

Arboricultural Impact Assessment Report

Relating to development proposal at Honeylands Hospital, Pinhoe, Exeter

> Client: Brackley Investments Ltd

Section	Page
1	2
2	3
3	3
4	4
5	4
6	4
7	12
8	12
9	12
10	13
	14
	1 2 3 4 5 6 7 8 9

info@fresh-aspect.com



1	Summary
Arboricultural impacts can be managed to acceptable levels	The overall impacts from the scheme are moderate but reducing to low with the recommended mitigation measures.
KEY trees have been identified for retention, but some loss is unavoidable	The scale and extent of tree loss will result in an impact of low magnitude due to the limited quality and stature of trees requiring removal. Tree loss will only occur because of unavoidable conflict with other site constraints.
Retained trees provide a positive character to the development	The retention of the remaining key trees will maintain the character to the proposal and enhance the overall setting of the proposed building.
Retained trees have been afforded space to reach full maturity	The retained trees have space for future growth and the London Plane will be retained in an open car park and garden area allowing it to reach full maturity. Any shading or domination of buildings is within acceptable limits.
Works within root protection areas will be managed to limit negative impacts	Works required within the Root Protection Areas of a retained tree are unavoidable and can be mitigated with ground protection and standard tree protection measures. The tree will have an ample volume of soil to sustain its root system (roots are present outside the RPA) as works will only be carried out on one side of the tree's root system, thereby limiting overall long-term negative impacts.
New planting will provide a positive impact	The proposal includes new planting that will successfully compensate for tree loss and provide a long-term positive impact. Shrub planting will soften the site interior and provide appropriate separation between areas.
The proposal accords with locally adopted policy	The proposal complies with national and local policy as well as current best practice.



Arboricultural Impact Assessment Report

Honeylands Hospital, Pinhoe, Exeter

2 Introduction

Instruction

- 2.1 I have been instructed by Brackley Investments Ltd (Client) to provide an arboricultural impact assessment, professional opinion, and advice in relation to the proposed development.
- 2.2 This report includes evaluation of the direct and indirect effects of the proposed development and the resulting impacts on trees and local amenity.

Scope

2.3 Details of the report author, a general disclaimer and the limitations of this report are included as *Appendix 1*.

Accompanying Documents

2.4 This report must be read in conjunction with the following plan(s) and document(s); also instructed by the Client and/or produced as part of the design stage process:

Document/Drawing:	Name/Ref: Produced by:	
Tree Survey	05367.TreeSurvey.23.1.20	Aspect Tree Consultancy
Tree Constraints Plan	05367.TCP.24.1.20	Aspect Tree Consultancy
Tree Protection Plan	Plan 05367.TPP.Rev B 27.6.22 Aspect Tree Co	
Landscaping Plan	05367.LSP.Rev B 27.6.22	Aspect Tree Consultancy
Site layout	9588- PL05L proposed site plan	Roberts Limbrick Ltd

 Table 1 - Supporting plan & documents

3 Relevant Background Information

Statutory Designations

- 3.1 The presence of Tree Preservation Orders (TPOs) and/or Conservation Area status has been checked with the Local Planning Authority.
- 3.2 There are no TPOs covering trees on the site. Adjacent sites (Lamacraft Drive) contain trees that are subject to a TPO. These have a limited influence on the site and are not affected by the proposed development.
- 3.3 The site does not fall within a Conservation Area.



4 Baseline information and data collection

Brief site overview

- 4.1 The site is located on the southern side of Pinhoe Road, in the eastern section of Exeter.
- 4.2 The site was formerly a hospital (Honeylands).
- 4.3 The site contains a former building, an old manor house, with open grounds around it, to the East of the main building.

Site survey

- 4.4 I undertook the site visit and initial tree survey assessment on the 23rd January 2020 with a review in 2021 to verify the accuracy of the data in case of changes since 2020.
- 4.5 The survey methodology and the tree quality assessment criteria are described in the accompanying Tree Survey document (see *2.3*); which includes the survey data schedule.

