Landmark Trees

ARBORICULTURAL METHOD STATEMENT

Gospel Oak Primary School,

Mansfield Road

London NW3 2JB

REPORT PREPARED FOR:

NPS Property Consultants Ltd

Norwich Office

Nautilus House

10 Central Avenue

St Andrews Business Park

Norwich NR7 0HR

REPORT PREPARED BY:

Adam Hollis

MSc ARB MICFor FArbor A MRICS C Env

Ref: NPS/GOP/AMS/01

Date: 11th November 2012

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1.0 Introduction

1.1 Purpose & Use of the Method Statement

1.1.1 This outline method statement has been prepared for NPS Property Consultants Ltd in support of a planning application for Gospel Oak Primary School, Mansfield Road, London NW3 2JB to London Borough of Camden. The document will address the following issues:

- Precautions to minimise damage to trees.

1.1.2 This document lays down the methodology for any proposed works that may have an effect upon the trees on and adjacent to the site. It is essential within the scope of any contracts related to the development proposals that this method statement is observed and adhered to. It is recommended that this document form part of the work schedule and specification issued to the building contractors and can be used to form part of the contract.

1.1.3 Copies of this document will be available for inspection on site. The developer will inform the local planning authority within twenty-four hours if the arboricultural consultant is replaced.

1.2 Terms of Reference

1.2.1 We (LT) are instructed by the client, to prepare a method statement for proposed development based on the above planning application with reference to BS 5837:2012 Trees in Relation to Design, Demolition and Construction.

1.2.2 For this purpose, the client has supplied us with the current proposals plan (13-1-1011EYFS-BAS-PL-A-010_131025). There are no structural or services plan as yet. We are also reliant upon our own impact assessment report NPS/GOP/AIA/01A and plan overlays of tree constraints contained therein.

1.3 Development Proposals & Potential Impacts

1.3.1 The principal proposals are for the refurbishment and extension of an existing school building with a new site access.

1.3.2 The principal primary impacts in the current proposals are the felling of Category C trees 2, 3, 9, 11 & 16 - 18 to facilitate development and construction access. T4 cherry, T8 ash and T10 elder are also recommended for felling as poor specimens (category U) regardless of development. All tree works will be carried out by competent contractors to best practice. Retained trees near development will be protected by a combination of fencing and ground protection, trial investigation and where applicable, constructional variation. Site deliveries, access and material storage will be routed away from trees by means of these protection measures. Demolition of hard landscaping will proceed in a pull down / back fashion with light plant working in a controlled manner under supervision. Construction will adopt design variations such as

pile and raft for the foundations only if significant roots are found in trial pits (their presence is not expected) within the RPA encroachments of T1 & 13.

1.4 Sequence of Works

1.4.1 The sequence of works will be as follows:

- initial tree works – felling, stump grinding and pruning for working clearances
- installation of Tree Protection Barrier (TPB) & ground protection
- demolition of existing landscaping
- installation of supplementary ground protection
- main construction
- removal of TPB
- soft landscaping

These works and their arboricultural implications are outlined in sequence below

1.5 Site Supervision

1) Site supervision – an individual e.g. the Site Agent, must be nominated to be responsible for all arboricultural matters on site. An agent must be nominated for each phase of work, if demolition and construction contracts are to be awarded separately. The agent(s) must:

- be present on site for the majority of the time
- be aware of the arboricultural responsibilities - to this end, a site briefing / meeting between the agent and arboricultural consultant must be held before the commencement of each phase of works.
- have the authority to stop any work that is causing, or has the potential to cause harm to any tree
- be responsible for ensuring that all site operatives are aware of their responsibilities toward trees on site and the consequences of the failure to observe these responsibilities.
- Make immediate contact with the local authority and/or a retained arboriculturalist in the event of any tree related problems occurring, whether actual or potential
- Contact details for Landmark Trees are provided on the cover to this report.
- Contact details for the Local Authority Tree Officer are as follows:

  Alex Hutson
  Tree Officer
  Camden Council
  Town Hall
  Judd St,
  London WC1H 9JE
  Tel.: 020 7974 5939
  e-mail: Alex.Hutson@camden.gov.uk

1.6 Site Monitoring

1.6.1 Landmark Trees are to be retained as Arboricultural Consultants responsible for site monitoring for the duration of the development. Key personnel are in the main Adam Hollis and occasionally James Bell, subject to any new staff intake. Site monitoring will be undertaken by a qualified and experienced arboriculturalist at pre-determined and agreed time intervals.

1.6.2 The arboriculturalist will arrive at the site, check in at the site office and be safely escorted around the site by the site agent, checking the maintenance of tree protection measures. Routine visits will generally be unannounced. However, the arboriculturalist will also visit subject to advance notification and agreement to supervise any agreed works within the RPA.

1.6.3 Monitoring will involve a schedule of routine visits (monthly for the first 6 months and quarterly thereafter, including both site-setup and sign-off inspections) and reports to ensure contractor compliance with tree protection measures and to provide ongoing liaison with all personnel involved in the site development (including the LPA). Any defects requiring rectifying must be notified to the Site Agent and the Client and copied to the LPA by email. Emergencies will be notified to the LPA by phone. Appropriate records will be kept and be made available to the LA if required to show evidence of site monitoring (Appendix 3).

1.6.4 Supervision will not require the arboriculturalist to be present throughout all operations to ensure tasks are carried out as per the approved methodology, but certainly, during the key elements of proposed (and any other unplanned) incursions into the protection areas (subject to LPA agreement and for whatever reasons). Such supervision would require the arboriculturalist to attend site, if not the whole task, to ensure the arboricultural objectives were met. However, where tasks are ongoing, provided the arboriculturalist is satisfied, and after an appropriate briefing, the supervision may be reduced to telephone and email contact between the site foreman/ contractor and arboriculturalist.

