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Consultancy

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Arboricultural Method Statement (AMS) and Tree Protection Plan (TPP)

In accordance with BS 5837:2012 Trees in relation to design, demolition and construction. Recommendations. An Arboricultural Method Statement and Tree Protection Plan derived from the Arboricultural Implication Assessment ref 220910 AIA

Address/ Project	Project ERB British Museum Great Russell Street, London WC1B 3DG
Ref No:	220910 AMS
Client:	William Horton Capital Planning & Programme Management The British Museum Great Russell Street, London WC1B 3DG
Date instructed:	October 2022
Instructed by:	William Horton Capital Planning & Programme Management
Documents referenced:	Tree Survey and Tree Constraints Plan Ref. 220910 Survey Arboricultural Implication Assessment Ref. 220910 AIA
Prepared by:	D. Riley & O.R. Booth
Date completed:	December 2022
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ATTACHMENT
Tree Protection Plan – Ref. 220910

1: Introduction

1.1 Aspects dealt with within this Method Statement:

The Arboricultural Method Statement (AMS) is a methodology for the implementation of any aspect of development that has the potential to result in loss of or damage to a tree identified as suitable to be retained.
The AMS takes into consideration construction operations undertaken in the vicinity of the trees. It will deal with such issues as site access, intensity of construction activity, space needed for works, location of temporary storage of materials and location of service runs.
This AMS includes with it a Tree Protection Plan (TPP). The TPP outlines trees to be retained, removed, preliminary location of barriers and type of barrier to be installed. This method statement contains a timetable indicating when and how specific works adjacent to trees should be carried out.
Please note that it will be necessary to incorporate the details of this method statement into an site induction, that this method statement will be provided to all relevant parties and that it will be available for reference at the site office and from the project manager.

1.2 Aspects not dealt with within this Method Statement

Please also refer to Appendix 2.
This report does not deal with issues relating to Subsidence or Heave either as a result of retention or removal of trees. It does not consider the water demands of the trees present to enable decisions as to foundation type and depth. It is considered that such considerations are best dealt with in a different report having liaised with the structural engineer. This can be provided on request.

2. Background Information

2.1 Names and Contact numbers of Parties concerned

Contact Name	Company/ Organisation	Role	Contact details
TBC	Capital Planning & Programme Management The British Museum	Project Manager	TBC
TBC	WRIGHT & WRIGHT ARCHITECTS	Architect	020 7428 9393
TBC	TBC	Contractor	TBC
Oliver Booth	Writtle Forest Consultancy Ltd	Arboricultural Consultant	o.booth@writtleforest.co.uk 01277 355970
TBC	London Borough of Camden	Local Authority Tree Officer	0207 974 4444

2.2 Availability of this Method Statement

The Site Manager and appointed Contractor will each hold a copy of the document, including the Tree Protection Plan. Copies of this document will be made available for contractors visiting site.

3: Supervision and Monitoring

3.1 Monitoring and Supervision

Arboricultural supervisory works and monitoring visits must be confirmed by formal correspondence circulated to all relevant parties, including the council. These records of site visits will provide proof of compliance.

3.2 Site Management

All tree protection measures detailed in this document must be fully understood by all the parties involved in the development. Clarification or modifications to the consented details must be recorded and circulated to all parties in writing. These documents should then form the basis of any supervision arrangements between the Arboricultural Consultant and the proposer, as agreed with the Local Planning Authority where applicable.

It is the Site Manager's responsibility to ensure that the requirements set out within the Arboricultural Method Statement are known and understood by all site personnel. Copies of pertinent documents should be kept on site at all times. The site manager will brief all personnel who may have an impact on any trees and relay specific tree protection requirements.

This methodology should be a part of all site induction procedures and written into appropriate site management documents. The following pertinent points should be explained to all personnel who could have an impact on trees;

1. The specification of the Protective Barriers around retained trees.
2. The requirement for Protective Barriers to be sufficiently robust to prevent incursion by construction activity.
3. Why it is essential that the Protective Barriers remain throughout the works.
4. The importance of the 'exclusion zones' around retained trees.
5. The potential damage caused to trees and new tree planting by compaction of soils and the requirement for ground protection.

4: Schedule of Tree Work

4.1 Tree works to be carried out prior to installation of Protective Barriers

Tree Number	Species	Works required
G2	Elder x2, Cherry + Sorbus	Reduce crowns to the north by up to 1m in line with boundary wall. **Note:** This is a third-party tree, liaison and permission required from owner if access and climbing of tree required to carry out pruning.
T21	Prunus sp.	Reduce crown to the north by up to 0.5m in line with boundary wall. **Note:** This is a third-party tree, liaison and permission required from owner if access and climbing of tree required to carry out pruning.

