Plan and Arboricultural Method Statement, which in turn could be a breach of planning permission.

### Construction Exclusion Zone

A construction exclusion zone (CEZ), as designated by the protective barrier fencing, is an area where there is to be no construction activity. Access to the area for construction personnel or machinery is strictly prohibited unless detailed in the tree protection plan, and there is no scope for materials or waste storage, welfare facilities, etc. There may be some construction activities planned for these areas (e.g. the installation of service trenches) these activities will be undertaken under the direct supervision of the Project Arboriculturalist.

### Protective Barrier Fencing

Protective barrier fencing should be appropriate for the intensity and proximity of the development to protect trees where development activity is nearby.

The protective barrier fencing will be fixed with signage denoting the words “tree protection area” at 5.0m intervals. See Appendix 4: Tree Protection Notice

Default Specification: The fence will comprise either a 2.4m wooden site hoarding or a 2.3m high scaffold framework, well-braced to resist impacts. The uprights will be spaced at a maximum of 3.0m intervals and driven into the ground by a minimum of 600mm. Standard anti-climb welded mesh panels will be securely fixed to each other with at least two scaffold clamps and to the scaffold framework with wire.

Secondary specification: The fence will comprise 2m tall welded mesh panels on rubber or concrete feet. The panels are to be joined together using a minimum of two anti-tamper couplers installed so that they can only be removed from inside the fence. The panels will be supported on the inner side by stabiliser struts, which will be attached to a base plate and secured with ground pins.

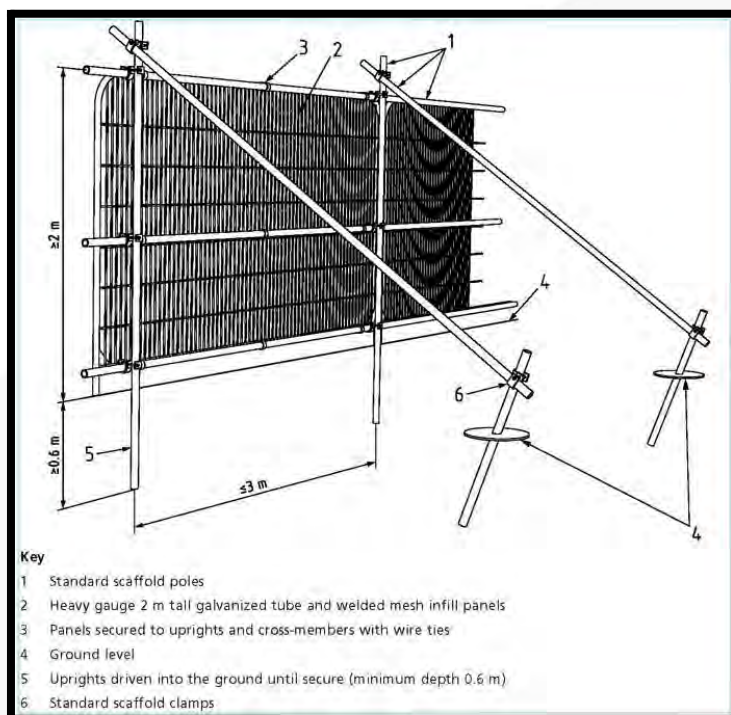


Figure 3: Default specification for protective barrier fencing (BS5837)