1.6.5 The specified frequency of visits is fortnightly for the first three months and monthly thereafter. In addition, a site logbook will be kept by the Site Agent to record all stages of the development from the installation of the fence protection, to daily checks of the fencing through to the completion of the project. This should be made available to the LA if required to show evidence of site monitoring. Site monitoring should include:

- Pre-Development Site Inspection (S.2.3)
- Construction Site Agent Briefing (S.1.5)
- Installation of site facilities (S.3.3)
- Demolition of hard surfaces / structures within RPA's (3.6)
- Construction of new of hard surfaces / structures within RPA's (3.7)
- Site completion meeting (S.5)

1.6.6 The LPA's Arboricultural Officer will have free access to the site and report on any problem areas directly to the developer's Project Arboriculturalist, who will then visit the site and make recommendations to the developer on how best to rectify the situation and ensure implementation. A final sign-off visit will be carried out at the end of the development and a formal letter sent to both the client and LPA indicating an end to the monitoring period. It is the client's duty to notify LT that the project has been completed, in order to facilitate such an inspection.

1.6.7 N.B. Landmark Trees will only be responsible for providing monitoring in so far as they fully instructed to do so and regularly paid for such services by the client. In the absence of routine payment (as per our business terms), routine monitoring will cease (temporarily or permanently) and the LPA will be informed of the cessation of monitoring. The client will also reserve the right to dismiss Landmark Trees and replace with another arborist, but must inform the LPA.

1.7 Statement Adoption

1.7.1 It is recommended that, in due course, acceptance of the recommendations in this report is demonstrated by, for example, the architect specifying in writing to the building contractor that tree care conditions apply in execution of the contract, and by an estimate or written undertaking from the contractor to the architect demonstrating that the practical aspects of observation of such recommendations have been priced in. If conflicts between any part of a tree and the building(s) arise in the course of development these can often be resolved quickly and at little cost if a qualified arboriculturist is consulted promptly. Lack of such care is often apparent quickly and decline and death of such trees can spoil design aims and can of course affect saleability, and reflect poorly on the construction and design personnel involved. Trees that have been the recipients of careful handling during construction add considerably to the appeal and value of the finished development.

2.0 Pre- Development Site Preparation

2.1 Arboricultural Works

2.1.1 All works must be carried out by a competent arborist in accord with BS 3998: 2010 and any other prevailing good professional practice.

2.1.2 Specific works recommended to facilitate development are the removal of trees 2, 3, 9, 11 & 16 -18. The removal of trees, T4, 8 7 10 is recommended on husbandry grounds. Pruning works include the partial crown reduction of T13 maple from the new extension are also recommended. These specific works to facilitate development and any other husbandry works are listed in Appendix 1.

2.2 Installation of Tree Protection Barrier

2.2.1 A Tree Protection Barrier [TPB] comprising steel mesh panels of 2.4m in height ('Heras') should be erected to protect trees near buildings to be demolished on site. These panels will be mounted on a scaffolding frame as shown in Figure 1 below (this is also Figure 2 of BS5837: Trees in Relation to Design, Demolition and Construction in paragraph 6.2.2.2).

2.2.2 This TPB is to be erected before any work commences on site, is to remain 'in situ' undamaged for the duration of all work or each phase, and only to be removed once all work is completed. If any work is deemed necessary prior to the erection of fencing a Landmark Trees representative should be informed to enable their presence to oversee the work being carried out.

2.2.3 The only other exception is the completion of soft landscaping but if any excavations, however minor, are to be carried out as part of soft landscaping within RPAs, an arboricultural assessment must be carried out beforehand and any arboricultural protection measures incorporated. The TPB should carry waterproof warning notices denying access within the RPA.

2.2.4 The Tree Protection Plan in Appendix 5 illustrates where the protective fencing will be located to form the boundary of the Tree Protection Zone (TPZ). The TPZ is an exclusion zone and suitable steps will be taken to prevent access by pedestrians and vehicles and the storage of any works materials and equipment will be located outside of the TPZ.

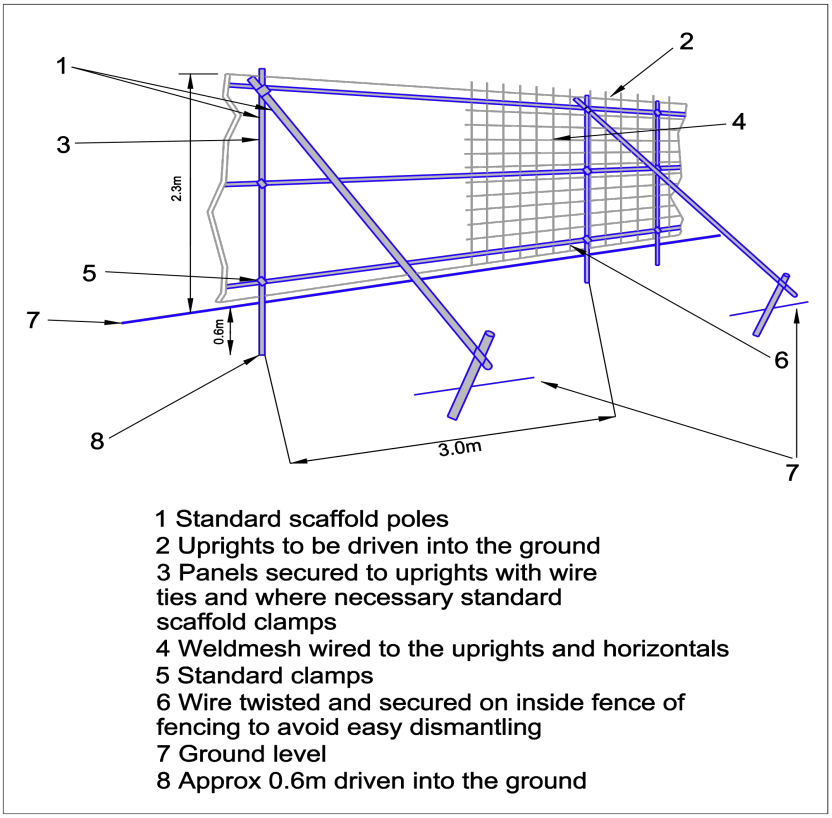


Fig. 1 Tree Protection Barrier Specification (Source: Figure 2 from BS5837 - Default specification for protective barrier)

2.3 Pre-Development Site Inspection

2.3.1 Upon completion of the tree works and installation of the protection measures, the standard of work can be checked by the retained arboricultural consultant who can then liaise with the local authority. If there are any amendments to either the tree works or additional protection measures, they will be agreed at this meeting and confirmed in writing.

