



Arboricultural Method Statement

Site: Teil House, 10D Kidderpore Avenue, NW3 7SU

Date: 26/05/2021 | Revision: 3 | CCL ref No: 10332

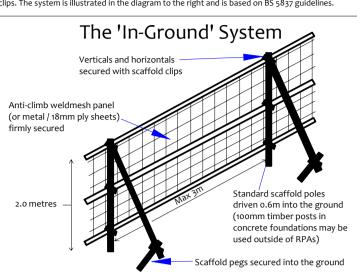
Tree Protection Barriers

The purpose of tree protection barriers is to keep construction activity away from Restricted Activity Zones or Construction Exclusion Zones. They should be appropriate to the nature and proximity of activity within the site. The barriers should be erected prior to the commencement of all activity including demolition, soil stripping and delivery of materials and demolition (except where existing | Ground Protection Measures structures require demolition to enable the barriers to be installed). Barrier systems are specified below and should be installed according to the legend on the Tree Protection Plan.

The In-Ground System This system may be installed where indicated by a solid purple line on the Tree Protection Plan. It should be robust enough to withstand occasional knocks by plant machinery and, once installed, otherwise suitable new ground protection measures shall be installed. The ground protection shall

and diagonal bracing struts. Weldmesh panels (or similar – e.g. Heras type fencing panels, or 18mm+ the hard surfacing must be firm enough to spread the load of any traffic passing overhead. plywood boards) are secured to this scaffold framework using sturdy clips e.g. standard scaffold

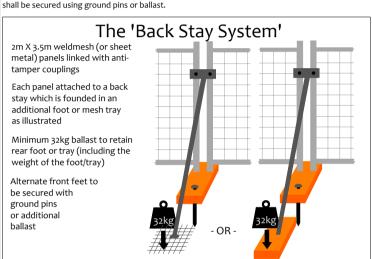
Where only pedestrian traffic will occur, the ground protection measures may be as simple as timber clips. The system is illustrated in the diagram to the right and is based on BS 5837 guidelines.



The Back-Stay System —— ——

This system may be installed where indicated by a solid or dashed purple line on the Tree Protection Plan. It is more practical over existing hard surfaces or where the fencing needs to be moved to enable permitted activities within a Restricted Activity Zone. This system should be able to withstand occasional knocks by machinery and should not be relocated except with the consent of the site manager and the approval of the local authority.

Within this system, weldmesh fencing panels (minimum height 2m) are affixed into rubber or concrete feet and clipped together with anti-tamper couplers. Two couplers should be used, spaced at least 1m apart. Alternate panels should be attached to a diagonal back stay connected to an additional foot or baseplate secured with ground pins or additional ballast. Where ground pins are not used, the total weight of the foot/plate plus ballast should total not less than 32kg. Where it is not possible to install diagonal struts (such as very close to a hedge) then the front feet shall be secured using ground pins or ballast.



state the purpose of the fencing and that it should not be moved, or traversed, other than by

Suitable weather-proof notices should be displayed to identify tree protection zones. They should

Author: Joe Taylor FdSc (Arboriculture), M. Arbor A

Client: Nigel Bird Architects



Removal of Tree Protection Barriers

Removal of protective fencing or ground protection measures shall be done after all major construction work is complete and their removal has been approved by the appointed arboris

 $Within \ Restricted \ Activity \ Zones, soils \ containing \ roots \ may \ be \ subject \ to \ compaction \ due \ to \ general$ construction activity (including pedestrian activity and use of plant machinery). In order to minimise compaction, it is proposed to ensure that a suitable load-spreading surface is in place at all times. Any existing hard surfacing may be retained and reinforced (where applicable and adequate), need to be able to adequately spread the load of construction traffic. Where existing hard surfacing Vertical scaffold poles are driven into the ground, onto which are affixed horizontal scaffold poles is to be retained, it shall not be necessary to install additional ground protection measures. However,

boards, or scaffold planks installed directly onto a geotextile fabric on the ground. The ground should first be made even by raking, or by adding a few centimetres of sand or woodchip. Alternatively the boards may be supported by a scaffold framework. The scaffold may be founded on poles driven into the ground and/or onto blocks (to raise the scaffold) with additional couplings to