5: Sequence of Events

Sequence	Brief outline of events	Arboricultural input required
1	Carry out tree work as detailed in section 4.1 above.	Yes – Site visit to check that tree works have been completed satisfactorily.
2	Install Protective Barriers as shown on the Tree Protection Plan (TPP).	Yes - Site visit to check adequacy and location of Protective Barriers.
3	Demolition of existing buildings and construction of the proposed buildings.	Yes – If existing foundations are to be removed within the RPA of T21 Prunus sp.
4	Re-inspection of retained trees.	Yes - Site visit to carry out the inspection of retained tree within one month of the completion of works.

6. Installation of Protective Barriers

The areas requiring the installation of protective barriers prior to commencement of the works are shown as of the TPP. Protective Barriers are to be relocated once the main construction of the proposed dwellings is completed. The relocated Protective Barriers maybe be removed once the access roads/driveways are constructed to allow for soft landscaping to be carried out.

6.1 Arboricultural Consultant Role

1. Review trees, post tree works to check that the works have been completed satisfactorily.
2. Review Protective Barriers to ensure they are installed satisfactorily.

7: Demolition of existing buildings and construction of proposed buildings

7.1 Methodology for the demolition of existing buildings and construction of proposed buildings.

1. All protective barriers will need to be installed as of TPP prior to the commencement of the proposed works.
2. Access to the work area to be from the north via East Road. This will serve as the main access to for the duration of the proposed works.
3. Adjacent to T21 Prunus sp. machinery used for demolition of existing build to be of smallest dimensions suitable for the operation; and located within footprint of structure, demolishing inwards away from the tree using 'top down pull-back method'.
4. Where possible existing foundations located within the RPA of T21 are to be retained in-situ to remove requirement for excavations. If not possible foundations to be removed under Arboricultural Supervision.
5. Removal of existing foundation to be removed using a machine operated breaker with the aid of hand tools.

6. If significant sized roots (>25mm in diameter) or a significant root mass is encountered these are to be retained and protected.
7. Roots (<25mm dia.) encountered will be pruned back with a sharp tool leaving as small as wound as possible. If roots are to be left exposed for a period of longer than 1 hour (dependent on weather conditions), then they are to be protected by wrapping them in hessian.
8. Boundary of foundations to the north must be first lined with a heavy-duty polythene to prevent curing cement leaching into surrounding soils.

7.2 Arboricultural Consultant Role

1. Oversee the removal of existing foundation as required within the RPA of T21 Prunus sp.

8: General Site Conditions and Tree Protection Measures

Storage of Materials

Designated areas for storage of materials and site office will be decided by the Site Manager before any works can commence. Arboriculturist if the storage areas or site office.

Discharge of Contaminants

No materials that are likely to have an adverse effect on tree health, such as oil, bitumen or cement will be discharged within the RPA of any of the trees to be retained. It is advised that the disposal of all waste materials is carried out in an appropriately sustainable fashion.

Contingency Plans

Should there be any contamination of soils either within or adjacent to the RPA these should be dealt with as quickly as possible with a proprietary emergency clean up kit. The situation should then be assessed as to whether it is appropriate to remove soils. An Arboriculturist should be consulted before a decision is made. The protection barriers erected should be able to be removed relatively easily to access the area in event of an emergency.

Access to the area of proposed works

Main access to the site is understood to be from the north via East Road. It is considered that these would be the only access point into the site for the purposes of carrying out the development as proposed. If there are any other proposed access points into the site, this should be agreed prior to use with the Arboriculturist.

Cranes and Lifting Equipment

All lifting equipment, including cranes if utilised, should be so positioned that they operate without contact with the retained trees. Care must be taken so that the arc of the boom fitted to the lifting equipment is sufficiently clear of the retained trees.

Boundaries/ Scope of the Site

The appointed Arboricultural Supervisor must be consulted if the boundaries of the site are extended or if excavations/ storage/ construction related to this development is to be carried out on other parts of the wider area, outside of the development site as indicated on the Tree Protection Plan.

Appendix 1: Protective Barriers

Before the commencement of any works on site (other than those set out in the schedule of tree works, contained in this document), protective vertical barriers must be erected. The location of the barriers is illustrated on the Tree Protection Plan.
The barriers are to be erected to exclude construction activity in the RPAs of retained trees.
The barriers will remain in place until completion of the main construction phase and then only removed with the agreement of the consulting Arboriculturist.
Other than works detailed within this method statement or approved in writing by the local planning authority, no works shall take place within the exclusion zones defined by the protective fencing. No vehicles will be allowed to enter areas to be protected by the barriers.

Specification of Protective Barriers

The barriers should be fit for purpose of excluding construction activity. At this site, it is considered sufficient to install two-metre-tall welded mesh or solid panels on concrete feet (please refer to figures 1a and 1b. The panels (Heras type) should be joined together using a minimum of two anti-tamper couplers and installed so they can only be removed from the inside. The distance between the couplers should be at least 1 metre and should be uniform throughout the protective barrier.