3.0 Development Phase

3.1 The following general precautions will apply:

- No fires shall be made on any part of the site, or within 20m of any tree to be retained.
- No spilling or pouring of fuels, oils, solvents, tar shall be made on any part of the site.
- No materials that are likely to have an adverse effect on tree health such as oil, bitumen or cement will be stored or discharged within 10 metres of the trunk of a tree that is to be retained.
- No spillage or discharge of wet mortar or concrete shall be made on any part of the site.
- No storage of materials shall be made within the protective fences.
- No breaching or moving of the protective fences without the approval of an arboriculturist.
- Alterations in levels within the tree protection fence areas shall be avoided.

3.2 Root Protection Areas (RPA)

3.2.1 The Root Protection Area (RPA) is a desirable zone of protection around the trees' rooting system and these have been marked on the plan in Appendix 5. As much as possible, the RPA's will lie within the TPZ and therefore, be fully fenced off. However, this degree of protection is not entirely possible on the site: it is necessary to allow construction access around the site within the RPA of retained trees (especially those of G14) and to perform some works (in part) within the RPA i.e. construction of new building extension just within the RPA of T13.

3.2.2 All involved parties will need to be made aware of the deficiencies. In these instances, careful and supervised working, as described in sections, S. 3.4 (routing of services) and S. 3.6 (demolition of surfaces) and S. 3.7 (construction) will be required.

3.2.3 Ground outside the TPZ must be protected from site traffic and not left exposed during construction. As far as practical, existing hard surfaces should be retained as initial ground protection (where fit for purpose for anticipated loading) until the landscaping phase and / or substituted / supplemented with appropriate materials (e.g. Cellweb, Ground Guards etc.), capable of withstanding anticipated loads. **NB the provision of ground protection on plan does not prohibit the consented laying of services and related works in those areas (where applicable). It means that those operations should proceed under caution and protect adjacent ground to that immediately requisitioned for the work in hand.**

3.3 Site Access, Accommodation & Storage

3.3.1 Site access and accommodation will be as per the layout within our Tree Protection Plan (Appendix 5), making use of the proposed new access route to the existing hard standing area for material storage, as necessary.

3.3.2 Delivery lorries will be excluded from the site. Materials can be unloaded onto protected ground within RPA's and stored throughout the interior of the site(s) away from protected trees

3.3.3 Many site activities are potentially damaging to trees e.g. material storage, parking, soil compaction and the use of plant machinery. In this latter example particular care is required to ensure that the operational arcs of excavation and lifting machinery, including their loads, do not physically damage trees (e.g T13) in use.

3.4 Routing & Installation of Services

3.4.1 Every effort should be made to ensure that the routing and instillation of services avoid the RPA at the design stage; however if unavoidable then it may be possible, with written permission from the LPA, to implement the provisions of BS5837 and NJUG VOLUME 4 (e.g. radial trenching and /or mole trenching) under arboricultural supervision.

3.4.2 We understand that existing service routes will be maintained, with minimal disturbance to trees.

3.5 Changes in Grade

3.5.1 The upper layer of top soil contains the majority of a tree's roots and if this is disturbed by a reduction in ground level, serious damage can be caused. If such soil is to be disturbed within the TPZ / RPA, it will be done only with hand tools and the supervising arborist will be informed if roots are exposed.

3.5.2 If the ground level requires raising, this will be achieved using coarse, granular material such as pebbles.

3.5.3 If ground levels need to be marginally altered within the RPA of any tree, prior agreement must be sought from the Tree Preservation Officer and given in writing by the LPA.

3.6 Demolition Measures.

3.6.1 Demolition of structures within what would otherwise be an RPA will proceed with due caution to avoid unnecessary damage to trees.

3.6.2 All plant and vehicles engaged in demolition works (removals only) will either operate outside the RPA, or work from within the existing hard standing near trees. Where trees stand adjacent to structures scheduled for demolition, it will be necessary to undertake demolition inwards within the footprint of the existing building (often referred to as "top down, pull back").

3.6.3 Any existing hard standing within the tree's RPA's will be first broken up with manual power tools and then carefully removed with light plant by a skilled machine operator, either operating outside the RPA, or working from within the existing built structure and hard standing, near trees. Soil exposed beneath the structure will not be scraped away, but preserved in situ and protected immediately (not tracked over) with replacement ground protection (as per para 3.2.1) before the continuance of operations.

3.7 Construction Measures

Detailed method statements and risk assessments will be obtained from all specialist subcontractors involved in the new build and these will be scrutinised by the site agent to ensure the AMS requirements have been considered therein.

3.7.1 The building encroachments will only require the use of specialised foundation techniques, e.g. a mini-piling and raft design, should significant roots be encountered in trial pits within the affected areas of T1 & 13's RPA. No significant roots are expected here.

3.7.2 The outline of the proposed building extension and its foundations within the RPA will be established by the site engineer with trial holes. The arboriculturalist will be consulted on the possible pinch points where the retained tree canopies and RPA's are in close proximity to the western wall construction (i.e. T13). RPA founadation encroachments will be pre-emptively excavated by hand or with an Airspade under arboricultural supervision to 750mm depth. Roots smaller then 25mm diameter may be cut cleanly with a sharp pruning saw or secateurs back to a junction. Roots larger then 25mm diameter may only be cut in consultation with the retained arboriculturalist. Similarly, T13's canopy can only be pruned under the advice of the LT arboriculturalist and strictly in accordance with the Appendix 1 schedule.

3.7.3 Similarly, any further retained structures / retaining wall foundations within the RPA of retained trees (e.g. T13) will be constructed with discontinuous footings (positioned by trial pits as per para. 3.7.2 above) with flexibility of placement built into the design, such that trial excavated pits containing significant roots / root bundles are infilled and not used, with the footing relocated. A pad and suspended beam specification as per the detail below is proposed.