Where only light vehicles are to operate (e.g. barrows, trolleys or occasional cars), thick wooden boards or scaffold planks should also suffice, though at least 150m of compressible woodchip will need to be installed first to help spread the load. Sturdier systems are specified below: Where cars will regularly park or heavier vehicles/plant machinery will occasionally operate, sturdier

ground protection measures will be required such as metal road plates, or purpose built synthetic oad mats over a compression resistant layer such as 150mm of woodchip or 100mm of a 3D cellular confinement system in-filled with 7-40mm angular gravel (e.g. CellwebTM). A temporary concrete slab may also be considered as a suitable load spreading platform. Where a pile driver needs to operate, a concrete slab may be the preferred option.

Where existing structures need to be removed, this shall be done with temporary ground protection measures in place to enable this to be achieved without compacting soils. The ground protection measures shall be installed and approved before commencement of demolition and construction activity and before the arrival of plant machinery or materials. They shall remain in place until all heavy construction activity is complete or until they are due to be replaced

Construction Exclusion Zones

Nithin Construction Exclusion Zones the following restrictions shall apply:

- Tree Protection Barriers shall be erected and maintained throughout the entire project as indicated on the Tree Protection Plan and under the header -Tree These shall remain in place at all times except when authorised landscaping works
- are being undertaken. At such times, all restrictions that apply to the Restricted Activity Zone shall apply. Furthermore, the project arborist shall be informed prior to any works being undertaken in these zones.
- No construction activity or excavation shall occur unless agreed otherwise by the project arborist and local authority.
- No vehicles or plant machinery shall be driven or parked. No tree works, other than those specified in this report shall be undertaken
- No alterations of ground levels or conditions shall occur.
- No chemicals or cement washings permitted • No temporary structures shall be installed.
- No spoil shall be stored. No fires shall be permitted
- Removal of hard surfaces, structures or turf shall be done using hand operated tools only and supervised by the project arborist.

Tree Works Specification

The following table specifies the tree works which will be required prior to the commencement of

ree Reference	Action Required	Notes
T2	Prune lowest branches to create a clearance distance of 2.5m from the proposal.	Branches to be pruned back to secondary branch junction or th branch collar wherever possible Pruning to be kept to a minimum achieve the desired clearance o

Restrictions in Specific Zones

Restricted Activity Zone A

Within this zone trees roots are likely to be present where access will be required to facilitate construction. The following restrictions shall apply:

- No vehicles or plant machinery shall park or operate unless a suitable load spreading is to be mixed at considerable.

 Activity Zones, where cement is to be mixed at considerable. surface is in place. The load spreading surface shall be installed and/or maintained as specified under the heading **Ground Protection Measures**. This shall remain in place distances from trees and water run-off cannot enter Root heroughout the entire construction phase or until any new permanent hard surfacing is installed. Any pedestrian activity other than very occasional shall also require a protection. is installed. Any pedestrian activity other than very occasional shall also require a further special measures are • Removal of existing structures such as, walls, steps and hard surfaces (where applicable) shall be undertaken using hand tools or a mechanical excavator operating from outside the Restricted Activity Zone and carefully marshalled by the project arborist.
- No excavation shall occur beneath any existing hard surfacing and its sub-base or beneath the foundations of any structure such as wall, steps or patio.
- No further excavation shall occur in this zone without consulting the project arborist All other chemicals hazardous to tree health, including petrol and diesel, shall be stored in suitable and obtaining approval from the local authority. • Existing ground levels shall be retained undisturbed or raised by no more than
- 150mm. Ground levels may only be raised using granular topsoil (not rich in clay) or Underground Services where new surfacing is proposed. on the planning application documents unless approved by the local authority.
- with the project arborist and a methodology agreed and approved by the local

 Site Hoarding wherever possible and protected with damp sacking during times that they are shall apply: unearthed. Any roots in excess of 10mm that need to be severed shall be pruned with

 • Ground levels shall be maintained as existing.
- Storage of materials and spoil shall be avoided unless it has been agreed with the
- compaction or contamination occurs. All hazardous materials (including non-essential cement products) shall be forbidden.