The panels should be supported on the inner side by angled stabilizer struts installed every 3.5 metres at the join of the Heras panels. Both the concrete feet and the stabiliser strut base plates should be secured with ground pins. Where barriers are to be erected on retained hard surfaces or it is otherwise unfeasible to use ground pins stabilizer struts should be mounted on a block tree.
The specification of the temporary barriers will be installed in accordance with the specification as discussed in the paragraph above and referenced in figures 1a and 1b.
Notices will be affixed to all protective fencing 'Construction exclusion zone - Keep Out' (please refer to figure 2.

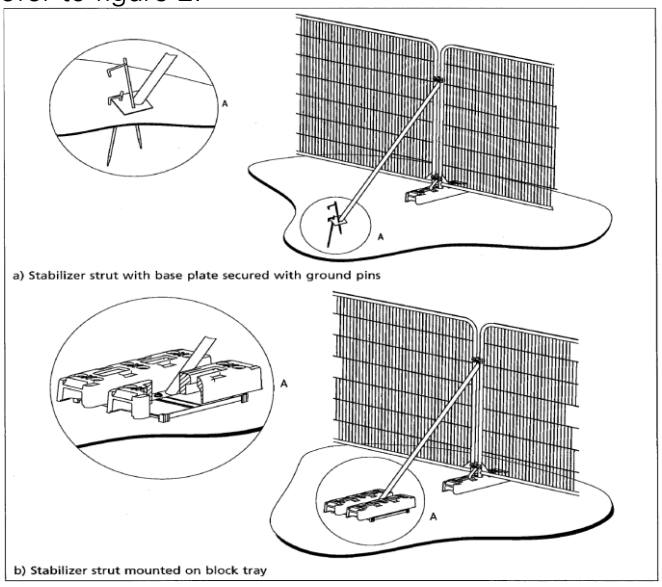

Figure 1a and 1b - Diagram of protective barrier taken from BS 5837 (2012)

Figure 2 - Example of suitable warning sign affixed to protective barrier

Appendix 2: Limitations of Arboricultural Method Statement

Limitations of the Report

Please also refer to sections 1.2 and 1.3 at the beginning of this report.

- The report is based on information provided by third parties and the specifications and recommendations is dependent upon information provided therein.
- This report does not consider the possible implications to any present or future built structures other than those considered within the report.

Findings of the Survey and the Report

- Validity, accuracy and findings of the report will directly relate to the accuracy of information provided at the time of the tree survey.

Timing of the Survey and the Report

- The considerations/ findings in this method statement are valid for one year.
- Such considerations/ findings will become invalid if any building works are undertaken, soil levels are altered or tree work undertaken outside of the scope of works as detailed and presented at the time of compiling this report.
- If there are any alterations to either the property or soil levels, or if tree works are carried out, it is recommended that a new tree report is undertaken.

Trees in relation to other Properties:

- This report/survey only considers the trees in relation to the site as identified.
- It does not comment on possible effects of trees on neighbouring properties, including in relation to subsidence or heave, or with regard to possible hazards presented by trees surveyed.
- Neighbouring owners of trees that are identified as posing a possible risk to the property/site in question should seek their own advice as to possible effects of the recommendations given within this report.
- Damage to, or possibility of damage to, any other structure that is not referred to within the report is not considered unless otherwise specified. This includes both neighbouring structures and any other structure on the property.

Trees in Relation to Subsidence, Heave and Direct damage

- This report does not deal with issues relating to subsidence or heave in relation to any built structures and surrounding vegetation whether the structure or vegetation falls within the boundaries as considered or lies beyond the boundaries.
- The report does not consider issues relating to subsidence or heave in relation to any proposed built structures or future vegetation whether within the boundaries as considered or beyond the boundaries
- It is prudent to consider the effects of heave on any property if trees are removed.
- Similarly, the issue of direct damage (when the roots of a tree have physical contact with a structure) is not considered within this report.

Trees subject to statutory controls:

- If the trees are covered by a Tree Preservation Order or are located in a conservation area it will be necessary to consult the local authority before any pruning works, other than certain exemptions, can be carried out.
- The works specified above are necessary for reasonable management and should be acceptable to the local authority. However, tree owners should appreciate that the local authority may take an alternative point of view and have the option to refuse consent.

Trees are subject to changes outside man's control:

- Trees are living organisms subject to changes outside man's control. Trees and environment alter with the seasons it is as well to inspect trees whilst in full leaf and when out of leaf.
- If there are any harsh or unexpected weather conditions, or heavy storms it is also prudent to inspect trees.
- Changes to ground water conditions will affect the root growth of a tree. Such changes are not always the result of man's influence and other factors may be involved.

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