3.7.4 Where scaffolding needs to be installed within the RPA, the following ground protection should be followed / adapted to site needs: in this instance, there would be 1 storeys of scaffold and c. 200mm of Cellweb (or equivalent) filled with no-fines aggregate.

3.7.5 Any replacement paving/hard landscaping within RPA will require a no-dig construction technique, either using a cellular confinement system with no fines aggregate for the sub-base or simply building upon the existing sub-base without disturbing the ground below. Choice of construction method will initially depend upon root penetration within the existing sub-grade. The key principle is not to excavate in the presence of roots and to provide a porous surface to promote healthy soil water relations for future root growth. A further consideration in the use of a more expensive cellular confinement system or similar, may be the claimed reduction in risk of possible future slab / surface displacement by roots of trees growing in paved areas

NOTE: subject to engineers confirmation

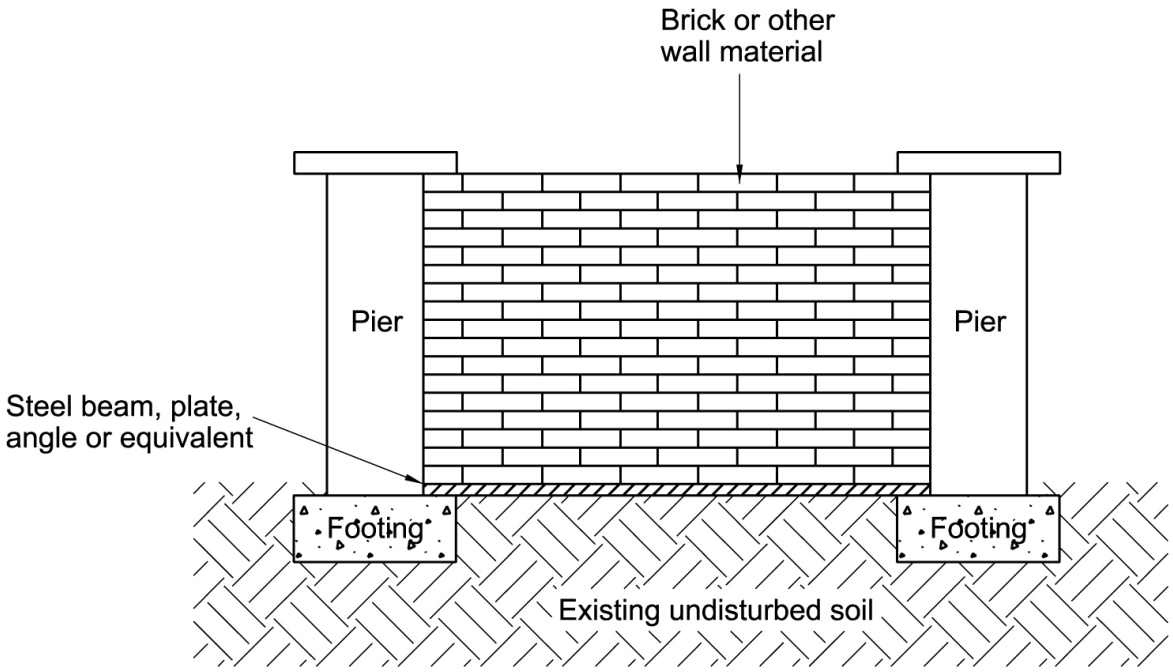


Figure 4: Proposed Boundary Wall Foundations

3.7.6 Method Statement - Sample specifications for no dig replacement paving construction by trees (e.g. T13)

i. The Construction should ideally be undertaken between May and October when the ground is sufficiently dry to prevent compaction occurring. The sub-base should be flat, that it to say any small hollows should be filled to bring up to surrounding levels.

ii. Install F4M Geotextile Separation Fabric over levelled ground surface.

iii. The geotextile should be laid out and not trafficked across at any time.

iv. The Cell Web cellular confinement system (e.g. 1 x 75 mm 'Cellweb' Tree Root Protection System for residential car use only and 75mm for pedestrian use only) is laid on the membrane and adjacent panels are stapled together. Place staking pins to maintain 'Cellweb' cells open. The panels should be laid out and worked on sequentially as the contractor progresses across the length of the area. The panels are sequentially filled with the no fines aggregate, each serving as a platform for the next section.

v. There is no need at any time for the ground to be crossed by heavy traffic. The particles/gravel pieces are transported from the parking bay over the freshly-laid confinement system BY WHEELBARROW and installed BY HAND. There will be no trespass on to the RPA beyond the installation of the confinement system itself.

vi. Panels are backfilled with no-fines 20-40mm particle size stone (clean granular fill). The infill can then be rolled to compact the particles and create a tight interlock across the cells.

