

SIMON JONES ASSOCIATES Ltd.

ARBORICULTURAL PLANNING CONSULTANTS
Arboricultural Consultancy - Tree Surveys
Planning & Development · Hazard & Safety
Tree & Woodland Management - Expert Witnesses

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Arboricultural Implications Report

Proposed Re-development of the

The Gatehouse, 41 Highgate West Hill,

London N6



June 2013

Ref. SJA air 13074-01

SUMMARY

Simon Jones Associates has undertaken a survey of a single copper beech tree, a single lime tree and the east end of a group of 40 beech trees growing on or immediately adjacent to this site, in accordance with British Standard BS 5837: 2012, *Trees in relation to design, demolition and construction – Recommendations*.

An assessment of the impacts of the proposed Gatehouse development on these trees shows that no trees are to be removed and none of the existing trees are to be pruned.

Furthermore there are no incursions into the root protection areas (RPAs) of any of the trees to be retained. An area of the existing tarmac around the retained beech tree no. 223 is proposed to be removed and reinstated as soft landscaping. These works will be carried out by manual excavation under arboricultural supervision to ensure that no unintentional damage to the rooting area by over-dig takes place.

The proposal will not prevent the planting or successful establishment and growth of the three adjacent lime trees to be planted as part of the approved landscape scheme associated with the boundary wall planning permission. The proposal will reduce the amount of soil volume available to these specimens but this reduction is by only 11m³ (from 146.4m³ to 129m³) compared to the previously approved scheme, and the remaining volume of soil will still meet the recognised guidelines to provide sufficient soil to allow the trees to grow to maturity.

As the proposal will represent no alteration to the key arboricultural features of the site there will be no impact on the character and appearance of the conservation area and thus the proposal complies with national planning policy.

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1. INTRODUCTION.

1.1. Instructions.

1.1.1. Simon Jones Associates Ltd. has been instructed by Witanhurst Construction Management Limited to visit The Gatehouse, Witanhurst, 41 Highgate West Hill, London N6 and to survey the trees growing on or immediately adjacent to this site.

1.1.2. We are instructed to record the trees' locations, species, dimensions, ages, condition, and visual importance; and to categorise them in accordance with British Standard BS 5837: 2012, *Trees in relation to design, demolition and construction — Recommendations*.

1.1.3. We are further asked to identify which trees are worthy of retention within a proposed re-development of the site; to assess the implications of the development proposals on these specimens, and to advise how they should be protected from unacceptable damage during construction.

1.1.4. Furthermore we are asked to assess the impact of this proposal on the proposed new planting of lime trees nos. 1, 2 and 3 which were specified within Tree Locations Plan SJA 9007-02 and approved under condition 2 of the planning permission with LPA Reference 2009/2597/P and Appeal Reference APP/X5310/A/09/2119328 for the A2 Boundary Wall Planning Permission.

1.2. Scope of report.

1.2.1. This report and the appended tree protection plan (TPP) reflect the scope of our instructions, as set out above.

1.2.2. The proposed re-development comprises the construction of a new basement which will create a link to the new basement of the Main House; the reinstatement of two rear extensions; an additional storey on the central rear extension; replacement roofs on rear extensions and localised repair work to the external walls.

1.2.3. The report is intended to accompany a planning application to be submitted to the London Borough of Camden, and complies with local validation requirements, and with the recommendations of BS 5837: 2012.

1.3. Site inspection.

1.3.1. A site visit and tree inspection was undertaken by Matt Rew and Andrew Bigg of Simon Jones Associates Ltd., on the 1st and 2nd of April 2009 and revised by Simon Jones on the 31st July 2009. Weather conditions at all times were clear, dry and bright. Deciduous trees were in partial, and then full leaf.

1.3.2. The tree locations plan at **Appendix 2** is based on the topographical survey plan provided. The locations of some additional trees, not shown on this plan, have been plotted using our own measurements taken on site.

1.3.3. The tree protection plan at **Appendix 3** is based on the proposed site layout plans by Owen Architects, drawing nos. P_212 and P_213 and the landscape hardworks layout by Balston Agius drawing no. B337 PLG-042.