Key trees & features

- 4.6 The site contains numerous ornamental trees within the central area. These are of limited stature and significance.
- 4.7 A mature yew tree is located on the site frontage in the NW corner.
- 4.8 An early mature London plane is in the centre of the site, with a mature Sweet Chestnut toward the southern boundary.

5 Proposed Development

- 5.1 The proposal is for a residential retirement development. This will utilise the existing main house.
- 5.2 A new access will be provided in the northern, main road boundary.

6 Arboricultural Impact Assessment

Terms & Definitions

- 6.1 When describing impacts on arboricultural features; reference is made to the following parameters, as appropriate or relevant to the specific issue:
 - 1. Positive or negative
 - 2. **Magnitude:** Refers to the 'size' or 'amount' of an impact, determined on a quantitative basis where possible.
 - 3. **Duration:** The time for which the impact is expected to last prior to recovery or replacement of the resource of feature, (defined in relation to the feature rather than human time frames). The duration of an activity may differ from the duration of the resulting impact caused by the activity. For example, if short-term construction activities cause soil compaction around mature trees, there may be longer-term implications for tree health.
 - 4. **Reversibility:** An irreversible (permanent) impact is one from which recovery is not possible within a reasonable timescale or for which there is no reasonable chance of action being taken to reverse it. A reversible (temporary) impact is one from which



spontaneous recovery is possible or for which effective mitigation, is both possible and an enforceable commitment has been made.

- Timing and frequency: Some changes may only cause an impact if they happen to coincide with the critical life-stages or seasons (for example, the bird nesting season). This may be avoided by careful scheduling of the relevant activities.
- 6. **Compensation:** Measures taken to make up for the loss of, or permanent damage to, arboricultural resources through the provision of replacements.
- 7. **Enhancement:** A new benefit unrelated to any negative impact.
- 8. Impact: The way in which an arboricultural resource is affected by the project.
- 9. **Mitigation:** Measures taken to avoid or reduce negative impacts.
- 6.2 Individual trees, hedgerows, groups, woodland, and other vegetative features have been assessed in relation to the submitted layout. Issues identified are evaluated in the following subsections.



Tree Removal & Retention

6.3 Trees which make a positive contribution to the layout have been retained wherever possible. Trees to be removed are shown on the accompanying Tree Protection Plan (TPP) with a dashed canopy outline and included on the following table:

Tree	Species/Description of feature:	BS5837	Reason for removal & Impact:	
Ref:	~	category		
	Yew	A1	Removal to provide new access point. The required	
1	High visual amenity value		visibility splay and configuration of the existing road layout.	
	due to its presence on the		HIGH visual impact but of a temporary nature once new	
	main road frontage		planting is established.	
	Lawson cypress		Remove as within building footprint.	
2	Minor feature within the B1		Minor tree with purely internal benefit.	
	site		LOW impact of limited magnitude.	
	Japanese redwood Small ornamental tree	C1	Remove as within building footprint.	
3			Minor tree with purely internal benefit.	
			LOW impact of limited magnitude.	
	Common walnutCoppice regrowth fromC1felled tree.C1		Remove as within very close proximity to building footprint.	
4		C1	Low quality tree with purely internal benefit.	
			VERY LOW impact of limited magnitude.	
	Mestern und ander		Remove as within close proximity to internal road.	
-	Western red cedar	C1	Minor tree with purely internal benefit and limited life	
5	Poor physiological		expectancy.	
	condition		LOW impact of limited magnitude.	
	6 Structurally poor minor C1 tree	Sweet chestnut		Remove as within footprint of the internal road.
6		C1	Minor tree with purely internal benefit.	
			LOW impact of limited magnitude.	
	Serbian spruce Minor ornamental tree	B1	Remove as within footprint of the internal road.	
8			Minor tree with purely internal benefit.	
			LOW impact of limited magnitude.	
	11-11-		Remove as within very close proximity to the footprint of	
	Holly Minor ornamental tree with no external amenity value	C1	the main house.	
9			Minor tree with purely internal benefit.	
			VERY LOW impact of limited magnitude.	
	Horse chestnut			
	Minor internal tree with	C1	Remove to allow for new landscaping.	
T11	poor structure and		Minor tree with purely internal benefit.	
	condition		VERY LOW impact of limited magnitude.	
H1	Mixed species		Remove section to provide main access point	
(part)	Roadside hedge	B1	LOW impact due to limited length of section.	
(1	Mixed ornamental hedge		Remove as within building and internal road layouts	
H2 & H3	Small ornamental hedges	C1	VERY low impact due to no external value.	
			s to be removed	

