



Arboricultural Method Statement

Hartley Service Group Ltd

**Hampton Wick Infant & Nursery School
1 Normansfield Avenue
Teddington
TW11 9RP**

20 June 2024

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Introduction

Arbtech Consulting Limited (Arbtech) received written instruction on 01 April 2024 from Hartley Service Group Ltd to attend Hampton Wick Primary & Nursery School, 1 Normansfield Avenue, Teddington, TW11 9RP (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.

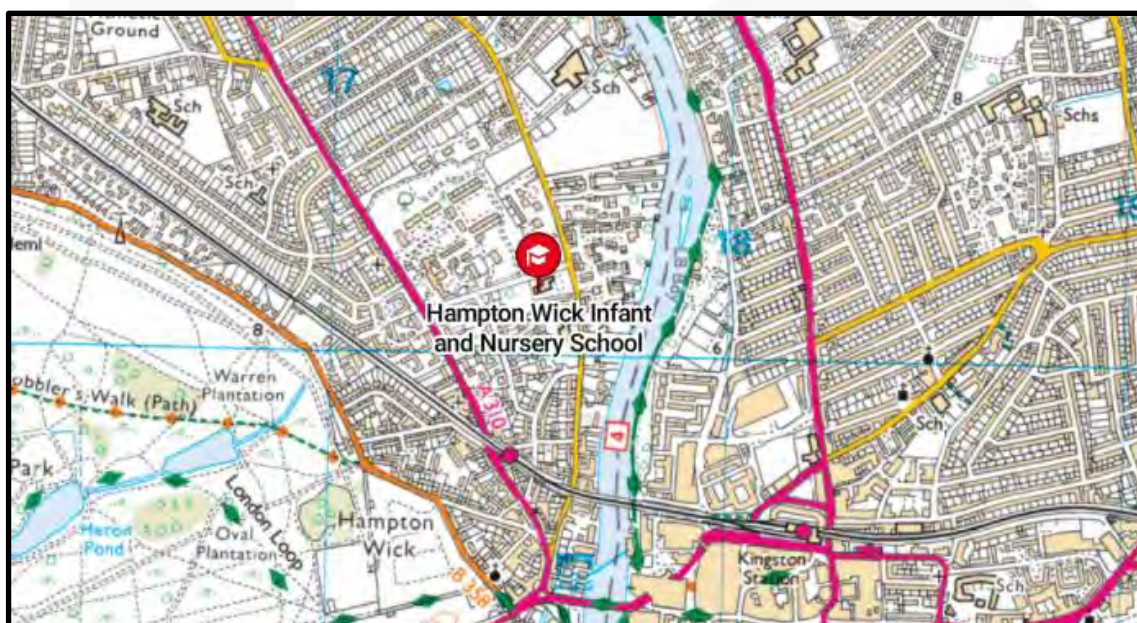


Figure 1: OS Map showing the site location (Bing Maps)

Site Description: The site is a school located in an urban residential area southwest of London. To the north, east, and south are residential properties, and to the west is a small area of woodland.

Proposed Scheme

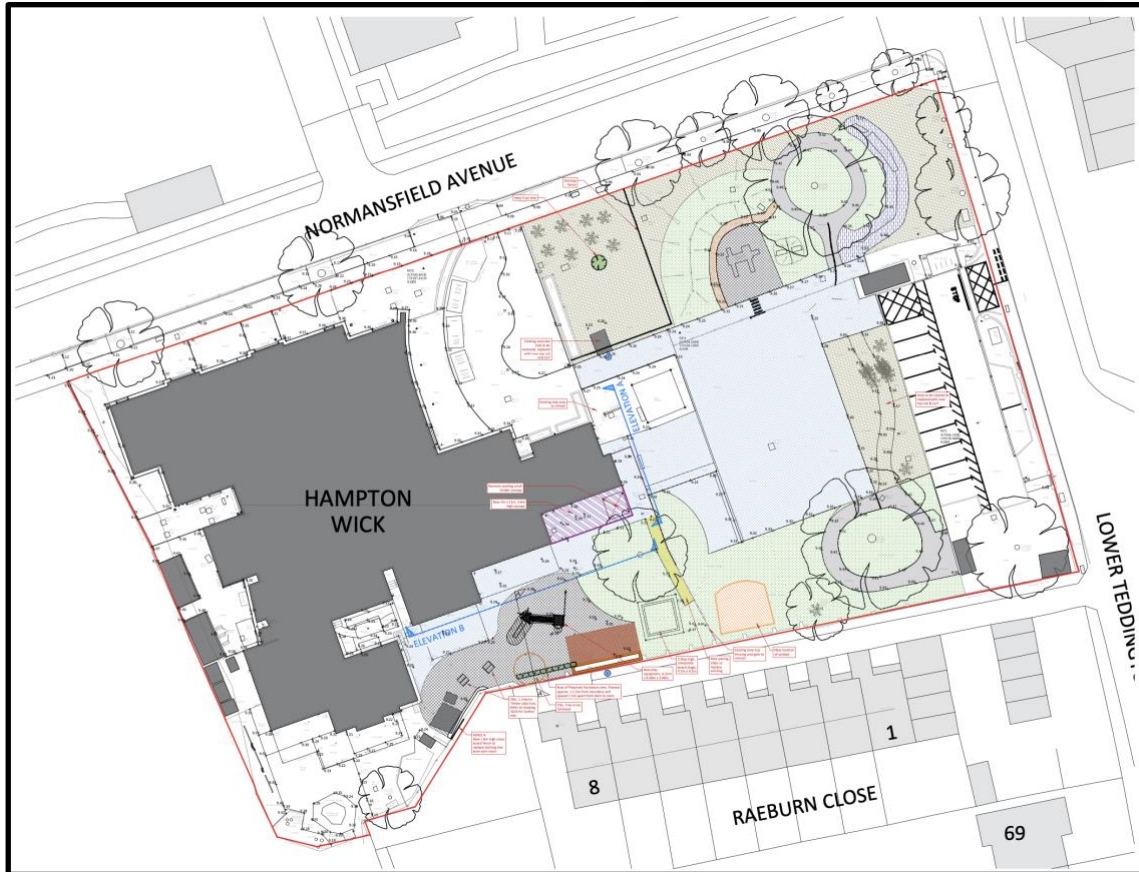







Figure 2: Proposed scheme, 6512_2001_P/18 (DHP)

Description: Resurface of playground areas including bound mulch, astro turf, and rubber crumb surface; relocation of the sand pit, erection of a stage, two timber huts; replace existing canopy with an enlarged canopy; replacement of a fence panel, replacement of an existing climbing frame with enlarged climbing frame, erection of fence screening panels and landscaping.

Checklist for submission to Local Planning Authority

Tree Survey (including schedule)	
Tree Constraints Plan (TCP)	
Arboricultural Impact Assessment (AIA)	
Arboricultural Method Statement (AMS)	
Tree Protection Plan (TPP)	

This report and its appendices precisely follow the strategy for arboricultural appraisal intended to provide local planning, which is 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

Document	Reference No.
Survey base drawing	GC22055-TS
Proposed layout drawing	6512_2001_P/18
British Standard 5837:2012	“BS5837”
Tree Survey Schedule	Arbtech TS 01
Arboricultural Impact Assessment	Arbtech AIA 01_A
Tree Protection Plan	Arbtech TPP 01_A

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 Anthony Jones on 10 April 2024.