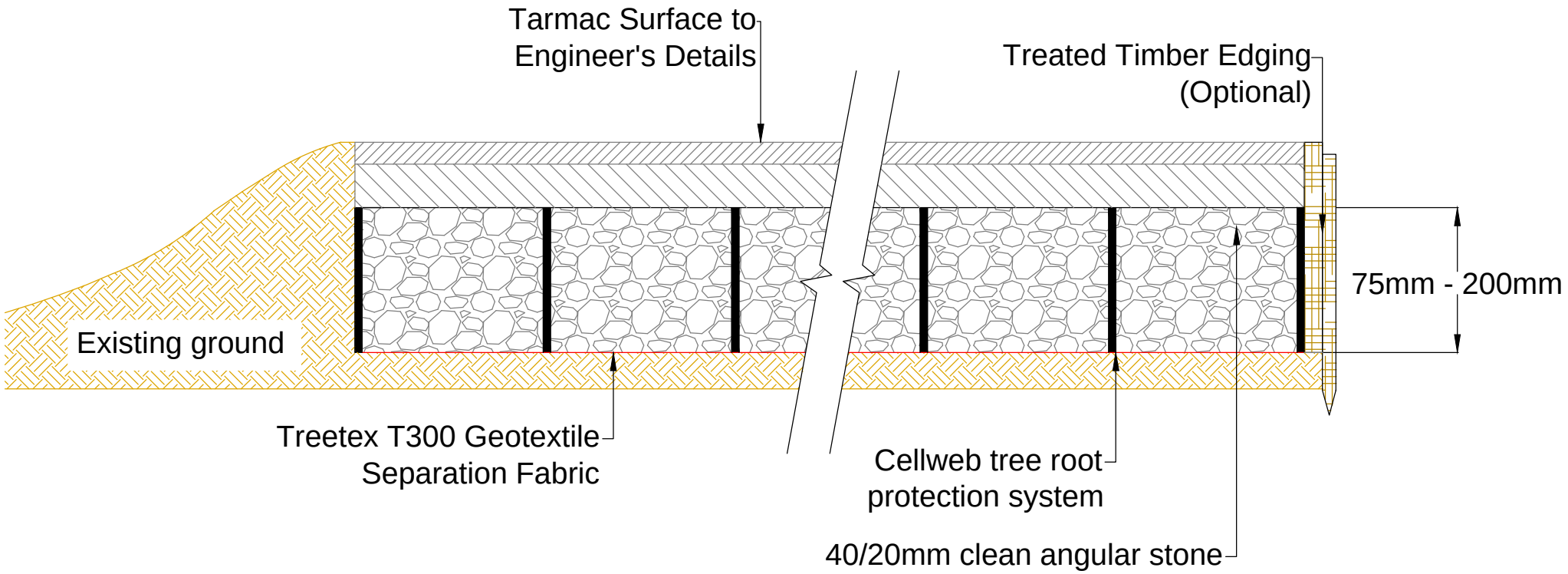
vii. The finished surface can then be laid on top. Again no fines material to be used, either gravel, dry-set block paving or porous tarmac is preferable; for a gravel finish install further F4M Geotextile separation fabric over 'Cellweb' and place minimum of 50 mm of decorative gravel surcharge (retained with plastic Duobloc grids as necessary).

viii. Install treated timber edging boards as required, fixed to timber pegs at 900 mm centres

3.7.7 See cross-sectional diagram (Figure 5) below for further explanation. For technical data on the Geotextile membrane and the Cellweb cellular confinement system always refer to the manufactures guidelines for design and implementation. Further technical advice can be gained from the manufacturer:

'Cellweb' and 'Duobloc' is a trade name of Geosynthetics Ltd

Flemming Road
Harrowbrook Industrial Estate
Hinkley, Leics.
LE10 3DU
Tel. 01455 617139
www.geosyn.co.uk



Geosynthetics Ltd
Fleming Road, Harrowbrook Industrial Estate,
Hinckley, Leicestershire. LE10 3DU
Tel: 01455 617139 Fax: 01455 617140 www.geosyn.co.uk

Project: cellweb-tarmac-standard detail	Description: Cellweb Section - Tree Root Protection c/w Tarmac Surface	*Drawn By:* RDS	*Scale:* NTS	*Date:* 13 September 2012	*Checked By:*
		Ref: ----	*Version:* V1	*Sheet:* page 1 of 1	

3.8 Removal of Ground Protection & Post Construction Landscaping & Treatment

3.8.1 The tree protection may be removed upon completion of the construction phase and when all drainage and service runs have been installed and any site machinery has been removed from the RPA.

3.8.2 Following the developing phase, impacted trees within the site boundary, identified for such treatment, will receive remedial soil remediation treatment: deep root fertiliser / mycorrhizal injection and surface mulching

3.8.2 Any further landscaping works should avoid the changing of ground levels or deep digging. Mechanised cultivation such as tractor-mounted rotovation must not be used within the RPA's of existing trees.

3.8.3 Heavy machinery should not be used in the vicinity of any retained trees.

3.8.4 If herbicides are to be used they should be appropriate to their purpose and not in such a way as to damage any retained trees or vegetation; they must be applied by a suitably qualified person i.e. a holder of a recognised 'certificate of competence'.

3.8.5 Ideally, retained trees should be within a shrub area as this reduces the chances of compaction and disturbance of root systems.

3.8.6 Any new planting schemes adopted should consider aspects of the site such as current design, layout and future use. Consideration should also be given to the soil type, climate and overall character of the landscape.

4.0 Summary of Proposed Methods

4.1 Table of Impacts and Mitigation

4.1.1 The table below summarises the main areas where trees could become damaged by the proposed development and the methods that need to be adopted in order to prevent such damage:

Impact	Mitigation	Reference	Trees Affected
General site access, material storage etc.	Ground protection to acceptable standards.	Paras 2.2.1 & 3.3.3 Tree Protection Plan in Appendix 5	All retained trees
Demolition of existing paving within RPA	Pull back technique within RPA	Section 3.6	T13
Damage to roots caused by building & landscape wall foundation excavation within RPA.	Trial excavation. Pile and raft specification for building. Post development remedial treatment	Section 3.7 & 8	T1 & 13

5.0 Completion

5.1 Completion Meeting

5.1.1 Following completion of the works listed above, a Landmark Trees consultant will meet with a local authority representative and agree upon any remedial works deemed necessary. It is the client's duty to notify LT that the project has been completed, in order to facilitate such an inspection.

5.1.2 A separate LT post-development tree inspection (with specific reference to trees identified in the Appendix 1 schedules) is recommended to facilitate a constructive meeting and to monitor the health of some of the more senescent trees on site.

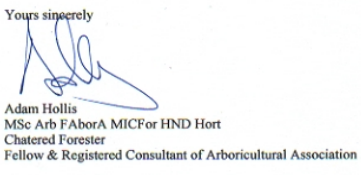
5.1.3 Any works agreed in the above meeting will be confirmed in writing and will be performed to BS 3998: 2010 Tree Works.

5.1.4 Landmark Trees recommend that any work proposed post development is checked to avoid penalty for performing illegal work on a protected tree.

5.1.5 It is recommended that, in due course, acceptance of the recommendations in this report is demonstrated by, for example, the architect specifying in writing to the building contractor that tree care conditions apply in execution of the contract, and by an estimate or written undertaking from the contractor to the architect demonstrating that the practical aspects of observation of such recommendations have been priced in.