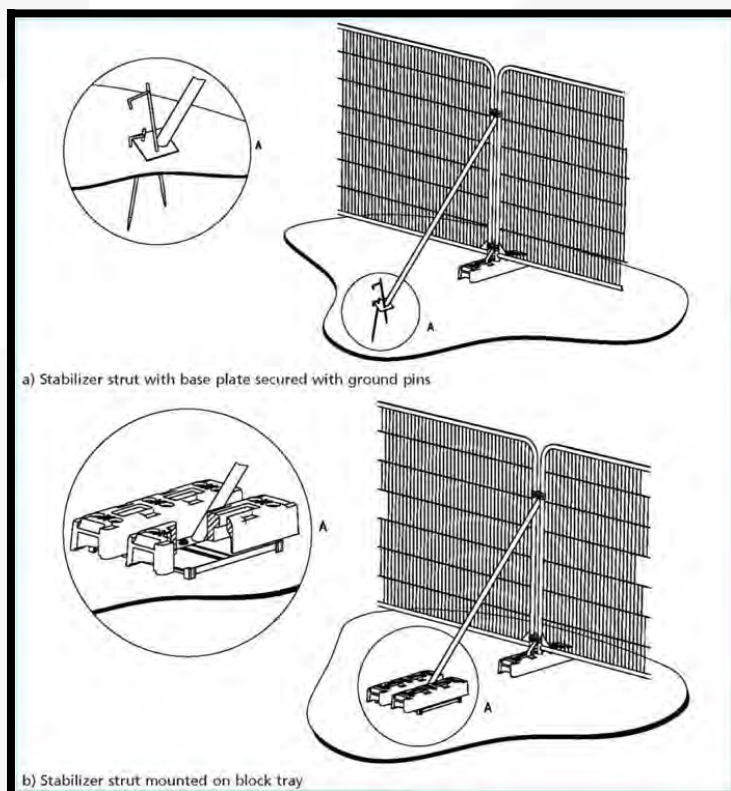


Figure 4: Example of protective barrier fencing with above-ground stabilising system (BS5837)

## Ground Protection

The existing hard surfacing within the RPAs of retained trees provides passive protection against compaction to the underlying soil and, therefore, must be retained for the duration of the project. If this is removed, it shall be done so under direct supervision of the Project Arboriculturalist and replaced with suitable ground protection, capable of withstanding the likely loading for the site.

New temporary ground protection will be capable of supporting any traffic entering or using the site without distorting or compacting the underlying soil.

Where the Project Engineer determines that any hard surfacing is not adequate protection from any expected loading, ground boarding is to be installed to the engineer's specification on top of the hard surfacing within the root protection areas of retained trees.

Where machinery will be stored or used on the ground boarding within the RPAs of retained trees, an impervious barrier and/or bunding to prevent oils, fuel, or chemicals from leaching into the soil within or adjacent to the RPAs is to be installed.

*Note: The ground protection might comprise one of the following:*

- a) for pedestrian movements only, a single thickness of scaffold boards placed either on top of a driven scaffold frame to form a suspended walkway or on top of a compression-resistant layer (e.g. 100mm depth of woodchip), laid onto a geotextile membrane;
- b) for pedestrian-operated plant up to a gross weight of 2t, proprietary inter-linked ground protection boards placed on top of a compression-resistant layer (e.g. 150mm depth of woodchip), laid onto a geotextile membrane;
- c) for wheeled or tracked construction traffic exceeding 2t gross weight, an alternative system (e.g. proprietary system or pre-cast reinforced concrete slabs) to an engineering specification designed in conjunction with arboricultural advice to accommodate the likely loading to which it will be subjected.

For any situations other than those described in a) or b) (as above), the ground boarding is to be designed by a suitably qualified person to an engineering specification in conjunction with arboricultural advice to be suitable for supporting the expected loading to be placed upon it.

In all cases, the objective of the ground boarding is to avoid compaction of the soil beneath so that tree root functions remain unimpaired.

Due to the various sizes of demolition and construction plant available and the potential requirements for material storage within the site, the final specifications for the ground boarding must be designed and supplied to the Project Arboriculturalist for their approval by the Project Engineer a minimum of ten (10) working days before its installation.

## Demolition

Before the demolition of the existing site features, all tree works are to have been completed, tree protection measures are to be in place as per Tree Protection Plan document (Arbtech TPP 01) and have been signed-off, and a copy of the demolition method statement submitted and approved by the Project Arboriculturist to ensure that there is no conflict with this Arboricultural Method statement.

### **Structures / Buildings / Walls**

Demolition of the existing site features (if applicable) are to be taken down so that all debris and materials fall outside the RPAs and away from the canopies of all retained trees.

### **Existing Underground Services**

Existing services within the site should be retained wherever possible. Where existing services within RPAs of retained trees require upgrading, the utmost care must be taken to minimise disturbance. Trenchless techniques should be employed where feasible, and open excavations should be considered only where necessary.

## Construction

Before the proposed development is constructed, a copy of the construction method statement will be submitted and approved by the Project Arboriculturist to ensure that it does not conflict with this Arboricultural Method Statement.