1.4. National policy context.

1.4.1. The National Planning Policy Framework (NPPF) was published in March 2012. Paragraph 14 of the NPPF explains that there is a presumption in favour of sustainable development:

“At the heart of the National Planning Policy Framework is a presumption in favour of sustainable development, which should be seen as a golden thread running through both plan-making and decision-taking.”

1.4.2. Accordingly, as the NPPF makes clear, planning permission for development should be granted unless the proposal is inconsistent with policies within the development plan, or any adverse effects significantly and demonstrably outweigh the benefits, or the NPPF itself indicates that the proposal should be restricted.

1.4.3. Under Section 197 of the Town and Country Planning Act 1990, local authorities have a statutory duty to consider the protection and planting of trees when granting planning permission for proposed development. The effects of proposed development on trees are therefore a material consideration that is taken into account in dealing with planning applications. The overriding principle of national policy in the NPPF, however, is that planning permission should be granted unless the proposal is not consistent with development plan policies, or where the adverse

effects significantly outweigh its benefits. It follows that development should only be refused on arboricultural grounds where loss of trees would have a significant or severe impact on the local landscape, amenity or biodiversity. Furthermore, the Gatehouse is located within the Highgate conservation area. Against this background, the effects of the current proposal are evaluated in the following sections of this report.

1.5. Site description.

1.5.1. The Gatehouse is located on the north-east corner of the Witanhurst Estate in the western part of Highgate Village at the key junction between Highgate West Hill and The Grove. To the north the site abuts the residential dwelling, The End House which is adjacent to No. 1 The Grove.

1.5.2. It is currently an active construction site as the implementation of previous planning permissions are underway.

2. THE TREES.

2.1. Survey findings.

2.1.1. We surveyed a total of two individual trees and a row of beech specimens growing as a hedge, with trunk diameters of 75mm and above, and all growing within or immediately adjacent to the site². Their details are found in the tree survey schedule at **Appendix 1**.

2.1.2. The numbers assigned to the trees in the tree survey schedule correspond with those shown on the appended tree locations and protection plans.

2.1.3. In terms of amenity value, there are no key arboricultural features within the small area affected by the proposal.

2.2. Statutory controls.

2.2.1. We understand that the common lime tree is covered by a tree preservation order (TPO).

2.2.2. The site is within the boundaries of the Highgate Village Conservation Area.

2.2.3. There are no woodlands within or abutting the site that are classified as 'Ancient'. Ancient woodland, which is considered to be an important and threatened habitat, is defined by Natural England as "Land that has had continuous woodland cover since at least 1600 AD".

2.3. Assessment of suitability for retention.

2.3.1. The trees have been categorised in accordance with BS5837: 2012. Details of the criteria used for this process can be found in the notes that accompany the tree survey schedule.

² British Standard BS 5837: 2012, *Trees in relation to design, demolition and construction – Recommendations* recommends that all trees over 75mm stem diameter should be included in a pre-planning land and tree survey.

2.3.2. Both the specimen copper beech (no. 223) and the row of beech trees which form a hedge (no. 225g) are assessed as category 'B' specimens. The copper beech is growing just east of the red line of the development within a grassed roundabout and the top of the canopy is visible in views from Highgate West Hill to the south. The line of beech trees (no. 225g) are growing within a raised brick retaining wall and are visible in a glimpsed view from Highgate West Hill. Lime no. 328 is an off-site tree which is located to the north of the Gatehouse entrance. It is assessed as a category 'C' tree, being of only 11m height, low quality with above average dead wood within the crown and is of moderate value.

2.3.3. Whilst trees in categories 'A', 'B' and 'C' are all a material consideration in the development process, the retention of category 'C' trees, being of low quality or of only limited or short-term potential, will not normally be considered necessary where they impose a significant constraint on development. Furthermore, BS 5837 makes it clear that young trees, even those of good form and vitality, which have the potential to develop into quality specimens when mature *"need not necessarily be a significant constraint on the site's potential"*³.

2.3.4. Furthermore, BS 5837 states that "....care should be taken to avoid misplaced tree retention; attempts to retain too many or unsuitable trees on a site can result in excessive pressure on the trees during demolition or construction work, or post-completion demands for their removal"⁴.

³ Ibid. 4.5.10.

⁴ Ibid. 5.1.1.