Table 2 - Trees to be removed

6.4 The impact of the proposed tree loss is low despite the number of trees. This is because the removed trees are generally low value ornamental specimens with an internal benefit only. These ornamental species are of a small stature meaning they are easily replaced with new planting (see Section 7). The magnitude of this impact is low.



- 6.5 The loss of the yew tree on the frontage will have a high visual impact but this cannot be avoided if an appropriate access is to be provided. This impact can be compensated for with new planting, reducing the timescale of the impact.
- 6.6 The retained trees are the larger specimens with a greater long-term viability than the removed trees. These will add a maturity to the site.

Impact of proposed development on amenity value

6.7 There will be a short term temporary negative impact due to the removal of trees required to develop the site. This impact is to be limited by the planting and establishment of replacement trees in equally publicly visible locations so that the mid to long-term impact is neutral.

Retained trees - General minor impacts

6.8 There are several impacts of no discernible significance which are not discussed in detail in this report. These relatively minor issues are adequately mitigated through standard clause recommendations for construction stage tree protection measures, as indicated on the accompanying TPP.

Retained Trees - Key issue(s)

- 6.9 The most significant impacts arising from the proposed development are:
 - 1. Installation of the new internal road adjacent to tree 7 (London plane) and the spatial relationship with the new development.
 - 2. The proximity of tree 10 (Sweet Chestnut) to the proposed building and works within its root protection area.
 - 3. The influence of and works within the RPA of an off-site cedar of an off-site tree (O/T2)
- 6.10 The above issues are individually evaluated in the following sub-sections.



Key Impact 1 - Installation of the new internal road adjacent to tree 7 (London plane) and the spatial relationship with the new development



Description, magnitude and extent of IMPACT(s):

- 6.12 **Impact from the road**: The proposed road will be located at the very edge of the trees RPA on its northern side. This will entail incursion into this to allow the road to be constructed. This would result in a loss of less than 2% of the RPA.
- 6.13 The tree has ample soil elsewhere (to the south) that will allow roots outside the RPA to continue to function. The retained undisturbed ground / soil is more than twice the area of the RPA. Therefore, the available ground is ample in terms of sustaining a tree of this size into the future. This more than compensates for the loss of a very small proportion of the RPA.
- 6.14 London plane is an extremely hardy species. In addition, the tree is in early maturity allowing it to tolerate disturbance more easily. This combination of factors limits the magnitude of the impact to moderate to low. This can be reduced to low with appropriate mitigation measures.
- 6.15 **Spatial relationship**: The above diagram shows the predicted future crown spread of the tree (green circle with double line hatching). The crown spread will mostly cover parking spaces and the road, limiting the magnitude and significance of any impact and any impact relating to this will be very low.
- 6.16 The crown spread will eventually be close to the southern elevation of the northern section of the main building. As the tree will be over the road at this point, it will require regular removal of lower branches / growth to maintain reasonable clearance. This will have the added benefit of allowing day light to reach windows in the nearest part of the building. Sunlight will also reach the windows in the morning and afternoon.
- 6.17 London planes are highly tolerant of pruning and regular works to lift the crown will not have a negative impact on the tree's physiological condition.

Mitigation recommended to reduce IMPACT(s):

6.18 The tree should be protected during the construction stage including ground outside the RPA.

6.19 Regular pruning, in accordance with BS3998:2010 Tree Works, will prevent any long-term damage to the tree's health, but will address shading or domination.



Key Impact 2 - The proximity of tree 10 (Sweet Chestnut) to the proposed building and works within its root protection area.