## Prohibition

- Mechanical digging or scraping is not permitted within a defined root protection area or areas cordoned off by protective barrier fencing.
- No access will be permitted within the protected areas;
- No materials, equipment or debris will be stored within any of the fenced areas or against the fencing;
- Fires are not permitted within 10m of any vegetation.
- Leaning objects against or attaching objects to a tree is not permitted.
- Machinery, plant, and vehicles are not permitted to be washed down within 10m of vegetation.
- Chemicals and materials are not to be transported, stored, used, or mixed within a root protection area or areas cordoned off by protective barrier fencing.
- Cement silos and mixing sites are to be situated within a bunded area to prevent spillage/leaking of chemicals harmful to trees. These areas are to be sited well clear of protected trees.
- Refuelling of plant or machinery is prohibited within 10m of the construction exclusion zones.
- An allowance must be made for sloping ground so that damaging materials such as concrete washings, mortar, or diesel oil cannot run towards trees.
- Where machinery is to be used within 5m of retained tree canopies, a banks man will be required at all times while setting up, moving, or operating within this distance of retained tree canopies.
- All caustic material and chemicals must be stored well clear of protected areas and preferably on lower ground if slopes are present or within a bonded area to prevent spills or leaks from entering the ground.



## Site Management

The Site Manager will be responsible for briefing and inducting all personnel who will be working on any stage of this development, especially those who will be working within or adjacent to the canopies or RPAs of retained trees, and will make them aware of and provide a copy of this Arboricultural Method Statement (Arbtech AMS 01) and Tree Protection Plan (Arbtech TPP 01); this is to include but not exclusively the movement and or operation of plant, excavations, unloading deliveries, mixing and or pouring of cement and concrete.

The Site Manager will be responsible for the day-to-day running and protection of all retained trees and for liaising with the Project Arboriculturalist about any tree-related matters and before any works that may or will affect the RPAs or canopies of retained trees; this is to include but not exclusively the movement and or operation of plant, excavations, unloading deliveries, mixing, pouring and storage of all caustic materials that may cause harm to retained trees.

The Site Manager will document any incidents of damage to retained trees or tree protection measures. Then, the Site Manager will report these incidents to the Project Arboriculturalist immediately and ensure that works within this area cease until the Project Arboriculturalist has had an opportunity to inspect the damage and, where appropriate, agree on a mitigation plan with the Local Planning Authority Tree Officer.

The Site Manager may designate another person to take charge of the briefing and inducting process of new site personnel or visitors in his absence.

If the Site Manager is replaced or is absent from the site for more than three consecutive working days, the Project Arboriculturalist will be informed, and a new pre-start meeting will be held with the new or acting Site Manager.

It is the responsibility of the Site Manager to ensure that the planning conditions attached to any granted planning consent are adhered to at all times and that a monitoring regime and supervision of any works within or adjacent to the RPAs are adopted.

If pruning works other than those previously approved are required at any time, permission must be sought from the Local Authority Tree Officer. Once permission is granted, they are to be carried out by a suitably qualified person in accordance with BS3998:2010 Tree work—Recommendations.

## Services

Detailed drawings of proposed underground services are not available at this time; hence it is not possible to identify any specific potential impacts associated with the scheme at this stage.

Existing services within the site will be retained wherever possible. Where existing services within RPAs require upgrading, the utmost care must be taken to minimise disturbance. Where feasible, trenchless techniques are to be employed, and only where necessary should open excavations be considered.

Where new services are to be introduced into the site, they will be located outside of RPAs so that they do not interfere with tree roots. If any excavations are required within the RPAs, all trenches are to be excavated by hand radially to the tree trunks under the direct supervision of the Project Arboriculturalist and carried out under NJUG guidelines.

The final positions of any proposed services will be verified and approved by the Project Arboriculturalist and Local Authority Tree Officer before implementation.

### **New Underground services**

Trenching for the installation of underground services and drainage routes could sever any roots that may be present and, as such, adversely affect the tree's health. For this reason, particular care will be taken in routing and installation methods of all underground services. All underground services and drainage routes will be located so that no excavations are required within RPAs.

Where underground services have been impossible to prevent from passing through RPAs or within proximity to trees, these sections are to be installed in one of three ways and under the direct supervision of the Project Arboriculturalist and in accordance with the National Joint Utilities Group guidelines (NJUG 4).

### **Trenchless Techniques**

There are three main types of trenchless techniques: guided and unguided boring and pipe replacement by lining or bursting. These techniques allow for the installation, maintenance, or renewal of underground services without disturbing soil in which roots are likely to grow. Starting and receiving pits for the boring machinery are to be located outside of the RPAs of any retained trees, with the bore depth maintained at a minimum depth of 600mm below the existing ground level. Techniques involving external lubrication of the equipment shall use only water, as other lubricants (e.g., oil, bentonite, etc.) could contaminate the soil.