A total of 16no. individual trees, 4no. groups of trees, 2no. hedges 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	GEOCAD	GC22055-TS	Topographical Survey

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 22 April 2024 to determine the potential conflicts between the proposed development scheme and existing trees located on and near the site. A new assessment was then carried out on 15 July 2024 following a revision of the proposed scheme. Subsequently, this Arboricultural Method Statement was produced 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	GEOCAD	GC22055-TS	Topographical Survey
Proposed layout drawing	DHP	6512_2001_P/18	Proposed Layout

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.

Table 4: Impacts upon the RPAs of retained trees

Tree Number	Species	Structure	RPA (m2)	Incursion	
				(m2)	(%)
H2	A Hedge	Fence	3.7	0.0	Negligible

These impacts are documented in the Arboricultural Impact Assessment (Arbtech AIA 01_A). See Appendix 2: Arboricultural Impact Assessment.

Trees to be Removed

A total of 3no. individual trees will require removal as part of this proposed scheme.

A breakdown of all tree works can be seen in Table 8: Summary of tree works.

Table 5: Number of individual trees to be removed

U	A	B	C
0	0	0	3

Table 6: Number of groups to be removed

U	A	B	C
0(0)	0(0)	0(0)	0(0)

() = partial removal of a group

Canopy cover is ecologically important, and the loss of canopy cover by this tree will be mitigated by planting within the development area.

Arboricultural Method Statement

This Arboricultural Method Statement (Arbtech AMS 01(2)) 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(2)) 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(2)) and the Tree Protection Plan (Arbtech TPP 01_A). Unless otherwise specified, protective measures will remain unaltered and in situ for the entire duration of the construction.

Table 7: Documents upon which this tree survey has been based

Document	Originator	Reference Number	Title
Survey base drawing	GEOCAD	GC22055-TS	Topographical Survey
Proposed layout drawing	DHP	6512_2001_P/18	Proposed Layout

Tree Work

For reasons of public safety, all tree works referred to herein must be carried out before site personnel commence work or building materials are delivered.

Table 8: Summary of tree works

Tree Number	Species	Works	Category
2	Snowy Mespilus	Remove; Grind stump.	C1
3	Sorbus	Remove; Grind stump.	C1
4	Apple	Remove; Grind stump.	C1
5	Maidenhair Tree	Crown lift all aspects by 3m to provide clearance for the proposed shelter whilst maintaining a balanced canopy.	B1
H2	A Hedge	Trim inside face back to the fence line.	C1

Notes

All tree work is to be undertaken in accordance with British Standard BS 3998:2010 - Recommendations for tree work. All arising's are to be removed, and the site is to be left as found. Care is to be taken of the ground around retained trees to make sure that it does not become compacted as a result of tree surgery operations. No equipment or vehicles such as timber Lorries, tractors, excavators, or cranes shall be parked or driven beneath the crowns of any retained trees to prevent subsequent compaction and root death.

Tree Removal

A tree should be felled in one piece only when there is no significant risk of damage to people, property, or protected species.

Where restrictions (e.g., lack of space, buildings, other features, land ownership or use, or other trees to be retained) cannot be overcome, trees should be dismantled in sections.

This also applies where a tall stump is being retained but where branches are to be removed/pruned.

Extensively decayed trees can be unpredictable when they are being felled, and special precautions should, therefore, be taken, such as the use of a winch to guide the direction of fall.

Stump Removal – Stump Grinding

Stump grinding will be to a minimum of 300mm deep or to extend through the base of the stump leaving the major roots disconnected if the intention is to reduce the potential for the spread of Honey fungus.

The grinding residue will be treated as arising's and removed from site.

NOTE: Mechanical destruction of a stump by stump grinding is less disruptive to the site than digging out.

The hole left by stump removal will be filled with soil or other material. The filling should be appropriate for future site usage and for any surface treatment that is to be installed.

Where future plant growth is desired, the backfill material will be firmed in 150 mm layers by treading, avoiding excessive compaction and destruction of the soil structure.

After Stump Removal

The hole left by stump removal, whether by digging out or grinding, will be filled with soil or other material. The filling will be appropriate for future site usage and for any surface treatment that is to be installed.

Where future plant growth is desired, the back-fill material will be firmed in 150mm layers by treading, avoiding excessive compaction and destruction of the soil structure.

Protected Species (general informative for tree works)

Conservation Status of British Bats

The consensus in Britain and Europe is that virtually all bat species are declining and vulnerable. Our understanding of population status is poor as there is very little historical data for most bat species. Certain species, such as the horseshoe bats, are better understood and have well-documented contractions in range and population size. Given this general picture of decline in the UK Government, the UK Biodiversity Action Plan has designated five species of bats as priority species (greater and lesser horseshoe bats, barbastelle, Bechstein's, and pipistrelle). These plans provide an action pathway for investigating the maintenance and restoration of the former populations' levels.

Legal Status of British Bats

Given the above position, all British bats, as well as their breeding sites and resting places, enjoy national and international protection.

All bat species in the UK are fully protected under the Wildlife and Countryside Act 1981 (as amended) through inclusion in Schedule 5. All bats are also listed in Annex IV (and some in Annex II) of the EC Habitats Directive, giving further European protection. Taken together, the Act and Conservation of Habitats and Species Regulations 2012 (as amended)* make it an offence to intentionally or deliberately kill, injure or capture (take) bats;

- Deliberately disturb bats (whether in a roost or not);
- Damage, destroy or obstruct access to bat roosts;
- Possess or transport a bat or any part of a bat unless acquired legally;
- Sell, barter or exchange bats or parts of bats

Although the legislation does not strictly protect foraging grounds, it does protect roost sites. Bat roosts are protected at all times of the year, whether or not bats are present. Any disturbance of a roost due to development must be licenced.

**the regulations that delivered by the UK's commitments to the Habitats Directive.*

Breeding Birds

All nesting birds are protected under the Wildlife and Countryside Act (as amended) 1981, which makes it an offence to intentionally kill, injure or take any wild bird or take, damage or destroy its nest whilst in use or being built, or take or destroy its eggs. Furthermore, several birds enjoy further protection under that Act and are listed on Schedule 1 of the Act. These further protected birds are also protected from disturbance and it may be necessary to operate "no-go" buffer zones around such nests – typically out to 100m. Planning policy guidance on the treatment of species identified as priorities under the biodiversity action programme suggests that local authorities should take measures to protect the habitats of these species from further decline through policies in local development documents and should ensure that they are protected from the adverse effects of development, where appropriate, by using planning conditions or obligations. The conservation of these species should be promoted through the incorporation of beneficial biodiversity designs within developments.