3. ARBORICULTURAL IMPACTS.

3.1. Trees to be removed.

3.1.1. No trees are to be removed.

3.2. Trees to be pruned.

3.2.1. No existing trees are to be pruned.

3.3. Root Protection Area incursions.

3.3.1. The 'Root Protection Areas' (RPAs)⁵ of the trees to be retained have been calculated in accordance with Section 4.6 of BS 5837; and have been assessed taking account of factors such as the likely tolerance of a tree to root disturbance or damage, the morphology and disposition of roots as influenced by existing site conditions (including the presence of existing roads or structures), as well as soil type, topography and drainage. Where considered appropriate, the shapes of the RPAs have been modified as a result of these considerations, so that they reflect more accurately their likely root distribution.

3.3.2. An area of the existing tarmac around copper beech (no. 223) within its RPA is to be removed and returned to soft landscaping.

3.4. Proposed Planting.

3.4.1. Limes nos. 1-3 are three trees at the east end of the row of thirteen specimens which are to be planted along the boundary with Highgate West Hill in accordance with condition 2 of A2 Boundary Wall Planning Permission ref: APP/X5210/A/09/2119328 and the approved plan proposed tree locations plan SJA 9007-02.

3.4.2. The proposed basement is shown in the proposed tree locations plan SJA PTLP 13074-01 at **Appendix 4**.

⁵ The minimum area around a retained tree "**deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority.**" BS 5837, paragraph 3.7.

3.4.3. The footprint of the proposed basement does not lie underneath the root balls of these trees; however part of the concrete structure to support the boundary wall does lie directly beneath them. Furthermore, both the concrete structure to support the boundary wall adjacent to Highgate West Hill to the south of the trees and the proposed basement to the south of the trees will restrict the depth of the soil available.

3.4.4. The proposed basement will reduce the volume of soil that is available to the trees.

3.4.5. The available soil volume required by these trees to allow them to grow to maturity has been calculated based on recognised guidelines (Urban⁶). These recommend that a volume of 36m³ is provided per tree which equates to a combined volume of 108m³ for the three trees (nos. 1-3).

3.4.6. The proposed reduction of soil volume available to these trees is outlined at section 4.4.2.

3.4.7. The relationship between the three trees and the adjacent above ground part of the Gatehouse has been approved under proposed tree locations plan SJA 9007-02. The planting positions of these trees will be retained with an adjustment of between 0.2 – 0.5m.

3.4.8. The canopy of tree no. 1 will overhang the roof of part of the adjacent single storey Gatehouse. The canopy of this tree may require pruning to provide a 2m clearance distance from the building. The canopies of trees nos. 2 and 3 will not be affected.

3.4.9. There is potential for damage to occur to these trees if they are planted prior to the completion of the construction of the proposed basement.

⁶ URBAN, 2008, ISA 'Up by Roots, Healthy Soils and Trees in the Built Environment'.

4. ASSESSMENT.

4.1. Tree removals.

4.1.1. No trees are to be removed.

4.2. Pruning.

4.2.1. No existing trees are to be pruned.

4.3. RPA incursions.

4.3.1. No parts of the proposed basement are within the RPAs of any of the trees to be retained; and therefore, subject to the implementation of protective measures specified below and on the TPP, their construction will not cause unacceptable damage to roots or rooting environments as a result of root severance or damage, or compaction or pollution of the soil.

4.3.2. The existing tarmac around copper beech (no. 223) which is to be returned to soft landscaping will be removed by manual excavation under arboricultural supervision to ensure that unacceptable damage to roots or its rooting environment as a result of unintentional over dig within its RPA does not take place.

4.3.3. The necessary precautions to prevent other incursions into the RPAs of retained trees and to protect them during demolition and construction can be assured by the erection of appropriate protective fencing, as shown on the TPP at **Appendix 3.**

4.4. Proposed planting.

4.4.1. As noted above the proposals will not prevent the planting of the proposed lime trees nos. 1 - 3.

4.4.2. Whilst the amount of soil volume for these three lime trees is proposed to be reduced by a total of 11m^3 from 146.4m^3 to 129m^3 , this will still provide sufficient soil volume to meet the recognised guidelines with a surplus of 21m^3 .

4.4.3. As noted in 3.4.3, the footprint of the proposed basement will not lie underneath the root balls of these trees. However, the root balls will be above the toe of the concrete reinforcement for the wall in part. Therefore there will be some restriction in the depth of soil available below 1.2m on the north side of the root balls. To the north there is a distance of between 0.75 and 1.0m between the proposed basement and the edge of the root balls and within this area there will be a minimum depth of 0.5m of sub-soil below the 1.2m depth of top soil.