### **Broken Trench – Hand Dug**

This technique combines both trenchless techniques and manual excavation, where excavation is unavoidable. Excavations will be limited to where there is clear access around and below the roots. All trenches shall be excavated by hand with the same precautions taken as for manual excavation. The open section of the trench will only be large enough to allow access for linking to the next section.

## Manual Excavation

Excavation within RPAs will be undertaken by hand under the direct supervision of the Project Arboriculturist to the required depth of the foundations or to a minimum of 600mm deep of any excavation, whether for proposed foundations, hard surfacing, or underground services. The Project Arboriculturist will determine the total depth of the manual excavation while on site.

The soil is to be loosened with a fork or pickaxe and then cleared with an air spade, air vac, or shovel. The Project Arboriculturist will cleanly sever any roots found with either a hand saw or secateurs.

The Project Arboriculturist shall cleanly sever any roots found with a diameter of less than 25mm. Roots of 25mm and above shall be excavated around without damaging them; the Project Arboriculturist shall decide if it is feasible or necessary to retain the root; if not, it shall be severed.

The edge of the excavation closest to the trees will be covered with damp hessian to prevent soil collapse or contamination by concrete.

The soil beneath the depth may be sheet piled, regular piled, or excavated deeper. Machinery may be used for this, provided that it is situated outside of the RPAs of retained trees or has appropriate ground protection in place to move around and work upon.

## Monitoring and Supervision

Where trees have been identified within this Arboricultural Method Statement (Arbtech AMS 01) and Tree Protection Plan (Arbtech TPP 01) for retention, there will be an auditable system of arboricultural monitoring. This is to extend to arboricultural supervision whenever demolition or construction activity is to take place within or adjacent to any canopy or RPA.

The development's tree protection measures are to be monitored, and all demolition and construction works are to be undertaken within or adjacent to the RPAs of retained trees. The Project Arboriculturist will supervise the work and record and report observations to the Council at appropriate intervals.

## Pre-commencement site meeting

Before the commencement of any works or machinery and materials arriving on site, a pre-commencement site meeting involving the Project Arboriculturist, Landowner or Agent, Site Manager, contractors and Engineer (as appropriate) and the relevant Local Planning Authority Officers will be held to ensure that all aspects of the Arboricultural Method Statement and Tree Protection Plan are understood and for all parties to swap contact details. See Appendix 5: Contact Details.

## **Supervision**

The Project Arboriculturist will be required to attend the site to directly supervise all demolition and construction works that are to be undertaken within or adjacent to the RPAs of all retained trees and will be advised a minimum of 72 hours before the commencement of any works that require his attendance; these will include:

1. Pre-commencement site meeting;
2. Location of protective measures (if applicable);
3. Any excavations within and immediately adjacent to RPAs, including foundations, hard surfacing, or underground services (a non-exhaustive list);
4. Removal of protective measures (if applicable) and sign-off.

## **Completion meeting**

Once all construction works have been completed and all materials and machinery have been removed from the site, the Project Arboriculturalist shall be informed and will invite the Local Authority Tree Officer to meet on-site to discuss the process, final remedial works that may be required and sign the development off so that the protective measures may be removed.

## Arboricultural Monitoring & Supervision Sign-Off Checklist

62 Station Road, Hayes, London, UB3 4DF

| Tree Number | Task  | Date Completed | Signed (Arboriculturalist) | Signed (Site Manager) |
|-------------|---|----------------|----------------------------|-----------------------|
| All         | Pre-commencement site meeting   |                |                            |                       |
| All         | Sign-off of the location and specification of the protective measures (if applicable) |                |                            |                       |
| All         | Completion of demolition  |                |                            |                       |
|             | Additional excavations (if required)  |                |                            |                       |
| All         | Completion of construction  |                |                            |                       |
| All         | Removal of machinery and materials from site  |                |                            |                       |
| All         | Dismantle & removal of protective measures (if applicable)                            |                |                            |                       |
| All         | Sign-off from Project Arboriculturist   |                |                            |                       |

## Appendices

The following documents were released to the Client as appendices to this report:

- Appendix 1: Tree Schedule
- Appendix 2: Arboricultural Impact Assessment
- Appendix 3: Tree Protection Plan
- Appendix 4: Tree Protection Notice
- Appendix 5: Contact Details

If you require clarification of the information contained herein, please do not hesitate to contact us via 01244 661170.