Sequencing of works

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

Table 9: Sequencing of works

Stage	Event
Stage 1.	Undertake and complete tree works as specified within Table 8: Summary of tree works
Stage 2.	Installation of protective measures in accordance with the approved Tree Protection Plan(s) (Arbtech TPP 01_A).
Stage 3.	Pre-commencement site meeting.
Stage 4.	Undertake and complete demolition of existing site features.
Stage 5.	Undertake and complete ground works.
Stage 6.	Undertake and complete construction works
Stage 7.	Removal and replacement of existing hard surfacing.
Stage 8.	Supervised excavations for the installation of fence posts within the RPAs of retained trees.
Stage 9.	Undertake and complete external landscaping outside of the construction exclusion zones (CEZs).
Stage 10.	Removal of all machinery and materials from the site.
Stage 11.	Dismantle and removal of protective tree measures.
Stage 12.	Undertake and complete external landscaping within the construction exclusion zones (CEZs).
Stage 13.	Site completion and sign-off from Project Arboriculturalist.

Protective Measures

Protective measures are to be installed immediately following the completion of the tree works and sited and aligned in accordance with the Tree Protection Plan (Arbtech TPP 01_A) before the commencement of any works or the introduction of any machinery or material to the site.

Upon installing the protective measures around the retained trees, the client will instruct on a pre-commencement site meeting, during which the Project Arboriculturist will visit the site to inspect and document the position and specifications of the protective measures.

If the protective measures and their positions do not comply with this Arboricultural Method Statement (Arbtech AMS 01(2)) dated: 20 June 2024 and Tree Protection Plan (Arbtech TPP 01_A), the Project Arboriculturist shall inform the client and Fencing Contractor so adjustments can be made.

When the protective measures comply with this Arboricultural Method Statement (Arbtech AMS 01(2)) and Tree Protection Plan (Arbtech TPP 01_A), the Project Arboriculturist will sign-off the protective measures in writing to the client for which a copy can be sent to the Fencing Contractor, Site Agent and Local Authority Tree Officer.

If the protective measures become damaged or there is an accident or emergency involving trees, these areas are to be cordoned off immediately with high-visibility plastic mesh fencing. The site agent is to photograph and document the damage and inform the Project Arboriculturist immediately after the incident. All work within this area is to cease until the Project Arboriculturist has visited the site. Any damaged sections of protective measures shall be replaced within 48 hours of the initial incident.

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 protective measures will remain in place until the completion of Stage 10 (see Table 9: Sequencing of works) thereafter, they will be carefully dismantled only with the agreement of the Project Arboriculturist and or the Local Authority Tree Officer.

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.

The proposed hard surfacing is to be installed immediately to act as ground protection. Where it is decided that this is not a viable option, these areas are to be covered by ground boarding as designed by the Project Engineer to cope with any likely loading.

No equipment, vehicles, or plant shall operate beyond the tree protection fencing. 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.

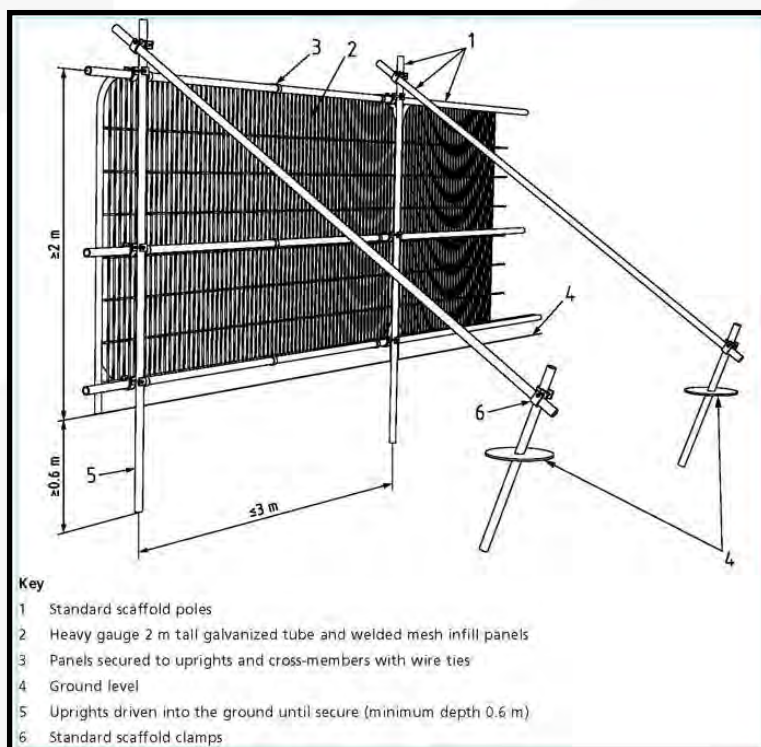


Figure 3: Default specification for protective barrier fencing (BS5837)

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.

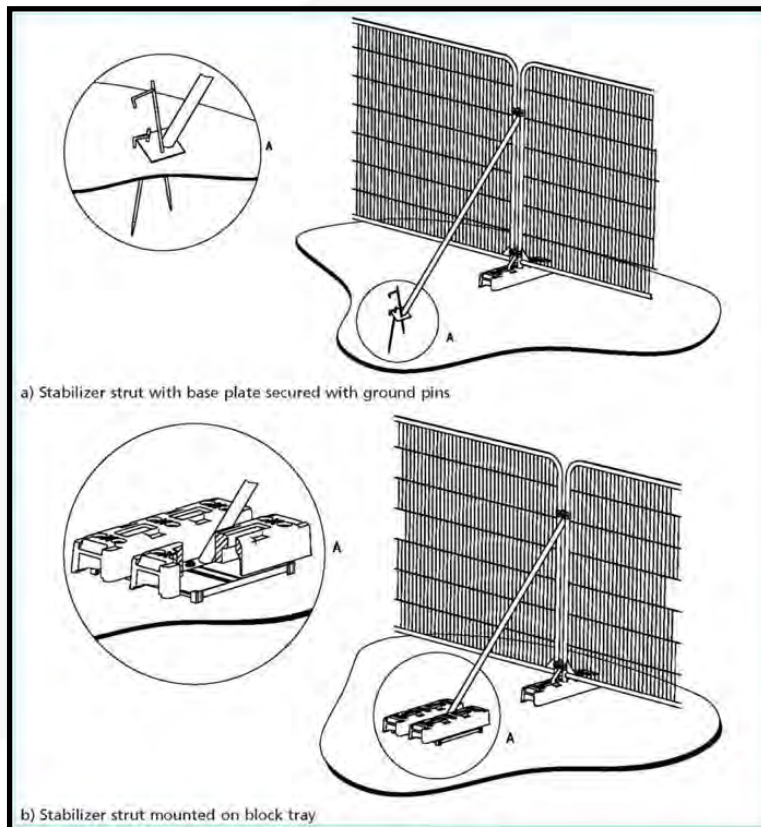


Figure 4: Example of protective barrier fencing with above-ground stabilising system (BS5837)

Ground Protection

The existing hard surfacing within the RPAs of retained trees 10, 15 & 16 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 the direct supervision of the Project Arboriculturalist and replaced immediately with either the scheduled replacement hard surfacing or 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.

At this stage, no contractors have been approached, so it is not possible to know exactly what equipment they have available and will be using.