4.4.4. As noted in section 3.4.7. fine adjustments are proposed to the tree locations amounting to changes of only up to only 0.5m from the previously approved tree planting plan. The changes are insignificant in nature and will have no impact on the view of the trees from the conservation area.

4.4.5. As noted in section 3.4.8. the canopies of trees nos. 2 & 3 will not be affected by the proposals. However, the canopy of tree no. 1 will overhang the roof of the adjacent Gatehouse and may need some minor pruning both at the time of planting and subsequently, in order to provide adequate clearance from the building. Any pruning to the tree will be minor in nature as it is intended that the canopy of the tree will be able to develop at a high level over the top of the roof of this single storey section of the building.

4.4.6. Furthermore, as the proposed height of this section of the building is not proposed to be increased, the relationship between tree no. 1 and the building will remain unchanged from the previously approved tree planting proposals.

4.4.7. The proposed planting of the lime trees will be carried out following the completion of the development and therefore they will not be affected by construction activity.

5. PROTECTION OF TREES TO BE RETAINED.

5.1. Protective fencing.

5.1.1. Construction exclusion zones (CEZs) will be formed by erecting protective fencing around the RPAs of all on-site trees to the specification recommended in BS 5837: 2012, Section 6.2, prior to the commencement of construction. This should consist of a scaffold framework comprising a vertical and horizontal framework, well braced to resist impacts, with vertical tubes spaced at maximum intervals of 3.5m. Onto this, weldmesh panels should be securely fixed with wire or scaffold clamps, as shown in **Figure 2** of that document.

5.1.2. The RPAs of the off-site trees will also be enforced by the erection of protective fencing to the same specification, prior to the commencement of construction, thereby safeguarding them from incursions by plant or machinery, storage and mixing of materials, or other construction-related activities which could have a detrimental effect on their root systems.

5.1.3. The recommended positions of the protective fencing are shown by **bold blue lines** on the TPP. The precise positioning of the fencing around the trees will be considered in conjunction with any other protective hoarding/fencing which may be required around the site boundary.

5.1.4. Within the CEZs safeguarded by the protective fencing, there will be no changes in ground levels, **no soil stripping**, and no plant, equipment, or materials will be stored. Oil, bitumen, diesel, and cement will not be stored or discharged within 10m of any trees. Areas for the storage or mixing of such materials will be agreed in advance and be clearly marked. No notice boards, or power or telephone cables, will be attached to any of the trees. No fires will be lit within 10m of any part of any tree.

6. CONCLUSION.

6.1. Summary.

6.1.1. On the basis of the above considerations we consider the arboricultural impact of this scheme to be negligible and there will be no impact on the local landscape, and thus the proposal complies with national planning policy.

6.1.2. The TPP shows the general and specific provisions to be taken during construction of the proposed development, to ensure that no unacceptable damage is caused to the root systems, trunks or crowns of the trees identified for retention. These measures are indicated by coloured notations in areas where construction activities are to occur either within, or in close proximity to, retained trees, as described in the relevant panels on the drawing.

6.1.3. The LPA can readily secure the implementation of and adherence to the measures shown on the TPP by the use of appropriate planning conditions.

6.1.4. Accordingly we conclude that, subject to the above, the proposed development does not constitute any long-term threat to the character or landscape of the conservation area, insofar as this is contributed to by trees; and accordingly it complies with national planning policy.

June 2013

APPENDIX 1

Tree Survey Schedule

SIMON JONES
ASSOCIATES Ltd.
ARBORICULTURAL CONSULTANTS

Tree Surveys and Reports · Advisory Service
Development · Management · Planning · Safety

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Associates: Mark Mackworth-Praed BA
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Tree Survey Schedule

The Gatehouse, 41 Highgate West Hill, London N6

June 2013

Tree Schedule: Explanatory Notes

The Gatehouse, 41 Highgate West Hill, London N6

This schedule is based on a tree inspection undertaken by Matt Rew & Andrew Bigg of Simon Jones Associates Ltd., on the 1st & 2nd of April 2009, and revised by Simon Jones on the 31st of July 2009. Weather conditions at all times were clear, dry and bright. Deciduous trees were in partial, and then full leaf.