5.1.6 If conflicts between any part of a tree and the building(s) arise in the course of development these can often be resolved quickly and at little cost if a qualified arboriculturist is consulted promptly. Lack of such care is often apparent quickly and decline and death of such trees can spoil design aims and can of course affect saleability, and reflect poorly on the construction and design personnel involved. Trees that have been the recipients of careful handling during construction add considerably to the appeal and value of the finished development.

Signed



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Adam Hollis MSc ARB MICFor FArbor A

11th November 2013

For and on behalf of ***Landmark Trees***

Web: www.landmarktrees.co.uk
e-mail: info@landmarktrees.co.uk
Tel: 0207 851 4544

London Office: 20 Broadwick Street, London, W1F 8HT
Registered Office: Grange Cottage, All Cannings, Devizes, Wiltshire, SN10 3NR

Landmark Trees is the trading name of Landmark trees Ltd. Registered in Wales. Reg No. 3882076

Appendix 1: Arboricultural Works

Notes for Guidance:

1, 2, 3 - Urgent (ASAP), Standard (within 6 months), Non-urgent (2-3 years)
RP - Pre-emptive root pruning of foundation encroachments under arboricultural supervision.
CB - Cut Back to boundary/clear from structure.
CL# - Crown Lift to given height in meters.
CT#% - Crown Thinning by identified %.
CCL - Crown Clean (remove deadwood/crossing and hazardous branches and stubs).
CR#% - Crown Reduce by given maximum % (of outermost branch & twig length)
DWD - Remove deadwood.
Fell - Fell to ground level.
FInv - Further Investigation (generally with decay detection equipment).
Pol - Pollard or re-pollard.
Mon - Check / monitor progress of defect(s) at next consultant inspection which should be <18 months in frequented areas and <3 years in areas of more occasional use. Where clients retain their own ground staff, we recommend an annual in- house inspection and where practical, in the aftermath of extreme weather events.
Svr Ivy / Clr Bs - Sever ivy / clear base and re-inspect base / stem for concealed defects.

Landmark Trees

Site: Gospel Oak Primary, Mansfield Road, London NW3 2JB **Surveyor(s): Adam Hollis**

Date: 24 10 2013 **Ref: NPS/GOP/AIA/01**

Tree Works for Development

Show All Trees

Hide irrelevant

Tree No.	English Name	Height	Stem Diameter	Crown Spread	Recommended Works	Comments/ Reasons
2	Cypress, Leyland	8	210.0	2332	Fell	Poor form To Facilitate Development
3	Cherry, Ornamental	9	150.0	4132	Fell	Suppressed by nearby tree To Facilitate Development
9	Ash, Common	11	240.0	4334	Fell	Co-dominant stems E stem removed Canopy still adjusting to loss of E stem. Minor deadwood To Facilitate Development
11	Ash, Common	11	220.0	3443	Fell	Deadwood (minor) throughout crown Canopy still adjusting to loss of T9's E stem To Facilitate Development
10	Elder	9	171.5	3232	Fell	Dying back (inner crown) Honey fungus at base To Facilitate Development
13	Maple, Field	13	380.0	3545	CB CB lateral 1-2m	Ivy clad Long low lateral branch over play area SW To Facilitate Development
16	Whitebeam, Swedish	8	180.0	2	Fell	A tree with insignificant defects To Facilitate Development

Landmark Trees

Site: Gospel Oak Primary, Mansfield Road, London NW3 2JB

Surveyor(s): Adam Hollis

Date: 24 10 2013

Ref: NPS/GOP/AIA/01

Tree Works for Development

Show All Trees

Hide irrelevant

Tree No.	English Name	Height	Stem Diameter	Crown Spread	Recommended Works	Comments/ Reasons
17	Lime, Common	8	130.0	3232	Fell	Co-dominant limbs Included bark in branch unions To Facilitate Development
18	Ash, Common	8	86.0	2321	Fell	Self-sown / unsuitable location To Facilitate Development

Appendix 2: General Guidelines

2.1 All work must be to BS 3998:2010 - '*Recommendations for tree work'*.

2.2 Staff carrying out the work must be qualified, experienced and ideally be Arboricultural Association approved contractors, and will be covered by adequate public liability insurance.

2.3 Any defects seen by a contractor or the client that were not apparent to the consultant must be brought to the consultant's attention immediately.

2.4 No liability can be accepted by the consultant in respect of the trees unless the recommendations of this method statement are carried out under the supervision of a Landmark Trees consultant.

2.5 It is advisable to have trees inspected by a consultant regularly. On this site it is recommended that these inspections are made every year.

Appendix 3: Sample Site Monitoring Sheet

Landmark Trees

Site Monitoring Report Sheet

Client:		**Planning Ref:**	
Local Authority:		**Date:**	
Site Address:			
Proposal:			

Visit Checklist	**Y/N**		**Y/N**
Tree protection barrier (TPB) in place		TPB as per approved	
Ground protection (GP) in place		GP as per approved	
TPB / GP breached		Trees damaged	
Site Agent briefed by LT			
LT briefed by Site Agent			
LPA informed			
Remedial action required			