Yours Sincerely,

A handwritten signature in blue ink, appearing to read "Phil Gower".

**Phil Gower** Dip Arb Lv4 (ABC) MArborA

Arboricultural Consultant

07842 416721

philgower@arbtech.co.uk

A large, light gray, stylized graphic of a house roof with a chimney, spanning the width of the page and partially behind the text.

## Appendix 1: Tree Schedule



## BS5837:2012 Tree Survey

## Arbtech Consulting Ltd.

Client: Sandeep Grewal  
 Project: 62 Station Road Hayes London UB3 4DF  
 Survey Date: 10/07/2024  
 Surveyor: Rob Dennis

Unit 3, Well House Barns  
 Chester road  
 Chester  
 Cheshire  
 CH4 0DH  
 Phone: 01244661170

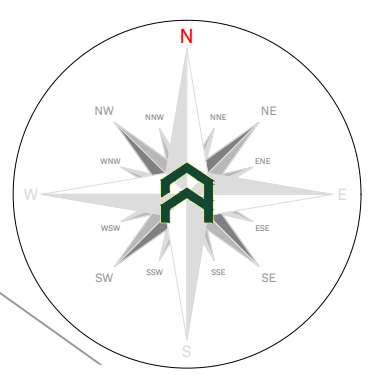
| Tree and Tag No<br>Species      | Hght<br>(m) | Stems         |           | Crown         |              | Age | RP<br>A (m²)<br>R (m) | Phys<br>Condition | Structural<br>Condition | Preliminary Recommendations |  | Cat<br>ERC |   |
|---------------------------------|-------------|---------------|-----------|---------------|--------------|-----|-----------------------|-------------------|-------------------------|-----------------------------|--|------------|---|
|                                 |             | No            | Ø<br>(mm) | Spread<br>(m) | Clear<br>(m) |     |                       |                   |                         | Survey Comment              |  |            |   |
| G1                              |             |               |           |               |              |     |                       |                   |                         |                             | Estimated Measurements   |            |   |
| Various                         | 10          | 1             | 220       | N             | 2            | 2   | SM                    | A: 21.9           | Good                    | C: Good                     |  | C.2        |   |
| <i>See comments for details</i> |             |               |           | E             | 2            | 2   |                       | R: 2.64           |                         | S: Good                     | Off-site group, no access to the trees within a gated private estate. Not visually inspected from the ground. The group appears to be growing on a small section of land against the site fence line, which is at street level. Consisting of but not limited to sycamore and elder. All dimensions estimated.   | 10+ yrs    |   |
|                                 |             |               |           | S             | 2            | 2   |                       |                   | B: Not visible          |                             |  |            |   |
|                                 |             |               |           | W             | 2            | 2   |                       |                   |                         |                             |  |            |   |
| G2                              |             |               |           |               |              |     |                       |                   |                         |                             | Estimated Measurements   |            |   |
| Various                         | 10          | 1             | 330       | N             | 2            | 2   | SM                    | A: 49.3           | Good                    | C: Good                     |  | C.2        |   |
| <i>See comments for details</i> |             |               |           | E             | 2            | 2   |                       | R: 3.96           |                         | S: Fair                     | Off-site group, growing on a southerly sloping bank, down to the towpath on the canal side. Consisting of but not limited to, sycamore and apple trees. The top of the bank is approximately 2.5 meters below the current site ground level, this is street level. The bottom of the bank the trees are growing on is at the towpath level, approximately 4 meters below street level. Dimensions for the stem taken from the largest stem accessible on the bank. All dimensions estimated. | 10+ yrs    |   |
|                                 |             |               |           | S             | 2            | 2   |                       |                   | B: Fair                 |                             |  |            |   |
|                                 |             |               |           | W             | 2            | 2   |                       |                   |                         |                             |  |            |   |
| T1                              |             |               |           |               |              |     |                       |                   |                         |                             | Estimated Measurements   |            |   |
| Silver Birch                    | 15          | 1             | 300       | N             | 5            | 2   | EM                    | A: 40.7           | Good                    | C: Good                     |  | B.2        |   |
| <i>Betula pendula</i>           |             |               |           | E             | 5            | 2   |                       | R: 3.59           |                         | S: Not visible              | Off-site tree approximately 20 meters from the north west corner of the site building. All dimensions are estimated.   | 20+ yrs    |   |
|                                 |             |               |           | S             | 5            | 2   |                       |                   | B: Not visible          |                             |  |            |   |
|                                 |             |               |           | W             | 5            | 2   |                       |                   |                         |                             |  |            |   |
|                                 |             |               |           |               |              |     |                       |                   |                         |                             |  |            |   |
| Age Classifications:            | N           | Newly planted | EM        | Early Mature  |              |     |                       | Condition:        | C                       | Crown                       | Stems:   | Ø          | Diameter  |
|                                 | Y           | Young         | M         | Mature        |              |     |                       |                   | S                       | Stem                        |  | (Eq)       | Equivalent stem diameter using BS5837:2012 definition |
|                                 | SM          | Semi-mature   | OM        | Over Mature   |              |     |                       |                   | B                       | Basal area                  | ERC:   |            | Estimated Remaining Contribution                      |