- 6.20 **Works in RPA**: The proposed building will entail development within the RPA of the tree. This will amount to the loss of 8% of the total RPA. This is located on one side of the tree with a large, retained volume of soil on all other sides. This means that roots outside the RPA will be retained, providing the tree with ample rooting volume to sustain itself into full maturity. This limits the magnitude of the impact. The impact is moderate.
- 6.21 Spatial relationship & shading:
- 6.22 The tree is close to the southwestern elevation of the nearest building with 2m separation from the crown spread, at the closest point. The tree is fully mature, and its canopy spread cannot be expected to increase in size, in any noticeable way. Therefore, the impact will not increase over time.
- 6.23 The nearest elevations (red arrows) do not have significant windows (or only very small windows leading into a corridor), so the tree will not directly cast shade into the principal living spaces within the building.
- 6.24 Diffuse light levels, to the nearest room, will be affected but can be improved by minor pruning of the tree (see image below), at a level that will not lead to its decline (according with national standards e.g., BS3998:2010).
- 6.25 The angle of the building, in relation to the tree, and the window design reduce the domination and shading caused by the tree. This mitigates for any potential negative impacts.

Mitigation recommended to reduce IMPACT(s):

6.26 Standard tree protection fencing is required to minimise encroachment of the RPA.

6.27 Minor pruning in accordance with BS3998:2010 Tree Works.

Recommended pruning to maximise daylight penetration to the dwellings.





Table 4 – Key Impact 2Key Impact 3 - The proximity of tree O/T2 Cedar) to the proposed building and works within its root protection area.



6.28 Spatial relationship & shading:

- 6.29 The tree will cast will not cast any significant shade onto the building. Any shade is cast onto the garden area but only for a period within the mid-morning with uninterrupted sun for the majority of each day, from the south. Therefore, any impact from direct shading is of a limited extent.
- 6.30 Whilst the shade arc is useful it does not take into account diffuse light levels. The site is bright and open and only the very corner of the site is shady. This will affect the corner of the building, but primary windows will not be unacceptably influenced.
- 6.31 The impact of shading is low and there will not be any unreasonable shading near the building or primary garden space.



Installation of footpaths and patios within RPA

- 6.32 Minor footpaths will be installed within the RPA of trees 10, Sweet Chestnut and OT/2, Cedar, to allow access to the garden areas. These can be constructed on existing ground level to reduce negative impacts to a very minor level.
- 6.33 Patios are also proposed within the RPA of tree 10. These are very light weight structures and will not affect the soil structure or lead to tree root severance if they are installed on the existing ground level.
- 6.34 Both the paths and patios will use a cellular confinement system that spreads any loading on the ground as well as preventing ground / root disturbance. The system is also permeable allowing rainfall penetration to still reach the soil.

7 Mitigation Strategy

Tree Protection

- 7.1 No access to the RPA of any retained tree will be permitted before or during construction activity, unless detailed in an approved *Arboricultural Method Statement* or otherwise agreed in advance with the LPA following advice from the appointed specialist.
- 7.2 BS5837 recommends that retained trees (and areas suitable for new planting) are incorporated into CONSTRUCTION EXCLUSION ZONES (CEZs) and suitably protected throughout the development process.
- 7.3 The CEZs are clearly marked on the accompanying TREE PROTECTION PLAN and general details (heads of terms) for an accompanying *Arboricultural Method Statement* are included in the appendices of this report.
- 7.4 The method statement should include:
 - Ground protection in, or close to, RPA for construction access.
 - The installation of foundations within RPA
 - Construction of paths and patios in RPA
 - General tree protection measures.

Compensatory Planting

- 7.5 This submission is accompanied by a detailed planting plan that shows trees and shrubs to be planted to both enhance the site but also to compensate for minor tree loss.
- 7.6 Where new tree planting is planned it is imperative that consideration is given to future management and maintenance. It is recommended that a minimum five-year plan is constructed and submitted with the new landscape proposals.

New planting should be in accordance with the National House Building Council Standards NHBC 4.2 'Building near Trees' – 2020.