Comments

Recommendations

Outcome		
1		
2		
3		
4		

Web: www.landmarktrees.co.uk
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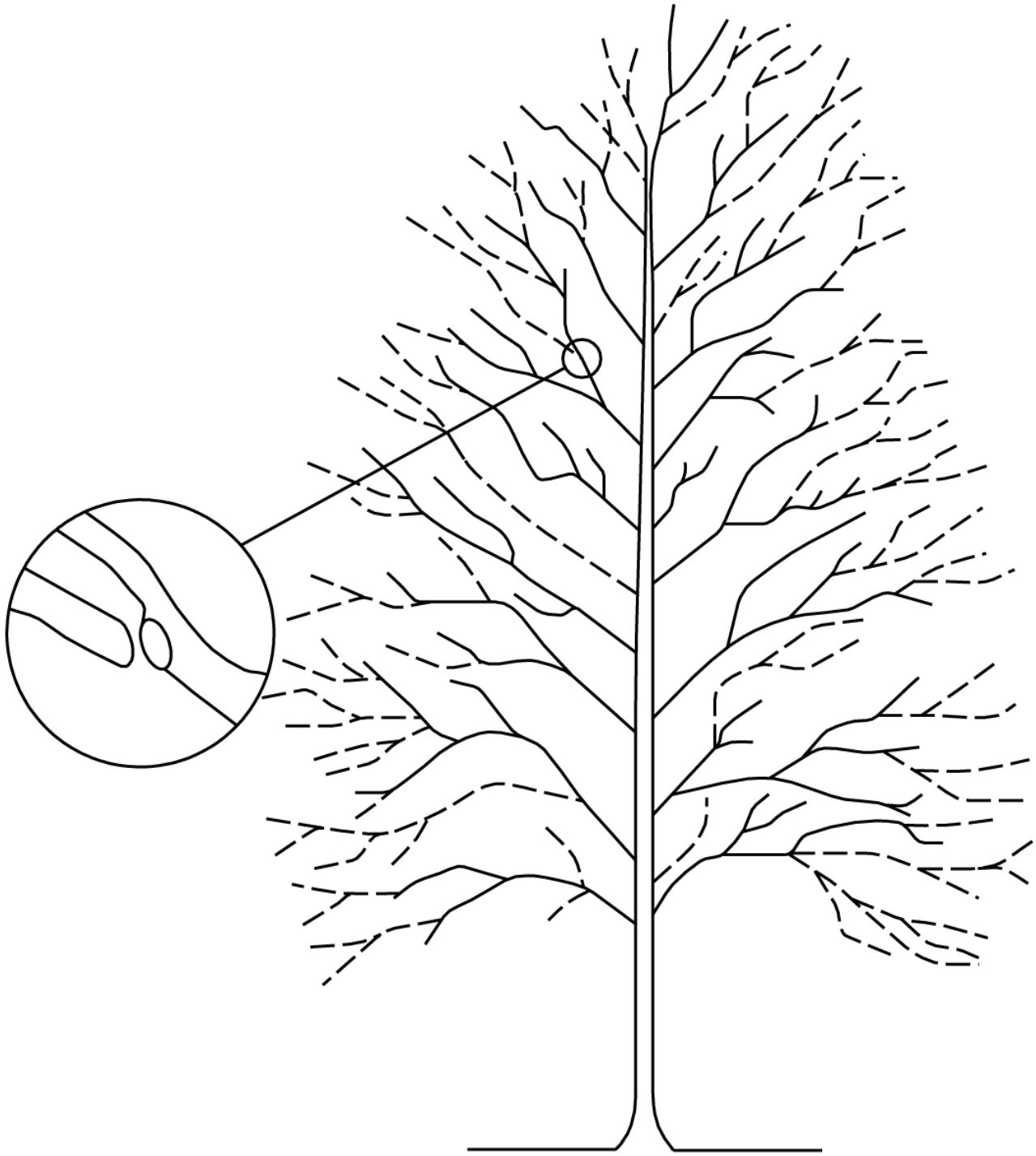
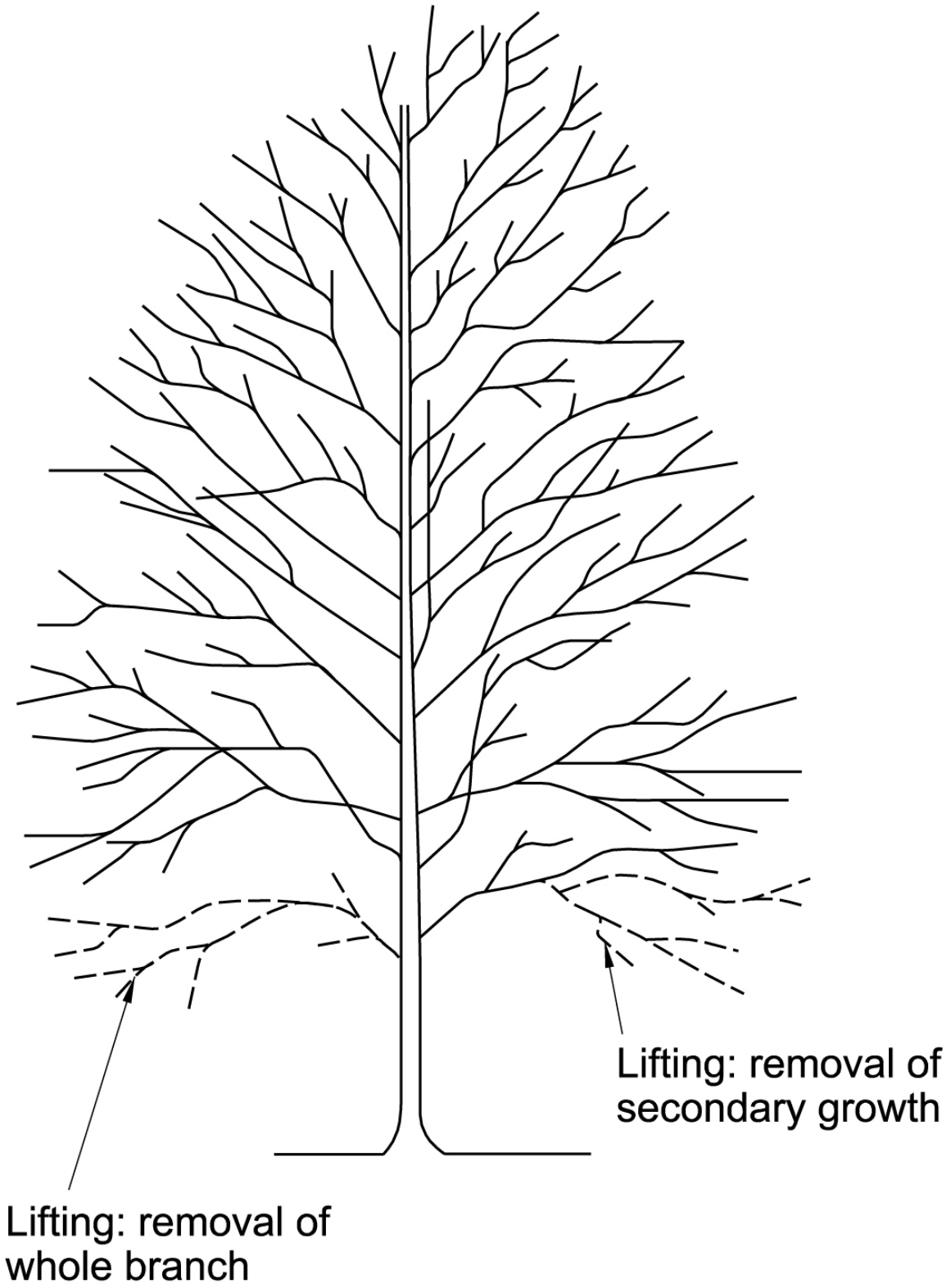
Appendix 4: Indicative Pruning Guidelines