## Appendix 2: Arboricultural Impact Assessment

---





Indicative  
only

#### Tree Categories

Trees are categorised in accordance with the cascade chart in Table 1 of the British Standard BS 5837:2012 'Trees in relation to design, demolition and construction - Recommendations'.

Category 'U' - Trees in such condition that they cannot realistically be retained as living trees in context of the current land use for longer than 10 years.

Category 'A' - Trees of high quality with an estimated remaining life expectancy of at least 40 years.

Category 'B' - Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.

Category 'C' - Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm.

#### Root Protection Area

In order to avoid damage to the roots or rooting environment of retained trees, the Root Protection Areas (RPAs) should be plotted around each of the category 'A' and 'B' trees. This is a minimum area in m<sup>2</sup> which should be left undisturbed around each retained tree.

The RPA is calculated using the British Standard BS 5837:2012 'Trees in relation to design, demolition and construction - Recommendations'.

The calculated RPA is capped to 707m<sup>2</sup>, which is the equivalent to a circle with a radius of 15m. Where there appears to be restrictions to root growth the root protection area is reshaped to more accurately reflect the likely distribution of the roots.

#### Tree Survey Report

Please refer to Arbtch Consulting Ltd. Tree Survey Report and Tree Schedule for full details on all surveyed trees, hedgerows and major shrub groups.

All trees were surveyed and categorised in accordance with the guidance as set out in the British Standard BS5837:2012 'Tree in relation to design, demolition and construction - Recommendations'.

#### Arboricultural Impacts

| Impacts  | Nos. of trees |
|--|---------------|
| Trees to be removed  | 0             |
| Groups / Hedgerows to be removed (partial removal of groups) | 0 (0)         |
| Trees with proposed excavations into RPAs                    | 0             |
| Groups / Hedgerows with proposed excavations into RPAs       | 0             |
| Trees that will require pruning                              | 0             |
| Groups / Hedgerows that will require pruning                 | 0             |
| Trees to be transplanted                                     | 0             |
| Groups / Hedgerows to be transplanted                        | 0             |

#### Utility Apparatus

**Underground utility apparatus**

Mechanical trenching for the installation of underground apparatus and drainage sewers any roots present and can change the local hydrology in a way that adversely affects the health of the tree. For this reason, particular care should be taken in the root and methods of installation of all underground apparatus. Wherever possible, apparatus should be routed outside of RPAs. Where this is not possible, it is preferable to keep apparatus together in common ducts. All inspection chambers should be sited outside of the RPAs.

Where underground apparatus is to pass within the RPAs, detailed plans showing the proposed route should be drawn up in conjunction with the project arboriculturist. In such cases trenchless insertion methods should be used with entry and retrieval pits being located outside of the RPAs. If this option is not feasible and providing roots can be retained and protected excavations should be undertaken using hand held tools (air-spade, forks, shovels) or a combination of trenchless and manual excavation (broken trench).

Any design and installation should be undertaken in accordance with the National Joint Utilities Guidelines (NJUG).

**Above-ground utility apparatus**

Above-ground apparatus (including CCTV cameras and lighting) should be sited to avoid the need for detrimental tree pruning, as such the current and future crown size of the tree should be assessed.