8 Trees & Planning Policy

8.1 Trees are a material consideration throughout the planning process and therefore the arboricultural information presented in this report and accompanying plans has been aligned with the objectives of the National Planning Policy Framework (NPPF) and the general tree-related policies and development objectives of the Local Planning Authority (LPA).

Key - LPA planning policies

- 8.2 The following Exeter City Council policies are relevant to this report:
 - i. DG1 Landscape
- 8.3 The proposed development accords with the NPPF no ancient woodland or veteran trees are present on the site.
- 8.4 The proposed development accords with the relevant sections of the above LPA policies.
- 8.5 The retained trees either have sufficient space to reach full maturity without crown spreads touching or obscuring buildings or outside existing canopy spreads.
- 8.6 Trees can be protected during the construction process.
- 8.7 The proposal includes a planting scheme that will incorporate the new development into the local area and compensating for the loss of existing trees.

9 Conclusions

- 9.1 The overall impacts from the scheme are moderate but reducing to low with the recommended mitigation measures.
- 9.2 The scale and extent of tree loss will result in an impact of low magnitude due to the limited quality and stature of trees requiring removal. Tree loss will only occur because of unavoidable conflict with other site constraints.
- 9.3 The retention of the remaining key trees will maintain the character to the proposal and enhance the overall setting of the proposed building.
- 9.4 The retained trees have space for future growth and the London Plane will be retained in an open car park / garden area allowing it to reach full maturity. Any shading or domination of buildings is within acceptable limits.
- 9.5 Works required within the Root Protection Areas of a retained tree are unavoidable and can be mitigated with ground protection and standard tree protection measures. The tree will have an ample volume of soil to sustain its root system (roots are present outside the RPA) as works will only be carried out on one side of the tree's root system, thereby limiting overall long-term negative impacts.
- 9.6 The proposal includes new planting that will successfully compensate for tree loss.
- 9.7 The proposal complies with national and local policy.



10 Recommendations

- 10.1 The tree protection measures discussed in this report and shown on the accompanying Tree Protection Plan should be implemented.
- 10.2 The appropriate use of well-worded planning condition(s) is considered a key element of successful tree retention during development and construction.
- 10.3 It is important that the tree protection measures are clearly communicated to, and understood by, the entire construction team prior to commencement of any site works – this process should involve the Local Planning Authority so as to ensure any planning conditions are not breached. This is most effectively managed by monitoring the development on a regular basis, checking tree protection measures in relation to the Tree Protection Plan & Arboricultural Method Statement(s) and reporting to the LPA on a monthly basis.
- 10.4 It is recommended that development is carried out in the following order:
 - a) Remedial tree works undertaken.
 - b) Tree protection measures installed.
 - c) Initial site clearance, demolition, and ground works.
 - d) Development of site.
 - e) Removal of tree protection measures.
- 10.5 All items above to be undertaken in accordance with LPA approved arboricultural method statements.



Appendices:

A1 Appendix 1 - Disclaimer, Limitations & Author
A2 Appendix 2 - Default Tree Protection Measures
A3 Appendix 3 - AMS heads of terms
A4 Appendix 4 - Accompanying Plans



A1

Appendix 1: Disclaimer, Limitations & Author

A1.1 Disclaimer

The statements made in this Report do not take account of extremes of climate, vandalism, or accident, whether physical, chemical or fire. Aspect Tree Consultancy cannot therefore accept any liability in connection with these factors, nor where prescribed work is not carried out in a correct and professional manner in accordance with current good practice. The authority of this Report ceases at any stated time limit within it, or if none stated after two years from the date of the survey or when any site conditions change, or pruning or other works unspecified in the Report are carried out to, or affecting, the Subject Tree(s), whichever is sooner.

A1.2 Limitations

The survey and report are concerned with the arboricultural aspects of the site only. This report is primarily concerned with the condition of existing trees and the application of current guidance for their retention. No documented information has been provided regarding any site-specific history of ground disturbance, root damage or severance, changes in soil levels, previous utility installations or any changes in site conditions.

Trees are large dynamic organisms whose health and condition can change rapidly, therefore due to the changing nature of trees and other site considerations, this report and any recommendations made are only valid for the 12-month period following the site survey.