Restricted Activity Zone B

garden. Either contiguous piling (or sheet piling) shall be installed along the edge of the excavation or an alternative method shall be adopted which does not disturb soils beyond the footprint of the Siting of Cabins proposal (e.g. pinning). A typical method of pinning would be to excavate to a specified depth (e.g. Cabins shall be located outside of Construction Exclusion Zones and Restricted Activity Zones unless without disturbing soils beyond the footprint of the build. The specific method adopted will vary

Within this zone it is proposed to excavate for the foundations for the new extension and sunken

- Excavation shall not extend more than 200mm beyond the footprint of the proposal in the direction of the trees.
- Where a small excavator is used, it shall operate from outside of the adjacent Fence Posts or Decking Posts • The excavator or piling rig shall be marshalled to ensure no contact is made with any restrictions shall apply:

General Restrictions - Throughout the Site

The project arborist shall oversee all excavation in this area.

No demolition, removal of surfaces, or soil stripping shall commence until the protective fencing and

fires shall be permitted in the vicinity of any exposed tree roots.

ground protection measures are installed to the satisfaction of the local authority. No fires shall be permitted beneath any tree canopy or within 5m of any tree stem, branch or foliage.

Canopy Protection

- In order to protect tree canopies the following restrictions shall apply throughout the site: No machinery in excess of 2m shall pass beneath the canopy of any tree without being carefully
- If materials require installation or delivery beneath tree canopies, this shall be done without the
- If materials are to be installed or delivered close to tree canopies (but not beneath them) and a All machinery operatives are to be made aware of any Construction Exclusion Zones and Restricted crane is required, they shall be carefully marshalled in order to ensure that branches are not Activity Zones that apply to this site.

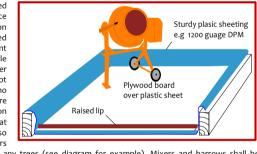
Storage of Spoil and Materials

be carefully marshalled when working close to tree canopies. Storage of materials and spoil shall be avoided in any Construction Exclusion Zones and Restricted Activity Zones unless it has been agreed with the project arborist that the ground protection measures are adequate to ensure no soil compaction or contamination occurs. All hazardous Scaffolding materials (including non-essential cement products) shall be forbidden.

General Restrictions - Continued

Hazardous Materials Any mixing of cement base

outside the Constructio required. Otherwise, provision



the Root Protection Area of any trees (see diagram for example). Mixers and barrows shall be

containers as specified by current COSHH Regulations, and kept away from Root Protection Areas.

 No new permanent or temporary structures shall be erected other than those shown on the planning application documents and the planning application documents are structured as a structure of the Construction on the planning application documents are structured as a structure of the Construction on the planning application documents are structured as a structure of the Construction on the planning application documents are structured as a structure of the Construction on the planning application documents. Exclusion Zones or Restricted Activity Zones unless done so in a manner detailed in a specific Method

• Underground services shall not be installed in this area without prior consultation Statement and approved by the local authority. • If roots are encountered in excess of 25mm diameter, they shall be retained | If site hoarding shall be installed over the Root Protection Area of any tree, the following restrictions

Post holes shall not exceed 300mm x 300m

- project arborist that the ground protection measures are adequate to ensure no soil Post holes shall be excavated using hand tools or by a post-hole auger attached to plant machinery sited outside of Root Protection Areas. Roots in excess of 25mm shall be retained wherever possible. • Roots in excess of 10mm shall be pruned with sharp secateurs.
 - Pruning shall be minimal and only undertaken where absolutely necessary to facilitate the site hoarding. It shall be undertaken by a reputable tree surgeon working to BS 3998 (2010). Site hoarding may be installed in place of the specified tree protection measures subject to the approval of the local authority with regard to its location and specification.