Tree branches can be pruned back with care to provide space, though it is not appropriate for repetitive and significant tree work to be an initial design solution unless this is a suitable management outcome for the tree. Any pruning should be undertaken in accordance with BS5837:2012.

#### Arboricultural Method Statement

All tree work must be undertaken in accordance with British Standards. Please refer to the Tree Schedule, Arboricultural Method Statement & Tree Protection Plan, for full details of all surveyed trees and how the development may be implemented without detriment to retained trees.

Rev: -- Date: --/--/-- Notes: N/A



Unit 3, Well House Barns, Chester, CH4 0DH  
https://arbtch.co.uk, 01544 651172

Project:

62 Station Road,  
Hayes  
London,  
UB4 3DF

Client:

Sandep Grewal

Drawing:

Arboricultural Impact Assessment

Based on:

2330-p1-01

Drawing No:

Arbtch AIA 01

Rev:

--

Date:

July 2024

Scale:

1:100 @ A0

Drawn:

PDG

Key:

|                       |                       |               |     |
|-----------------------|-----------------------|---------------|-----|
| Existing Site Layout: | Proposed Site Layout: | Tree Numbers: | T01 |
| Trunks:               | Tree Canopies:        | RPAs:         |     |
| Category 'U' Trees:   | Category 'C' Groups:  |               |     |

All dimensions should be checked on site. No dimensions are to be taken from this drawing. Please refer to the appropriate local authority's Local Planning Authority for all planning and building regulations. This drawing is designed to reflect the principle of the layout or design only, and relates only to the information provided herein. It is not to be used as a basis for any other design or construction. No liability is accepted for any errors or omissions. The drawing was produced in colour - reproductions may not be used as a basis for any other design or construction. The drawing was produced in colour - reproductions may not be used as a basis for any other design or construction.

Arbtch Consulting Ltd. 2024





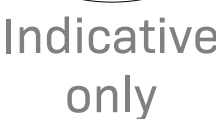


---

## Appendix 3: Tree Protection Plan

---





A construction exclusion zone (CEZ) is a designated area where there is to be no construction activity what-so-ever. Access to the area for construction personnel or machinery is strictly prohibited and there is no scope for materials or waste storage etc.

To be erected prior to the commencement of all works on site, and retained in place throughout construction.

**Default specification:** To comprise either 2.4m wooden site hoarding; or a 2.3m high scaffolding framework comprising of vertical and horizontal framework, well braced to resist impacts, with uprights to be spaced at a maximum of 3.0m intervals and driven into the ground by a minimum of 600mm. On to this, standard anti-climb welded mesh panels are to be securely fixed to each other with at least two scaffold clamps and to the scaffold.

**Secondary Specification:** To comprise of 2m tall welded mesh panels on rubber or concrete feet. Panels are to be joined together using a minimum of two anti-tamper couplers, installed so that they can only be removed from inside the fence. The panels should be supported on the inner side by stabilizer struts, which should be attached to a base plate and secured with ground pins.

All weather notices should be erected at regular intervals on the weld mesh panels with words such as "Construction exclusion zone - Keep out".

Do not move this fence

(TOWN & COUNTRY PLANNING ACT 1990)  
TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY PLANNING CONDITIONS  
AND/OR ARE THE SUBJECT OF A TREE PRESERVATION ORDER.  
CONTRAVENTION OF A TREE PRESERVATION ORDER MAY LEAD TO CRIMINAL  
PROSECUTION  
  
ANY INCURSION INTO THE PROTECTED AREA MUST BE WITH THE WRITTEN  
PERMISSION OF THE LOCAL PLANNING AUTHORITY



The existing hard surfacing within the RPA of retained provides passive protection against compaction to the underlying soil and therefore must be retained for the duration of the project. If this removed, it shall be done so under direct arboricultural supervision and replaced with suitable ground protection, capable of withstanding the likely loading for the site.

New temporary ground protection should be capable of supporting any traffic entering or using the site without being distorted or causing compaction of underlying soil.

*Note* The ground protection might comprise one of the following:

a) for pedestrian movements only, a single thickness of scaffold boards placed either on top of a driven scaffold frame, as to form a suspended walkway, or on top of a compression-resistant layer (e.g. 150mm depth of woodchip), laid onto a geotextile membrane;

b) for pedestrian-operated plant up to a gross weight of 2t, a proprietary inter-linked ground protection boards placed on top of a compression-resistant layer (e.g. 150mm depth of woodchip), laid onto a geotextile membrane;

c) for wheeled or tracked construction traffic exceeding 2 t gross weight, an alternative system (e.g. proprietary system or pre-cast reinforced concrete slabs) to an engineering specification designed in conjunction with arboricultural advice, to accommodate the likely loading to which it will be subjected.