The information contained in this schedule covers only those trees that were examined, and reflects the condition of these specimens at the time of inspection. We did not have access to the trees from any adjacent properties; observations are thus confined to what was visible from within the site and from surrounding public areas.

The trees were inspected from the ground only and were not climbed, and no samples of wood, roots or fungi were taken. A full hazard or risk assessment of the trees was not undertaken, and therefore no guarantee, either expressed or implied, of their safety or stability can be given. Trees are dynamic organisms and are subject to continual growth and change; therefore the dimensions and assessments presented in this schedule should not be relied upon in relation to any development of the site for more than twelve months from the survey date.

1. Tree No.

Given in sequential order, commencing at "1".

2. T.P.O. No.

Number assigned to tree in the London Borough of Camden Tree Preservation Order No. 39, made in 1971.

3. Species.

'Common names' are given, taken from MITCHELL, A. (1978) Field Guide to the Trees of Britain and N Europe.

4. Height.

Measured approximately with the aid of a clinometer, shown in metres.

5. Trunk diameter.

Trunk diameter measured at approx. 1.5m above ground level; or in case of trunks that divide into separate stems between adjacent ground level and 1.5m, at base, immediately above root flare ('arf'). Shown in millimetres.

6. Radial Crown Spread.

The maximum extent of branches from the base of the trunk in any direction, shown in metres. In the case of trees with asymmetrical crowns, separate distances are quoted in relation to points of the compass.

7. Crown Clearance.

Distance from adjacent ground level to lowest part of lowest branch, in metres.

8. Age Class.

Young: Age less than 1/3 life expectancy

Middle aged: 1/3 to 2/3 life expectancy

Mature: Over 2/3 life expectancy

Over-mature: Mature, and in a state of decline

Veteran: Surviving beyond the typical age range for species

9. Physiology.

Health, condition and function of the tree, in comparison to a normal specimen of its species and age.

10. Structure.

Structural condition of the tree – based on both the structure of its roots, trunk and major stems and branches, and on the presence of any structural defects or decay.

Good: No significant physiological or structural defects, and an upright and reasonably symmetrical structure.

Moderate: No significant pathological defects, but a slightly impaired physiological structure; however, not to the extent that the tree is at immediate or early risk of collapse.

Indifferent: Significant physiological or pathological defects; but these are either remediable or do not put the tree at immediate or early risk of collapse.

Poor: Significant and irreparable physiological or pathological defects, such that there may be a risk of early or premature collapse.

Hazardous: Significant and irreparable physiological or pathological defects, such that there is a risk of imminent collapse.

11. Comments.

Where appropriate comments have been made relating to:

- Health and condition
- Safety, particularly close to areas of public access
- Structure and form
- Estimated life expectancy or potential
- Visibility and impact in the local landscape

12. Category.

Based on the British Standard "Trees in relation to construction - Recommendations", BS 5837: 2012, Table 1.

Category U: Trees in such a condition that any existing value would be lost within 10 years and which should, in the current context, be removed for reasons of sound arboricultural management.

- Trees that have a serious, irreparable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other U category trees (i.e. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning).
- Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline.
- Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality.

Category A: Trees of high quality and value: in such a condition as to be able to make a substantial contribution (a minimum of 40 years is suggested).

- Trees that are particularly good examples of their species, especially if rare or unusual, or essential components of groups, or of formal or semi-formal arboricultural features
- Trees, groups or woodlands which provide a definite screening or softening effect to the locality in relation to views into or out of the site, or those of particular visual importance
- Trees, groups or woodlands of significant conservation, historical, commemorative or other value

Category B: Trees of moderate quality and value: those in such a condition as to make a significant contribution (a minimum of 20 years is suggested).

- Trees that might be included in the high category, but are downgraded because of impaired condition
- Trees present in numbers, usually as groups or woodlands, such that they form distinct landscape features, thereby attracting a higher collective rating than they might as individuals but which are not, individually, essential components of formal or semi-formal arboricultural features, or trees situated mainly internally to the site, therefore individually having little visual impact on the wider locality
- Trees with clearly identifiable conservation or other cultural benefits

Category C: Trees of low quality and value: currently in adequate condition to remain until new planting could be established (a minimum of 10 years is suggested), or young trees with a stem diameter below 150mm.