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 Arboriculturist 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_A) 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.

All demolition work within or immediately adjacent to RPAs or canopies of retained trees is to be undertaken under the direct supervision of the Project Arboriculturist.

Structures / Buildings / Walls

If any structures, buildings, walls, or other significant features are to be demolished, they are to be taken down so that all debris and materials fall outside of any RPAs and away from the canopies of all retained trees.

Foundations within and immediately adjacent to the RPAs of retained trees are to be left in situ wherever possible. Where this is not possible, the existing foundations must be demolished to the minimum depth required to allow for the installation of the new soft and hard landscaping.

Hard Surfacing

Where hard surfacing must be removed and/or resurfaced within the RPAs of retained trees, it is to be undertaken under the direct supervision of the Project Arboriculturalist during the landscaping phase of the development.

The wearing course will be broken up using a handheld pneumatic breaker, hand tools, and wheelbarrows to remove the surfacing. Where the subbase must be removed, a fork will be used to loosen the material, and shovels and wheelbarrows will be used to move it.

In some situations, and at the discretion of the Project Arboriculturalist, an excavator using a hydraulic breaker and a suitably sized toothless grading bucket may be possible. If an excavator is to be used, it must be situated outside of the RPAs, on top of the hard surfacing, working away from the RPAs or from suitable ground boarding capable of withstanding the expected loading.

Whichever system is used, there is to be **NO** disturbance of the underlying soil. If roots are found, they are to be covered over with damp hessian, and a layer of either sharp sand, wood chip, or topsoil will be applied as soon as practicably possible to prevent desiccation.

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.

Fences

Proposed and/or replacement fence posts are to be located so that they will not damage or require the removal of significant roots 25mm or greater in diameter. This may require individual posts to be relocated.

Note: *this will increase or decrease the spacing between the posts (bay lengths).*

All posts within the RPAs of retained trees are to be excavated manually using handheld tools (spade, shovel, rabbiting spade, post hole digger); no mechanised equipment (handheld or plant-mounted post borer) is to be used.

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.

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(2)) and Tree Protection Plan (Arbtech TPP 01_A); 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.

Landscaping

Landscaping, such as planting, turfing, fencing, etc., around retained trees may only be carried out once all tree protection measures have been removed.

All excavations within the RPAs of retained trees shall be undertaken by hand and without reducing current ground levels unless it is agreed in writing with the Local Planning Authority. At no time is the use of a rotavator permitted within the RPAs of retained trees.

Any tree roots discovered will be left in situ and shall not be cut or otherwise damaged. Where possible, the soil structure within the RPA shall be preserved.

No works will be carried out within the RPAs of any trees if the soil moisture is at a level where soil compaction may be likely. Should the soil become compacted or have a poor structure that would hinder the development of the existing trees and plants or any new plantings, the arboriculturist will be consulted about soil decompaction techniques.

Monitoring and Supervision

Where trees have been identified within this Arboricultural Method Statement (Arbtech AMS 01(2)) and Tree Protection Plan (Arbtech TPP 01_A) 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.

Monitoring and supervision schedule

The initial monitoring visit will check that the tree protection measures are in the correct location and as specified within the approved Arboricultural Method Statement, and if so, to sign off on their installation.

Thereafter, monitoring visits are to take place at regular intervals to ensure that tree protection measures are in place and are functioning as designed or whenever necessary to undertake works to be carried out under arboricultural supervision. The frequency of the monitoring visits is to be agreed upon with the Local Authority Tree Officer at the pre-commencement site meeting.

A record of all arboricultural monitoring and supervision visits will be kept, and any faults will be logged; this will then be copied to the Site Agent, Developer, and Local Planning Authority in a digital format.

If areas must be redesigned during the development so that they would require changes to the approved Arboricultural Method Statement or Tree Protection Plan and so affect retained trees, the Project Arboriculturist and Local Authority Tree Officer will be invited to attend a site meeting with all relevant parties. Before any changes are implemented, they must have been approved in writing by the Local Authority Tree Officer.

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;
3. Supervised removal/replacement of existing hard surfacing within and/or immediately adjacent to the canopies and RPAs of retained trees;
4. Manual excavation of fence post holes within and immediately adjacent to the RPAs of retained trees;
5. Any excavations within and immediately adjacent to RPAs, including foundations, hard surfacing, or underground services (a non-exhaustive list);
6. Removal of protective measures 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 Arboriculturist 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

Hampton Wick Primary and Nursery School, 1 Normansfield Avenue, Teddington, TW11 9RP

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			
5 & 7	Supervised manual removal/replacement of existing hard surfacing			
H2	Supervised manual excavation of fence post holes			
	Additional excavations (if required)			
All	Removal of machinery and materials from site			
All	Dismantle & removal of protective measures			
All	Completion of Landscaping			
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,



Phil Gower Dip Arb Lv4 (ABC) MArborA

Arboricultural Consultant

07842 416721

philgower@arbtech.co.uk

A large, light grey, stylized house graphic that serves as a background for the page. It has a simple, geometric design with a gabled roof and a chimney on the left side.

Appendix 1: Tree Schedule

BS5837:2012 Tree Survey

Arbtech Consulting Ltd

Client: Hartley Services Group Ltd
 Project: Hampton Wick Primary and Nursery School, TW11 9RP
 Survey Date: 10/04/2024
 Surveyor: Anthony Jones



3 Well House Barns
 Chester Road
 Bretton
 Cheshire
 CH4 0DH
 Phone: 01244661170

Tree and Tag No Species	Hght (m)	Stems		Crown		Age	RP A (m ²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations Survey Comment	Cat ERC	
		No	Ø (mm)	Spread (m)	Clear (m)							
Estimated Measurements												
G1 A Group <i>See comments for details</i>	4	1	100	N	2	1	Y	A: 4.5 R: 1.19	Good	C: Good S: Good B: Not visible	Group of 4 young trees located off-site next to southern boundary. Measurements estimated and indicative of largest individual tree in group.	C.2 10+ yrs
Estimated Measurements												
G2 A Group <i>See comments for details</i>	5	1	140	N	2	1.5	SM	A: 8.9 R: 1.68	Fair	C: Fair S: Fair B: Fair	Group of 2 standard planted trees and 8 trees planted as a sculptural living archway. Species consist of bird cherry and willow. Measurements estimated and indicative of largest individual tree in group.	C.2 10+ yrs
Estimated Measurements												
G3 A Group <i>See comments for details</i>	3	1	130	N	2	0.5	SM	A: 7.6 R: 1.55	Good	C: Good S: Good B: Good	Group of apple trees on site near northern boundary. Measurements estimated and indicative of largest individual tree in group.	C.2 10+ yrs
Estimated Measurements												
G4 A Group <i>See comments for details</i>	19	1	860	N	7	6	M	A: 334.6 R: 10.32	Good	C: Good S: Good B: Good	Group of 3 horse chestnut street trees located off-site next to northern boundary. Far west tree in group has two codominant stems with included bark, 5 m from ground level. Historic pruning consistent with crown lifting up to 6 from ground level. Measurements estimated and indicative of largest individual tree in group.	B.2 20+ yrs
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 Contributio