- 1m), install shuttering and then cast the concrete for the proposed walls. Then to excavate short | agreed otherwise by the project arborist. Where this is being considered, the project arborist shall be sections beneath this wall and cast deeper concrete. Then to excavate in between these deeper consulted and specific tree protection measures agreed. The following general restrictions will apply: sections and infill with concrete. In this manner excavation may continue to any specified depth

 • All services to and from site cabins shall be installed above ground through any Root Protection
 - No excavation shall occur within Root Protection Areas to enable cabins to be installed. • The cabins shall be founded on a suitable load spreading surface.

- If permanent fencing or decking is to be installed within Root Protection Areas, the following All post holes shall be excavated by hand and kept as narrow as possible (maximum diameter).
- Exploratory post holes shall be dug before committing to post / panel positions. If any roots in excess of 25mm are encountered they are to remain intact and the post hole shall be relocated slightly. The fencing system must permit such flexibility (i.e. where fixed panel widths are used, $\,$
- all post holes must be excavated before committing to the final location). • Any roots in excess of 10mm which are severed shall be neatly pruned back with secateurs. This will encourage healing and reduce the likelihood of infection. Walls shall be avoided over Root Protection Areas unless their foundations may be spanned over

Hedges may be planted within Root Protection Areas using hand tools to minimise excavation. Lighting, Bollards, CCTV and associated Cables

- If any of the above are to be installed close to tree canopies or within Root Protection Areas of
- retained trees; installation methods shall be detailed in a specific Method Statement and approved by the local authority. Consideration should be given to the following: No fires shall be permitted within any Construction Exclusion Zone or Restricted Activity Zone. No removed to the branch collar as per British Standard 3998 (2010).
 - Post holes must be excavated by hand or using an appropriate sized auger. No other form of mechanical excavation may be used. • Wherever possible, cables should be routed in a direction directly away from the tree stem rather than tangentially across the rooting zone. The location of all such cables shall be

determined after consultation with the project arborist and approval by the local authority.

Use of Heavy Plant

roots using a beam system.

All machinery operatives are to respect these zones and ensure that no damage occurs to trees due to the careless use of machinery. Mechanical excavators should have tracks rather than wheels to help spread their load. They should

If scaffolding is required in areas containing ground protection measures, the protective boards shall need to remain in-situ and be strengthened and stabilised to bear the weight of scaffold poles. Prior to the installation of any scaffolding within 0.5m of any tree branches, the project arborist shall be consulted to specify any pruning works that may be required.



Tree Data Schedule

Semi-Mature

pseudoplatanus

Semi-Mature

pseudoplatanus

Mature

Semi-Mature

Timing of Operations

Construction

Construction

Construction

Phase

Activity

Order Phase

5 1.5 13 2.5



Single stemmed and vertical with a well-formed crow

Single stemmed with a slight lean and a balanced crown

Form: Single stemmed and leaning with a slightly unbalanced crown Location prevented detailed inspection.

Form: Single stemmed and vertical with an unbalanced crown.

Form: Single stemmed and vertical with a well-formed crow

Multi-stemmed at 4.5m with a well-formed crown.

Defects: One heavily reduced limb appears to have some decay.

Limited inspection, dimensions estimate

Form: Single stemmed and leaning with an unbalanced crown

story: Occasional pruning wounds due to crown lifting (now healed).

Form: Single stemmed with a slight lean and a low, wide spreading habit.

Restricted Activity Zone B

footprint of the proposal.

Ht: 12m Dia: 30cm

Restricted Activity Zone A

Excavation limited to 200mm beyond the

Portugal Laurel

Ht: 4m

Semi-mature Lime

Ht: 13m

Planning conditions relating to trees to be identified and discussed with the Project arborist and site manager.

Protection measures confirmed acceptable by the local authority

Demolish existing structures and remove existing surfaces where applicable.

Remove protective barriers (fencing and ground protection measures as applicable).

Arboricultural Method Statement to be revised and approved.

Arboricultural Method Statement.

be assessed and ground remediation to be agreed.