- Trees not qualifying in higher categories
- Trees present in groups or woodlands, but without this conferring on them significantly greater landscape value, and/or trees offering low or only temporary screening benefit

TREE SCHEDULE

The Gatehouse, 41 Highgate West Hill, London N6

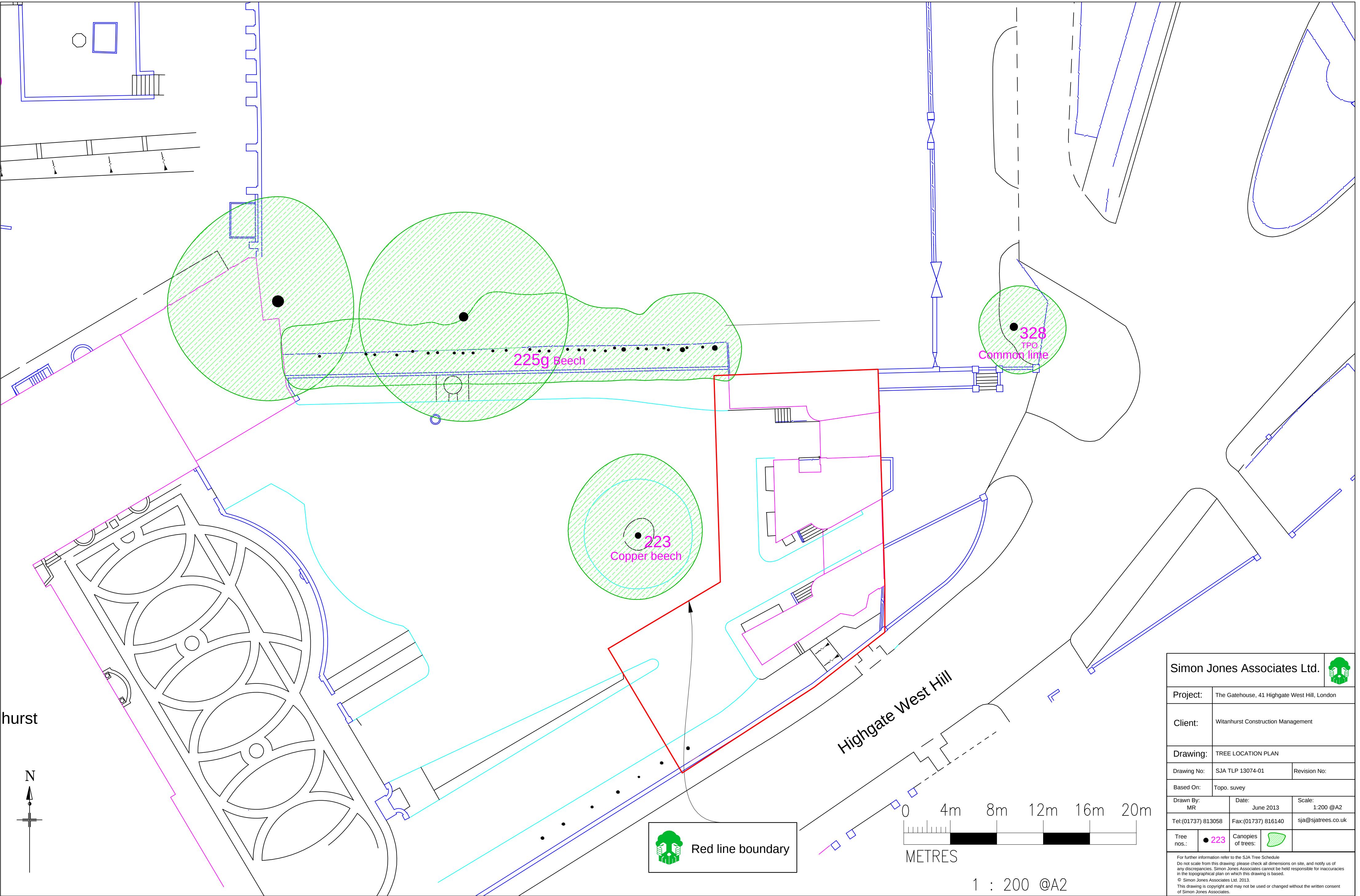
No.	T.P.O no.	Species	Height	Trunk diameter	Radial Crown Spread	Crown Clearance	Age class	Physio -logy	Structure	Comments	Category
225g	n/a	Beech	3m to 4m	70mm to 410mm	3m S	0.5m	Semi-mature	Average	Moderate	Row of approx. 40 beech trees, evidently planted as a hedge, but not regularly maintained as such in recent years; one sided canopies as have been cut back close to the boundary on the offsite side and extend 3m to the south; have been reduced in the past to approx. 1m beneath current height, very vigorous growth from beneath these points; of low quality but moderate value as a low level screen; of medium-term potential.	B (2)
223	n/a	Copper beech	14m	530mm	7m N 5.5m E 5.5m S 6m W	2m	Young	Average	Moderate	Growing within main courtyard within a grass roundabout; many surface roots, damaged on upper sides, probably by mowers; single upright trunk; spreading, dominant and unsuppressed crown appears to have been lifted in past; tree of moderate to high quality; of moderate value as visible from outside the site in views from the south but not yet an established landscape feature; of long term potential despite wounding to surface roots.	B (12)
328	T68 1969	Common lime	11m	600mm @1m	3.5m N 4.5m E 3.8m S 3.5m W	1m	Mature	Below average	Indifferent	Off-site tree; above average dead wood in crown; of low quality but moderate value; of medium-term potential.	C (2)