Tree and Tag No Species	Hght (m)	Stems		Crown		Age	RP A (m ²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations Survey Comment	Cat ERC	
		No	Ø (mm)	Spread (m)	Clear (m)							
Estimated Measurements												
H1 A Hedge <i>See comments for details</i>	2.5	1	90	N	0.5	0	SM	A: 3.7 R: 1.08	Good	C: Good S: Good B: Good	C.2 10+ yrs	
Estimated Measurements												
H2 A Hedge <i>See comments for details</i>	2.5	1	90	N	0.5	0	SM	A: 3.7 R: 1.08	Good	C: Good S: Good B: Good	C.2 10+ yrs	
Estimated Measurements												
1 Norway Maple <i>Acer platanoides</i>	16	1	490	N	4.5	12	M	A: 108.6 R: 5.87	Fair	C: Fair S: Fair B: Poor	U <10 yrs	
Estimated Measurements												
2 Snowy Mespilus <i>Amelanchier laevis</i>	4	1	110	N	2.5	1.5	SM	A: 5.5 R: 1.32	Fair	C: Good S: Fair B: Good	C.1 10+ yrs	
Estimated Measurements												
3 Sorbus <i>Sorbus sp.</i>	4.5	5	184 (Eq)	N	2.5	2	SM	A: 15.4 R: 2.21	Fair	C: Fair S: Fair B: Good	C.1 10+ yrs	
Estimated Measurements												
4 Apple <i>Malus sp.</i>	3	1	80	N	1.5	0.5	Y	A: 2.9 R: 0.96	Good	C: Good S: Good B: Good	C.1 10+ yrs	
Estimated Measurements												
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 Contributio

Tree and Tag No Species	Hght (m)	Stems		Crown		Age	RP A (m ²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations Survey Comment	Cat ERC	
		No	Ø (mm)	Spread (m)	Clear (m)							
5 Maidenhair Tree <i>Ginkgo biloba</i>	15	1	720	N E S W	7 8 2 8	2 2 2 2.5	M A: 234.5 R: 8.63	Good	C: Good S: Good B: Good	Tree located onsite within playground area and near school building. Two codominant stems with a naturally formed union, 11 m from ground level. Historic pruning consistent with crown lifting up to 2 m from ground level and selective branch reductions on south side of lower crown.	B.1 20+ yrs	
6 Bird Cherry <i>Prunus padus</i>	7	1	200	N E S W	4 3.5 3 4	1.5 1.5 1.5 1.5	EM A: 18.1 R: 2.4	Good	C: Good S: Good B: Good	Tree located onsite within southern boundary and on playground area. Historic pruning consistent with crown lifting up to 1.5 m from ground level.	C.1 10+ yrs	
7 Norway Maple <i>Acer platanoides</i>	13	1	960	N E S W	6 8.5 7.5 7.5	2 2.5 2.5 2	M A: 417 R: 11.52	Fair	C: Fair S: Fair B: Fair	Tree located onsite within playground area. 300 mm longitudinal, 200 mm depth cavity located at south west basal area. 400 mm diameter decay pruning wound on north east side of main stem, 3 m from ground level. 500 mm Longitudinal bark/ cambium decay wound on upper side of eastern lower scaffold limb. 15 degree lean towards the south east. Historic pruning consistent with crown reduction at 12 m from ground level with 1 m regrowth and crown lifting up to 2 m from ground level.	B.1 20+ yrs	
8 Bird Cherry <i>Prunus padus</i>	4.5	1	120	N E S W	2.5 2 2 2	1 1 1 1	SM A: 6.5 R: 1.43	Good	C: Good S: Good B: Good	Tree located onsite within playground area.	C.1 10+ yrs	
9 Bird Cherry <i>Prunus padus</i>	4	1	100	N E S W	2.5 2.5 2.5 2.5	1.5 1.5 1.5 1.5	SM A: 4.5 R: 1.19	Fair	C: Good S: Fair B: Good	Tree located onsite within playground area. 200 mm longitudinal decay wound on east side of main stem, 1 m from ground level.	C.1 10+ yrs	
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 Contributio