Install the tree protection barriers (fencing and ground protection boards - see Headers -Tree Protection Barriers and Ground

Variances to be agreed. Extents of excavation to be agreed. Scaffold restrictions to be agreed. Scope of future inspections /

Pre-Commencement site meeting: Tree protection barriers inspected. Additional protection measures to be agreed.

Install new buildings, structures and any hard surfaces taking into account restricted activities as specified in this

Site meeting with project arborist. Condition of retained trees to be assessed and mitigation agreed. Ground conditions to

History: No evidence of significant pruning.

History: No evidence of significant pruning.

Reduced in the past.

Position: Situated on third party land

History: No evidence of significant pruning.

Defects: No significant defects observed.

Defects: No significant defects observed.

No evidence of significant pruning.

Limited inspection, dimensions estimate

History: No evidence of significant pruning. Defects: No significant defects observed.

Position: Situated on third party land

BS 5837 Root Protection Area (radius = 12xstem diameter Root Protection Area needing amendment due to site conditions, e.g. presence of exising road or building. Root Protection Area having been amended to account

for for site conditions

 T_1 = Tree No 1 G_2 = Group No 2 H_3 = Hedge No 3

Tree Retention Categories Category A tree Category B tree

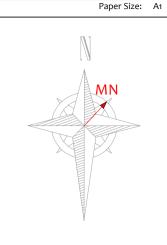
Category C tree

Category U tree

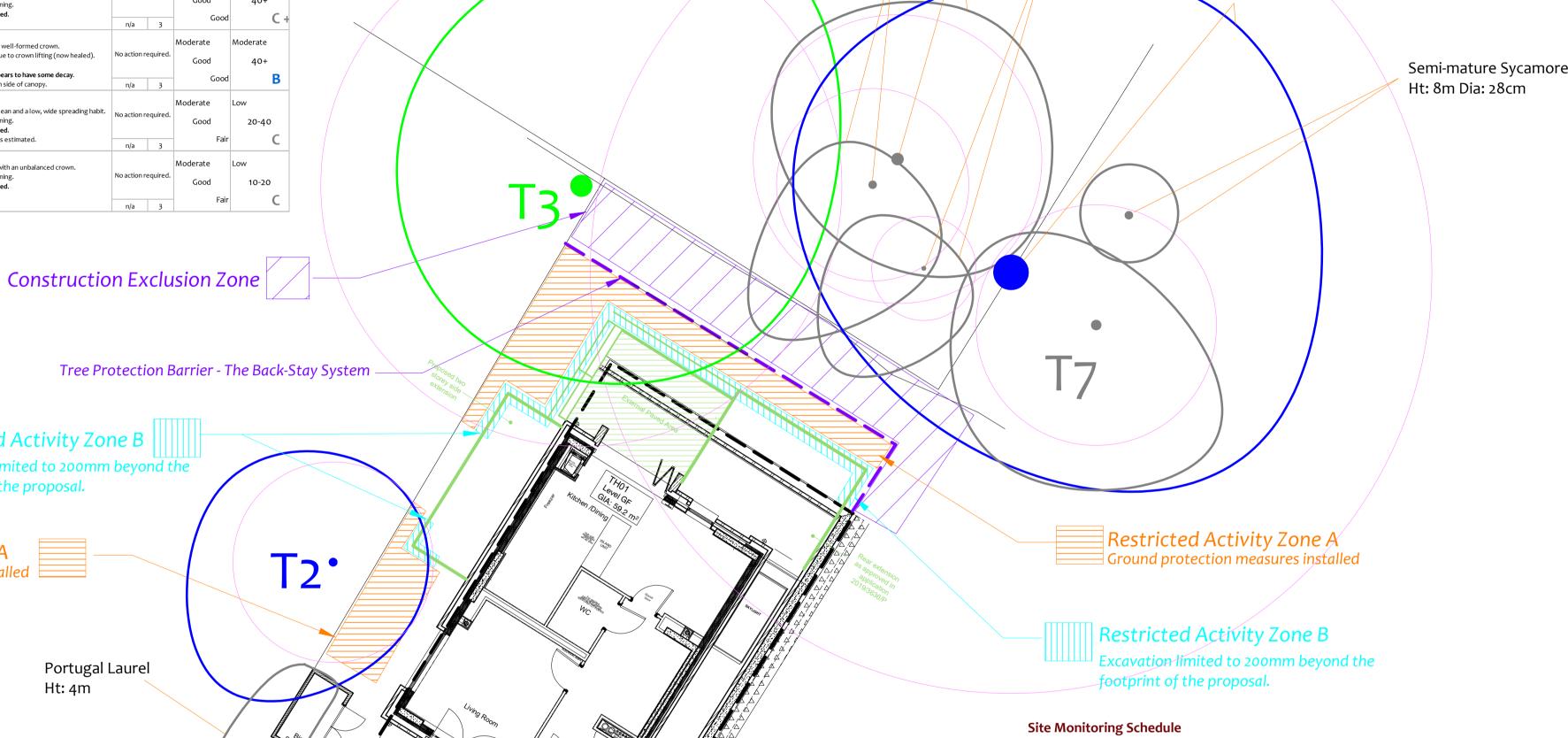
Trees of high quality with an estimated life expectancy of 40+ years. Usually large trees with significant presence or smaller trees with Usually maturing trees, or younger trees with good form. Retense trees is desirable though less than Category A trees markable trees of low quality and merit. Individual specimer