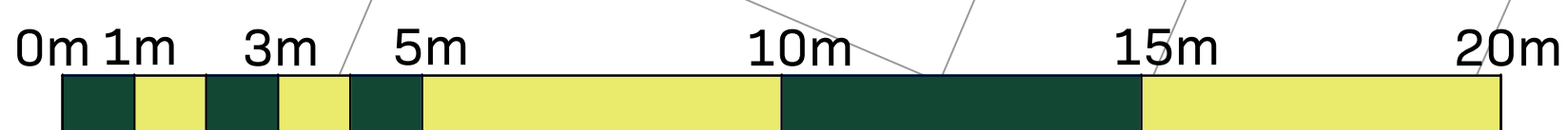
For situations other than those described in a) or b), the ground boarding is to be designed by a suitably qualified person to an engineering specification in conjunction with arboricultural advice to be able to support the expected loading to be placed upon it.

In all cases, the objective of the ground boarding is to avoid compaction of the soil beneath, so that tree root function remains unimpaired.

The arboricultural consultant will be required to attend site to directly supervise all demolition and construction works that have to be undertaken within the root protection areas. This will include:

- 1) Pre-commencement site meeting;
- 2) Location of protective measures (if applicable);
- 3) Any excavations within and immediately adjacent to RPAs, including foundations, hard surfacing, or underground services (a non-exhaustive list);
- 4) Removal of protective measures (if applicable) and sign-off.

Please refer to Arbretech Consulting Ltd. Tree Schedule and Arboricultural Method Statement, for full details on all surveyed trees and how all aspects of the development may be implemented without detriment to retained trees.







---

## Appendix 4: Tree Protection Notice

---

# Tree Protection Area **KEEP OUT**

Do not move this fence

**(TOWN & COUNTRY PLANNING ACT 1990)**

**TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY PLANNING CONDITIONS  
AND/OR ARE THE SUBJECT OF A TREE PRESERVATION ORDER.  
CONTRAVENTION OF A TREE PRESERVATION ORDER MAY LEAD TO CRIMINAL  
PROSECUTION**

**ANY INCURSION INTO THE PROTECTED AREA MUST BE WITH THE WRITTEN  
PERMISSION OF THE LOCAL PLANNING AUTHORITY**



Unit 3, Well House Barn, Chester Road, Chester, CH4 0DH  
<https://arbtech.co.uk> - 01244 661170





---

## Appendix 5: Contact Details

---

| Name | Position                | Company                 | Contact   |
|------|-------------------------|-------------------------|---|
|      | Client                  |                         |   |
|      | Agent / Project Manager |                         |   |
|      | Tree Officer            |                         |   |
|      | Project Arboriculturist | Arbtech Consulting Ltd. | 01244 661170<br><a href="https://arbtech.co.uk">https://arbtech.co.uk</a> |
|      | Site Manager            |                         |   |
|      | Main contractor         |                         |   |
|      |                         |                         |   |
|      |                         |                         |   |

## Document Production Record

| Document number | Editor     | Signature   | Position                  | Issue number | Date     |
|-----------------|------------|---|---------------------------|--------------|----------|
| Arbtech AMS 01  | Phil Gower |  | Arboricultural Consultant | 01           | 19/07/24 |

### Report Limitations

Arbtech Consulting Ltd has prepared this report for the sole use of the above-named Client/Agent in accordance with our terms of business, under which our services were performed. No other warranty, expressed or implied, is made as to the professional advice included in this report or any other services provided by us. This report may not be relied upon by any other party without the prior and express written agreement of Arbtech Consulting Ltd. The assessments made assume that the sites and facilities will continue to be used for their current purpose without significant change. The conclusions and recommendations contained in this report are based upon information provided by others and upon the assumption that all relevant information has been provided by those parties from whom it has been requested. Information obtained from third parties has not been independently verified by Arbtech Consulting Ltd.

### Copyright

© This Report is the copyright of Arbtech Consulting Ltd. Any unauthorised reproduction or usage by any person other than the addressee is strictly prohibited.