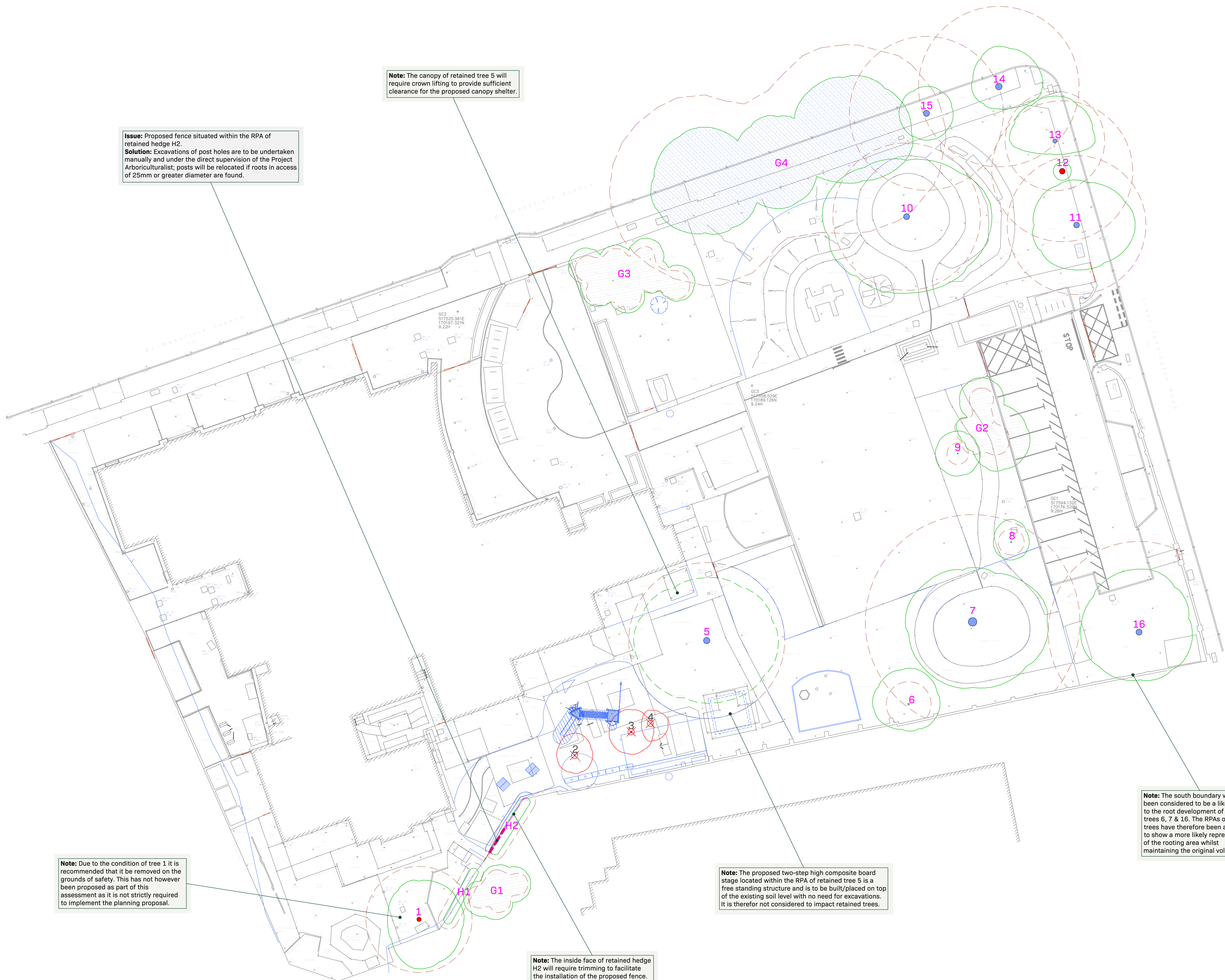
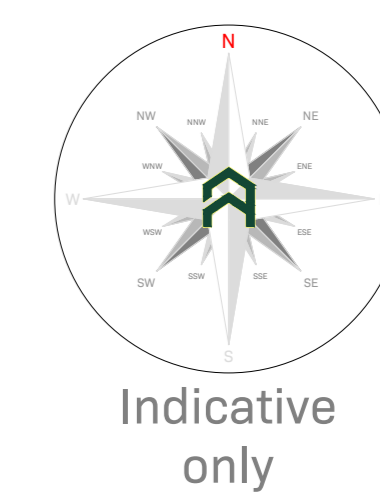
Tree and Tag No Species	Hght (m)	Stems		Crown		Age	RP A (m ²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations Survey Comment	Cat ERC				
		No	Ø (mm)	Spread (m)	Clear (m)										
10 Silver Maple <i>Acer saccharinum</i>	13	1	680	N E S W	6.5 9.5 8.5 9.5	2.5	M R: 8.16	Good	C: Good S: Good B: Good	Tree located onsite within playground area. 200 mm longitudinal cavity wound in inner canopy lateral branch, 7 m from ground level. Historic pruning consistent with crown thinning and crown lifting up to 3 m from ground level.	B.1 20+ yrs				
11 Common Horse Chestnut <i>Aesculus hippocastanum</i>	12	1	640	N E S W	5 6.5 5 5	2.5	EM R: 7.68	Good	C: Good S: Good B: Good	Tree located onsite on eastern boundary. Historic pruning consistent with crown reduction at 12 m from ground level.	B.1 20+ yrs				
12 Common Horse Chestnut <i>Aesculus hippocastanum</i>	6	1	650	N E S W	1 1 1 1	3	EM R: 7.8	Poor	C: Poor S: Poor B: Fair	Tree located onsite on eastern boundary. Bark necrosis around entire main stem. Bleeding canker present on north side of main stem. 500 mm diameter, 1 m length dead stem on east side of tree. Historic pruning consistent with pollarding/topping at 6 m from ground level.	U <10 yrs				
13 Common Horse Chestnut <i>Aesculus hippocastanum</i>	12	1	460	N E S W	5 4.5 1.5 5	6.5	EM R: 5.51	Fair	C: Fair S: Good B: Good	Tree located onsite on eastern boundary. Historic pruning consistent with crown reduction at 12 m from ground level.	B.1 20+ yrs				
14 Common Horse Chestnut <i>Aesculus hippocastanum</i>	14	1	740	N E S W	4.5 5 2.5 3	8	M R: 8.88	Fair	C: Fair S: Good B: Good	Street tree located off-site next to northern boundary. Historic pruning consistent with crown reduction at 14 m from ground level.	B.1 20+ yrs				
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 Contributio		

Tree and Tag No Species	Hght (m)	Stems		Crown		Age	RP A (m ²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations Survey Comment	Cat ERC	
		No	Ø (mm)	Spread (m)	Clear (m)							
15												
Common Horse Chestnut <i>Aesculus hippocastanum</i>	11	1	710	N	3	6	M	A: 228.1 R: 8.52	Fair	C: Fair S: Fair B: Good	Street tree located off-site next to northern boundary. Minor bleeding canker present on west side of main stem. Historic pruning consistent with pollarding at 12 m from ground level.	B.1 20+ yrs
16												
Common Lime <i>Tilia europaea</i>	16	1	680	N	7	2	M	A: 209.2 R: 8.16	Good	C: Good S: Good B: Good	Tree located onsite on southern boundary next to parking area. Historic pruning consistent with crown lifting up to 4 m from ground level and selective branch reductions on south side of lower crown.	B.1 20+ yrs

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 Contributio

A large, light grey decorative graphic consisting of two stylized, overlapping house-like shapes pointing upwards, centered on the page.

Appendix 2: Arboricultural Impact Assessment



Note: The canopy of retained tree 5 will require crown lifting to provide sufficient clearance for the proposed canopy shelter.

Issue: Proposed fence situated within the RPA of retained hedge H2.
Solution: Excavations of post holes are to be undertaken manually and under the direct supervision of the Project Arboriculturalist; posts will be relocated if roots in excess of 25mm or greater diameter are found.

Note: Due to the condition of tree 1 it is recommended that it be removed on the grounds of safety. This has not however been proposed as part of this assessment as it is not strictly required to implement the planning proposal.

Note: The proposed two-step high composite board stage located within the RPA of retained tree 5 is a free standing structure and is to be built/placed on top of the existing soil level with no need for excavations. It is therefor not considered to impact retained trees.

Note: The inside face of retained hedge H2 will require trimming to facilitate the installation of the proposed fence.

Note: The south boundary wall has been considered to be a likely barrier to the root development of retained trees 6, 7 & 16. The RPAs of these trees have therefore been adjusted to show a more likely representation of the rooting area whilst maintaining the original volume.

Arboricultural Impacts	
Items	No. of trees
Items to be removed	3
Groups / Hedges to be removed (Partial removal of groups)	0/0
Trees with proposed incursions into RPAs	0
Groups / Hedges with proposed incursions into RPAs	1
Trees that will require pruning	1
Groups / Hedges that will require pruning	1
Trees to be transplanted	0
Groups / Hedges to be transplanted	0

No.	Species	Proposed Structure	Incursion
5	Madrone Tree	Roo Shelter	Crown
H2	A Hedge	Fence	RPAs

Arboricultural Impacts - RPAs (Area)			
No.	Species	RPA (m ²)	Incursion (%)
H2	A Hedge	3.7	0.0
			Height

Tree Work Schedule			
No.	Species	Works	Category
2	Apple	Remove: dried stump	C1
3	Apple	Remove: dried stump	C1
4	Apple	Remove: dried stump	C1
5	Madrone Tree	Crown lift at eaves to 3m to provide clearance for the proposed shelter.	B1
H2	A Hedge	Trim hedge back to the fence line.	C1

All tree work is to be undertaken in accordance with British Standard BS 3893:2010 Tree work - Recommendations. All arising soil to be removed and the site to be left as found. Care is to be taken of the ground around retained trees to make sure that it does not become compacted as a result of tree surgery operations. No equipment or vehicles such as timber lorries, tractors, excavators or cranes shall be parked or driven beneath the crown of any retained trees, to prevent subsequent compaction and root death.