Subsidence Risk Assessment: Any discussion of soil characteristics is only presented where this may have a direct effect on tree growth. This report does not seek to address the specific area of subsidence risk assessment.

Foundation Design: The design and construction of foundations should be informed by appropriate soil sampling and laboratory testing in accordance with NHBC Chapter 4.2. This report does not specifically relate to risks associated with subsidence, heave or other forms of disturbance associated with tree root growth or tree removal.

Third Party Liability: The limit of Aspect Tree Consultancy indemnity over any matter arising out of this report extends only to the instructing Client. Aspect Tree Consultancy cannot be held liable for any third-party claim that arises following this report. The content and format of this Report are for the exclusive use of the Client. It may not be sold, lent, hired out or divulged to any third party not directly involved in the subject matter without the written permission of Aspect Tree Consultancy Ltd.

A1.3 Author

Dominic Scanlon MICFor, F.Arbor.A, CEnv

I am a professional tree specialist and Institute of Chartered Foresters Registered Consultant. I am a Fellow Member of the Arboricultural Association, Chartered Arboriculturist and Chartered Environmentalist.

I have skills and experience directly relating to the management of trees through the planning, development and construction processes such that I am a suitably qualified and experienced competent person as defined by BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations [BS5837].



A2

A3.1 Tree Protection Measures

Retained trees should be protected by barriers and/or ground protection before any materials are brought onto site, and before any demolition, development or stripping of soil commences. Where all activity can be excluded from the RPA, vertical barriers should be erected to create a Construction Exclusion Zone (CEZ). Where, due to site constraints, construction activity cannot be fully or permanently excluded in this manner from all or part of a tree's RPA, appropriate ground protection should be installed.

A3.2 Default Tree Protective Fence (TPF) – Type1:



Key

- Standard scaffold poles
- 2 Heavy gauge 2m tall galvanized tube and welded mesh infill panels Panels secured to uprights and cross-members with wire ties
- 3 4 Ground level
- Uprights driven into the ground until secure (minimum depth 0.6m) 5 6 Standard scaffold clamps Toe board 600mm to prevent soil running through fence
- (In timber or fabric)

A3.3 Default TPF – Type2a:

Examples of above-ground stabilizing systems



a) Stabilizer strut with base plate secured with ground pins

A3.4 Default TPF – Type2b:

Examples of above-ground stabilizing systems



b) Stabilizer strut mounted on block tray

A3.4 TPF + Ground Protection in RPA:









Appendix 2- Default Tree Protection Measures

A2 cont.

A3.6 Ground Protection in RPA – pedestrian:



A3.6 Ground Protection in RPA – up to 2 ton:

Ground Level Protection

Provide As Plan For Whole Extent of Area Within The RPA

Close Fixed Deck Board To Suite Min 21 Load As B55837:2012 L1 = RPA Length of Raised Deck Area PLUS Access Routes 150mm Deep Sterilized Wood Chip Layer or other compressible material W1 = RPA Width of Raised Deck Area Permeable Heavy Duty Geotechnic Membrane

A3.7 Example Warning Sign for TPF:



The final construction stage **Tree Protection Plan** shall be accompanied by a detailed **Arboricultural Method Statement** which will include details necessary to ensure the protection of trees throughout the demolition and construction stages of the proposed development.

A3.8 Tree Protection Plan (TPP)

The final TPP shall include details covering the following site-specific items:

- 1) Site Construction Access.
- 2) All hard surfacing within RPAs.
- 3) Construction Exclusion Zones.
- Precise location of TREE PROTECTION FENCING dimensioned – including temporary fencing & set back positions.
- 5) Barriers & Ground protection details dimensioned.
- 6) Special protection measures (see AMS A4.2)
- 7) Location of utilities routes.
- 8) Areas for drainage / attenuation.
- 9) Working space for cranes, plant, scaffolding and access during works.
- 10) Position of site huts & welfare facilities.
- 11) Contractor car-parking.
- 12) Materials storage areas.
- 13) Build sequence/phasing of construction works.