Trees unsuitable for retention due to their very poor condition

CCL 10332 Tree Protection Plan (Existing Layout with Proposals Overlaid) Teil House, 10D Kidderpore Avenue



Proposed Layout (Pale Green)



ree Officer invited. ndscaping operations. * Where agreed with the L.A. it may be acceptable to supply photographs of the fencing to avoid the necessity for a site visit.

Inspection

o occur prior to any works taking place on the site.

ccavation within Restricted Activity Zone B

proposed extension and retaining wall.

fter tree works completed & tree protection barriers / ground

cavation is required for the proposed stairs and the foundations fo

ost external construction activity but prior to removal of fencing &

re- Start Desk-top

|Existing basement

nolition & soil stripping.

ost-Construction Meeting

Site Monitoring Accountability

Position	Name	Contact Phone & email	Roles
Project Manager	Insert Details	Insert Details	Liaising with site manager & project arborist regarding any potential issues relating to trees. Oversight of this monitoring schedule. Instructing the project arborist and arranging access. Liaising with local authority regarding discharge of planning conditions and variances to the Arboricultural Method Statement.
Site Manager	Insert Details	Insert Details	Familiarity with Arboricultural Method Statement. Implementation of the tree protection measures. Day-to-day compliance with Tree Protection Measures. Informing the Project Manager of Tree Protection variances & issues affecting trees.
Project Arborist	Crown Tree Consultancy	08000 14 13 30 0203 797 7449 Info@crowntrees.co.uk	Inspect tree works and report to the project manager. Inspect tree protection measures and report to Project Manager. Oversee excavations in RPAs, provide mitigation advice, undertake root pruning. Monthly site monitoring and reporting to the Project Manager on tree protection and variances.
Local Authority	London Borough	020 7974 4444	Liaising with the project arborist and project manager regarding tree protection issues relating to planning conditions. Advice and assistance with the discharge of planning conditions relating to trees.
Additional Contact	Insert Details	Insert Details	Insert Details
Additional Contact	Insert Details	Insert Details	Insert Details

Site Attendees

Site manager, project

Tree Officer invited.

e manager, project

Site manager, project

Comments

oject Manager and Site manager to study this Method Statement & contact the

ection measures checked. Further protection measures / restrictions agreed.

Tree protection fencing locations & specification checked. Additional ground

Project Arborist to agree all protection measures.

wo week's notice to be given prior to excavation.

xcavations to be recorded and photographed.

xcavation to be as specified in this Method Statement.

Mitigation measures to be employed specified by the project arborist.

Retained trees inspected. Ground conditions assessed and mitigation measures

agreed where appropriate. Further landscaping operations and restrictions to be