No. of individual trees to be removed			
U	A	B	C
0	0	0	0

No. of groups / hedges to be removed			
U	A	B	C
0/0	0/0	0/0	0/0
U = Partial removal of a group.			

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 route 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 arboriculturalist. 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 (axe spades, 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 BS3893:2010.

Arboricultural Method Statement
 All tree work must be undertaken in accordance with British Standards. Please refer to Arboriculture Consulting Ltd 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:
 1 15/06/2024 Approved Proposal of Plans/Drawings



Project:
 Hampton Wick Primary and Nursery School
 1 Normansfield Avenue
 Teddington
 TW11 9RP

Client:
 Hartley Service Group Ltd

Drawing:
 Arboricultural Impact Assessment

Based on:
 6512_2001_P/18

Drawing No:
 Arbtech AIA 01

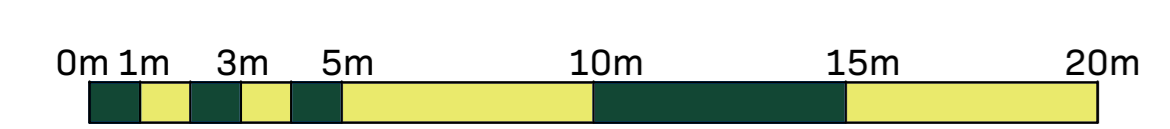
Date:
 June 2024

Scale:
 1:150 @ A0

Rev:
 A

Drawn:
 PDG

Key:
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 Proposed Site Layout: [Dashed line]
 Tree Numbers: [Number in circle]
 Tree Canopies: [Green outline]
 Proposed Pruning: [Pink outline]
 Proposed Lifting: [Green outline with star]
 Category of Trees: [Color in circle]
 Category of Groups: [Color in circle]
 Category of Trees to be Removed: [Red circle with X]
 Trees to be Removed: [Red circle with X]
 Hours/Fences: [Pink line]



A large, light grey, stylized graphic of a house roof with a chimney, serving as a background for the page.

Appendix 3: Tree Protection Plan

No.	Species	Works	Category
2	Prunus domestica	Remove, Small stump	
3	Salix	Remove, Small stump	C1
4	Apple	Remove, Small stump	C1
5	Meadow Sweet	Open for all aspects to be planted elsewhere for the proposed shelter whilst retaining a retained canopy	B1
H2	A Hedge	Thin hedges back to the fence line	C1

Protective Fencing

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 this standard anti-climb welded mesh panels are to be securely fixed to each other with at least two scaffold clamps and to the scaffolding framework with wire.

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".

Tree Protection Area
KEEP OUT
Do not move this fence

IT IS AN OFFENCE UNDER THE PROTECTION OF TREES ACT 1999 TO DESTROY OR UPROOT A TREE WITHOUT THE PERMISSION OF THE LOCAL PLANNING AUTHORITY.

Ground Protection

The existing hard surfacing within the RPA of retained trees 10, 15 & 16, as depicted on the Tree Protection Plan (Arbtech TPP 01) provides passive protection against compaction to the underlying soil and therefore must be retained for the duration of the project. If this is not possible, it shall be done under direct arboricultural supervision and replaced with suitable ground protection, capable of withstanding the likely loading to 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, or 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 heavy 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 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.

Supervised Demolition

Hard surfacing: Removal of and/or replacement of hard surfacing situated either partially or completely within the RPAs of retained trees shall be undertaken with care and under the direct arboricultural supervision as these areas are likely to contain roots. Where this is necessary the wearing course will be broken up using a hand held pneumatic breaker, hand tools and a wheel barrow to break up and remove the surfacing. If it is necessary to remove the sub-base this is to be undertaken using hand tools such as a fork to loosen the material and removed using shovels and wheelbarrows.

In some situations and at the discretion of the arborist it may be possible to use an excavator using a hydraulic breaker and a suitably sized toothless grading bucket, if an excavator is to be used it must be situated outside of the RPA, on top of the hard surfacing working away from the RPA or from ground boarding. Where ever system is used this is to be NO disturbance of the soil beneath. If roots are found they are to be covered over with damp hessian and a layer of either sharp sand, wood chips or top soil to prevent desiccation.

Supervised Excavation

All excavations within and immediately adjacent to RPAs are to be undertaken under direct on-site arboricultural supervision.

Any roots that are to be cut will be cleanly severed by the project arboriculturalist using a suitable hand saw or secateurs. The edge of all excavation closest to the retained trees will be covered over with damp hessian to prevent drying out, and where necessary be buttressed to prevent soil collapse or contamination by concrete. If appropriate soil beneath the depth of the excavation may be sheet piled, regular piled or have individual piles installed.

Manual excavation: Excavations within the RPAs will be initially undertaken by hand under direct on-site arboricultural supervision to a minimum of 600mm deep (to be confirmed by the project arboriculturalist), whether this is for proposed foundations, hard surfacing or underground services. The soil is to be loosened with the use of a fork or pick and/or air-spade and then cleared with a shovel and/or the aid of an air-spade and/or arvac.

Mechanical excavation: Excavation within the RPAs will consist of a mixture of mechanical and manual excavation. Where an excavator is used it will be fitted with a suitably sized toothless grading bucket, using a grading / scraping motion rather than digging. During each motion the excavator will not be permitted to remove no more than 10 - 20mm deep of soil in any one pass.

If any roots are discovered, mechanical excavation will immediately be stopped and manual excavation will take over to expose the root. Upon the root being uncovered and either severed or protected the excavations can then continue. Any excavator or other machinery that is to be used will be situated outside of the RPA of all retained trees or on top of a suitable ground protection.

Where an excavator or any other machinery is to be used within RPAs or beneath canopies the project arboriculturalist will clearly instruct the operator about what they want and expect to happen prior to any works may commence.