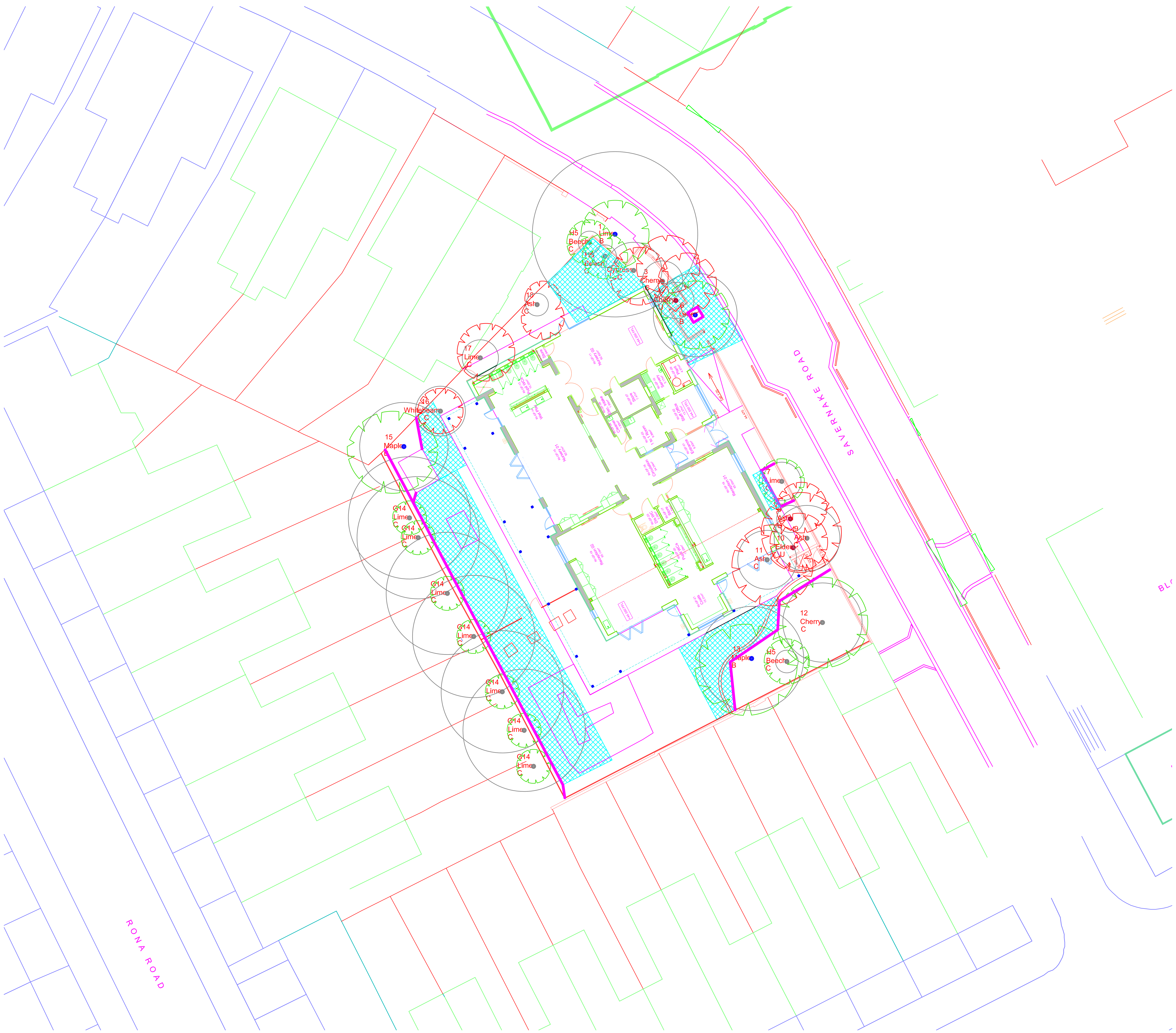
NOTE: Branches pruned back to suitable outward pointing bud or small branch.

REDUCING THE CROWN



CROWN LIFTING

Appendix 5: Tree Protection Plan



N

5m 10m

NOTE:

This survey is of a preliminary nature. The trees were inspected from the ground only on the basis of the Visual Tree Assessment method. No samples were taken for analysis. No decay detection equipment was employed. The survey does not cover the arrangements that may be required in connection with the laying or removal of underground services.

Branch spread in metres is taken at the four cardinal points to derive an accurate representation of the crown.

Root Protection Areas (RPA) are derived from stem diameter measured at 1.5 m above adjacent ground level (taken on sloping ground on the upslope side of the tree base).

Landmark Trees

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Site: Gospel Oak Primary	1:200@ A1
Drawing Title: Tree Protection Plan	November 2013

Key:

- Category A High Quality
- Category B Moderate Quality
- Category C Low Quality
- Category U Trees Unsuitable for Retention
- Tree Protection Fencing
- Precautionary area: assumed no-dig construction. All excavation subject to arboricultural supervision; limits of which to be hand-dug; hard-surfacing retained as ground protection where practicable

Category — Root Protection Area — Crown Spread — Tree Number — Species — Category (example: 13 Birch B2)

Tree Position Approximate (not shown on original survey)

Tree To Be Felled