A3.9 Arboricultural Method Statement (AMS)

The final AMS will be prepared and agreed with the LPA prior to start. The AMS may cover the following:

- 1) Pre-start Meeting.
- 2) Contact details for key personnel.
- 3) Site Monitoring Schedule.
- 4) Detailed Tree Work Schedule & Pruning Specification.
- 5) Final details of all operations within RPAs.
- 6) Utilities: methods of installation near trees.
- 7) Emergency Procedures.



Δ3

Appendix 3 - AMS Heads of Terms

A4.1 General / Standard AMS information

Pre-commencement site meeting: Prior to the commencement of the development, site clearance or groundworks a site meeting shall be arranged and held between the Site Manager, the Arboriculturist, and the Tree Protective Fence contractor. Any defective tree protection measures will be reported to the site manager immediately and made good in the same day.

The site manager is responsible for informing the LPA or an appointed arboricultural specialist of any damage to or breaches of the Tree Protection Measures immediately.

Construction Exclusion Zone – CEZ: The CEZs are to be afforded protection at all times and will be protected by robust FENCING and/or GROUND PROTECTION as detailed. No works will be undertaken within any CEZ that causes compaction to the soil or severance of tree roots.

Tree Protective Fences (TPF): Protective fencing will be erected in accordance with the TPP prior to the commencement of any site works i.e., before any materials or heavy machinery is brought on site. The fencing may only be removed following completion of all construction works or with the formal agreement of the LPA. The location of the TPF will be as accurate as possible to the approved TPP. Any change to the position or construction of the fencing must be approved by the Arboriculturist and subsequently agreed by the LPA. No vehicles will drive or be parked within the CEZ.

Warning Notices will be affixed to every third panel or at 12m centres and will be made of all-weather signs.

After installation of the TPF the CEZ must be considered sacrosanct and off limits for any access or construction activity without the formal consent of the LPA or otherwise detailed on the TPP.

On-site environmental good practice guidelines:

Storage and use of Liquids and Hazardous Materials.

Liquids (fuel etc.) should be stored as far away from CEZ areas as is reasonably practicable. Spill kits and drip trays should be provided and maintained in close proximity to where liquids are stored, dispensed and used. Materials should be stored in accordance with manufacturer's Safety Data Sheets.

Drip trays or absorbent mats should be placed under filling points during the transfer/dispensing of liquids e.g. during the refuelling of plant to avoid any form of soil contamination in or immediately adjacent to CEZs or area for new landscape planting.

Responsibilities:

It is the responsibility of the Building Contract Manager (TBC) to ensure that the planning conditions attached to planning consent are adhered to at all times.

The Building Contract Manager will be responsible for contacting the LPA at any time issues are raised related to the trees on site. If at any time pruning works are required permission must be sought from the Local Planning Authority first and then carried out in accordance with BS 3998 2010.

The Building Contract Manager will ensure the build sequence is appropriate to ensure that no damage occurs to the trees during the construction processes.

Protective fences will remain in position until completion of ALL construction works on the site.

The fencing and signs must be maintained in position at all times and checked on a regular basis by an on-site person designated that responsibility.

Emergency Departures & Incident Reporting:

The contractor shall contact an appointed arboricultural specialist or the LPA Tree Officer if any breaches of the CEZ and tree protection measures occur.

An action plan to incorporate mitigation measures where necessary will be agreed and effectively implemented.

Contingency Plan - Water is readily available on site and will be used to flush spilt materials through the soil and avoid contamination to tree roots. At the time of any spillage the main contractor will contact the arboriculturist for advice.

Arboricultural Site Monitoring: Monitoring will be undertaken at a frequency agreed with the construction site manager during the initial pre-commencement site meeting.

The arboriculturist shall be present during the following Key Stages:

- 1) Pre-start meeting & initial positioning of the TPF & ground protection measures.
- 2) Minimum bi-monthly monitoring visit by specialist.
- 3) All operations near trees (as detailed in AMS) are supervised.

The accompanying tree protection plan identifies areas where detailed method statements are required.