Arboricultural Supervision

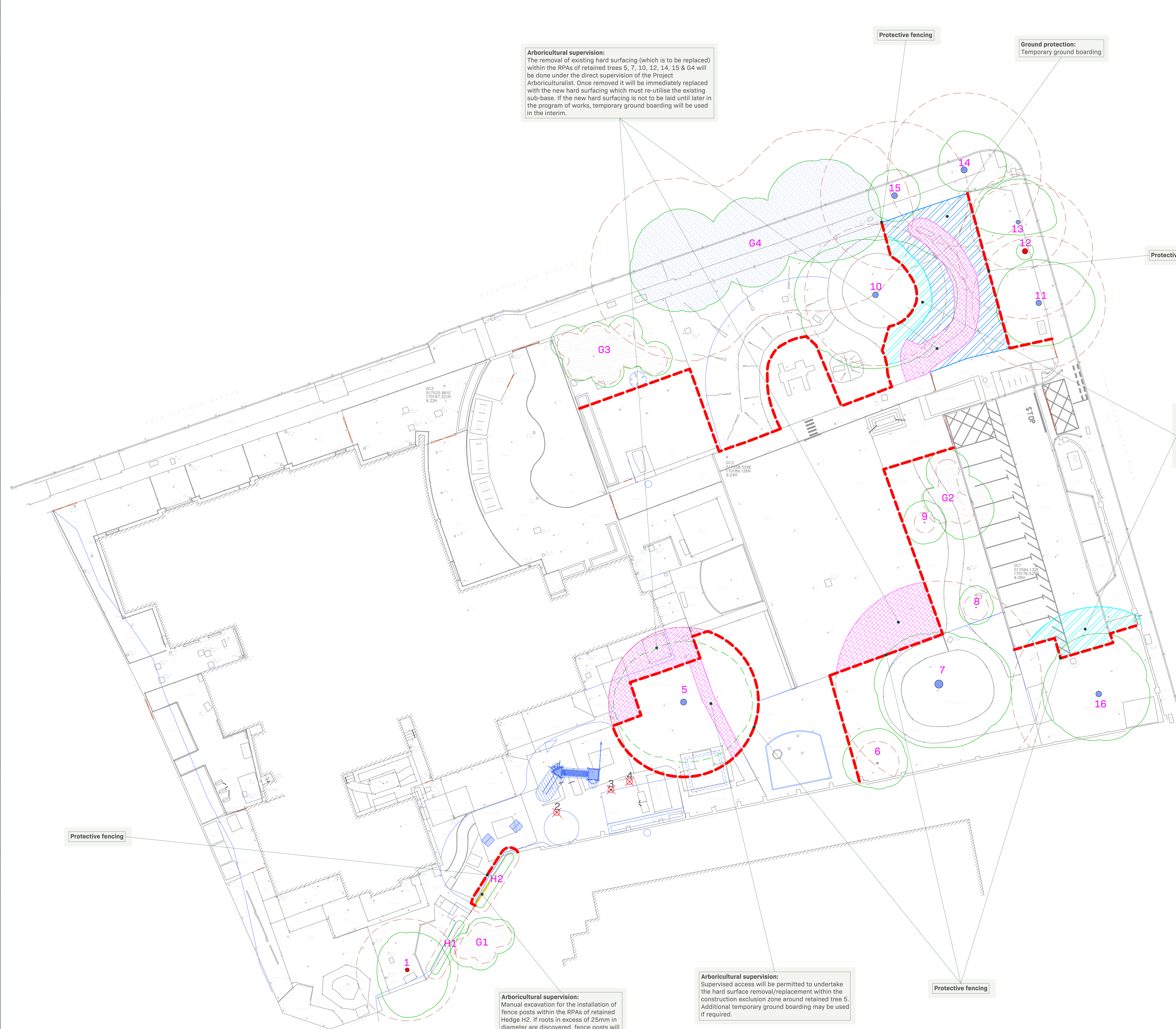
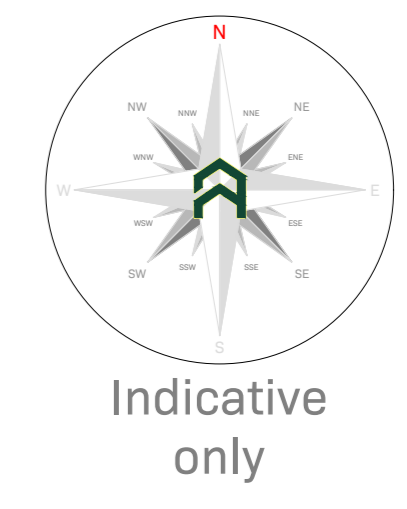
The arboricultural consultant will be required to attend site to directly supervise all demolition and construction works that have to be undertaken within the root protection areas. This will include:

- 1) Pre-commencement site meeting;
- 2) Location of protective measures;
- 3) Supervised removal/replacement of existing hard surfacing within and/or immediately adjacent to the canopies and RPAs of retained trees;
- 4) Manual excavation of fence post holes within and immediately adjacent to the RPAs of retained trees;
- 5) Any excavations within and immediately adjacent to RPAs, including foundations, hard surfacing, or underground services (a non-exhaustive list);
- 6) Removal of protective measures and sign-off.

Arboricultural Method Statement

Please refer to Arbtech 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.

Arboricultural supervision:
The removal of existing hard surfacing (which is to be replaced) within the RPAs of retained trees 5, 7, 10, 12, 14, 15 & G4 will be done under the direct supervision of the Project Arboriculturalist. Once removed it will be immediately replaced with the new hard surfacing which must re-utilise the existing sub-base. If the new hard surfacing is not to be laid until later in the program of works, temporary ground boarding will be used in the interim.



Arboricultural supervision:
Manual excavation for the installation of fence posts within the RPAs of retained Hedge H2. If roots in excess of 25mm in diameter are discovered, fence posts will be moved.

Arboricultural supervision:
Supervised access will be permitted to undertake the hard surface removal/replacement within the construction exclusion zone around retained tree 5. Additional temporary ground boarding may be used if required.

Ground protection:
The existing hard surfacing within the RPAs of retained trees 10, 15 & 16 is to be retained for the duration of the development to act as passive ground protection.

Rev:	Date:	Notes:
1	18/06/2024	Issued Proposed with the Report



Project:
Hampton Wick Primary and Nursery School
1 Normansfield Avenue
Teddington
TW11 9RP

Client:
Hartley Service Group Ltd

Drawing:
Tree Protection Plan

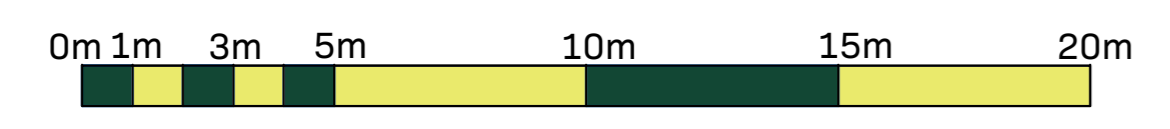
Based on:
6512_2001_P/18

Drawing No: Arbtech TPP 01
Date: June 2024
Scale: 1:150 @ A0
Drawn: PDG
Rev: A

Key:

Tree Numbers:	1	Trunks:	○	Tree Canopies:	○
Canopies Protected:	○	RPAs:	○	Category B Trees:	●
Category B Trees:	○	Category C Trees:	○	Category D Trees:	○
Category C Trees:	○	Tree Removal:	✗	Protective Fencing:	—
Category D Trees:	○	Ground Protection - Boarding:	■	Ground Protection - Passive:	■
Arboricultural Supervision:	—	Arboricultural Supervision - All Removal:	■		

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A large, light grey, stylized house-shaped graphic that serves as a background for the page. It consists of a wide base, a vertical stem on the left, and a large triangular roof with a small square chimney on the left side.

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

A large, light grey, stylized house graphic that serves as a background for the page. It has a simple, geometric design with a gabled roof and a chimney on the left side.

Appendix 5: Contact Details

Name	Position	Company	Contact
	Client		
	Agent / Project Manager		
	Tree Officer		
	Project Arboriculturist	Arbtech Consulting Ltd.	01244 661170 https://arbtech.co.uk
	Site Manager		
	Main contractor		

Document Production Record

Document number	Editor	Signature	Position	Issue number	Date
Arbtech AMS 01	Phil Gower		Arboricultural Consultant	02	20/06/24

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