Root Protection Areas ('RPA's)

Root Protection Areas have been calculated in accordance with Table 2 of the British Standard 'Trees in relation to construction – Recommendations', BS 5837: 2012. This is the minimum area which should be left undisturbed around each retained tree. RPAs are portrayed initially as a circle of a fixed radius from the centre of the trunk; but where there appear to be restrictions to root growth the circle is reshaped to reflect more accurately the likely distribution of roots.

<i>Tree No.</i>	<i>Species</i>	<i>RPA Radius</i>	<i>RPA</i>
223	Copper beech	6.4m	129m ²
225g	Beech	n/a (retaining wall)	
328	Common lime	7.2m	163m ²

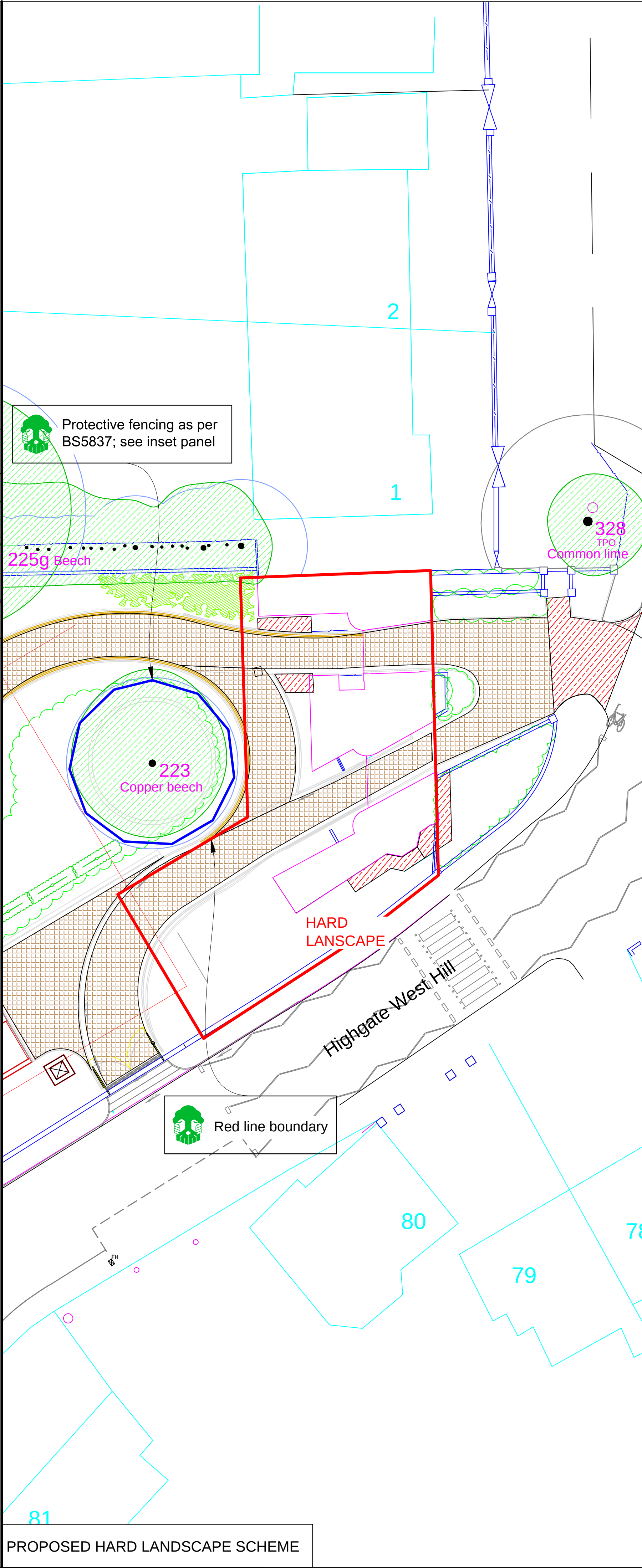
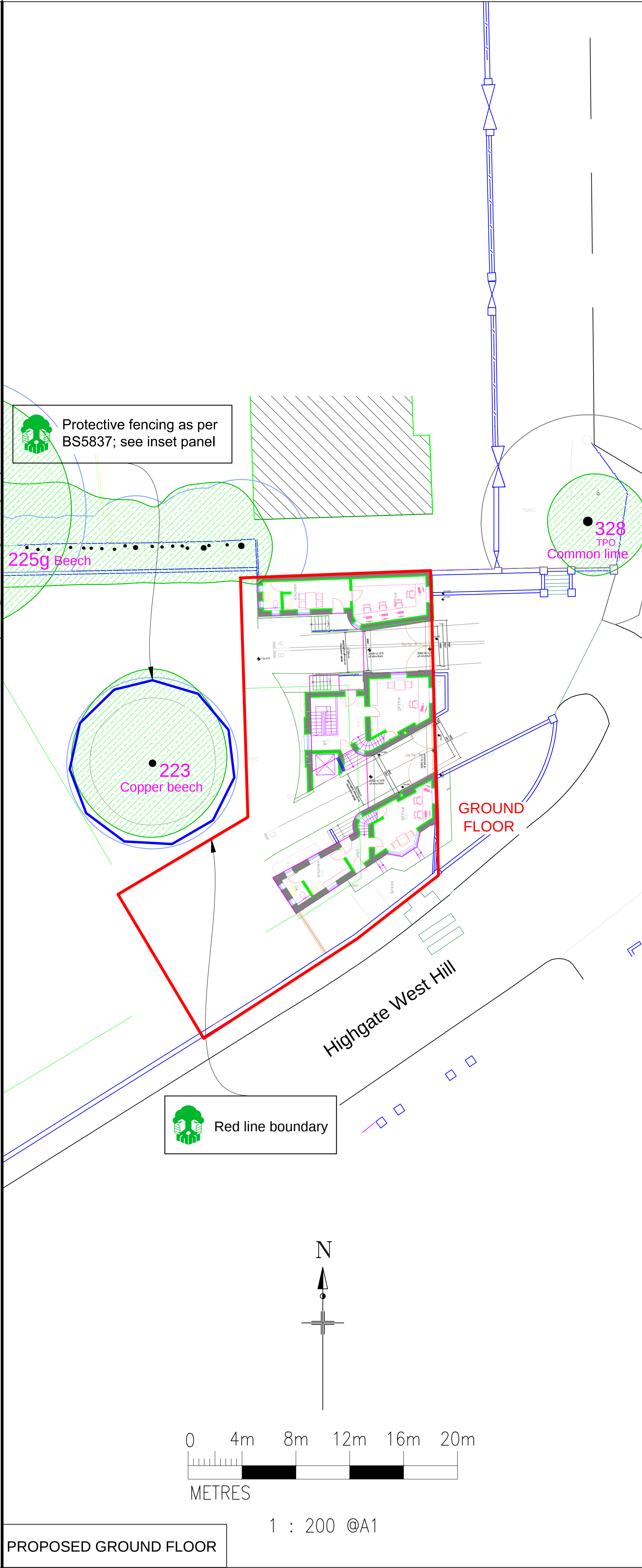
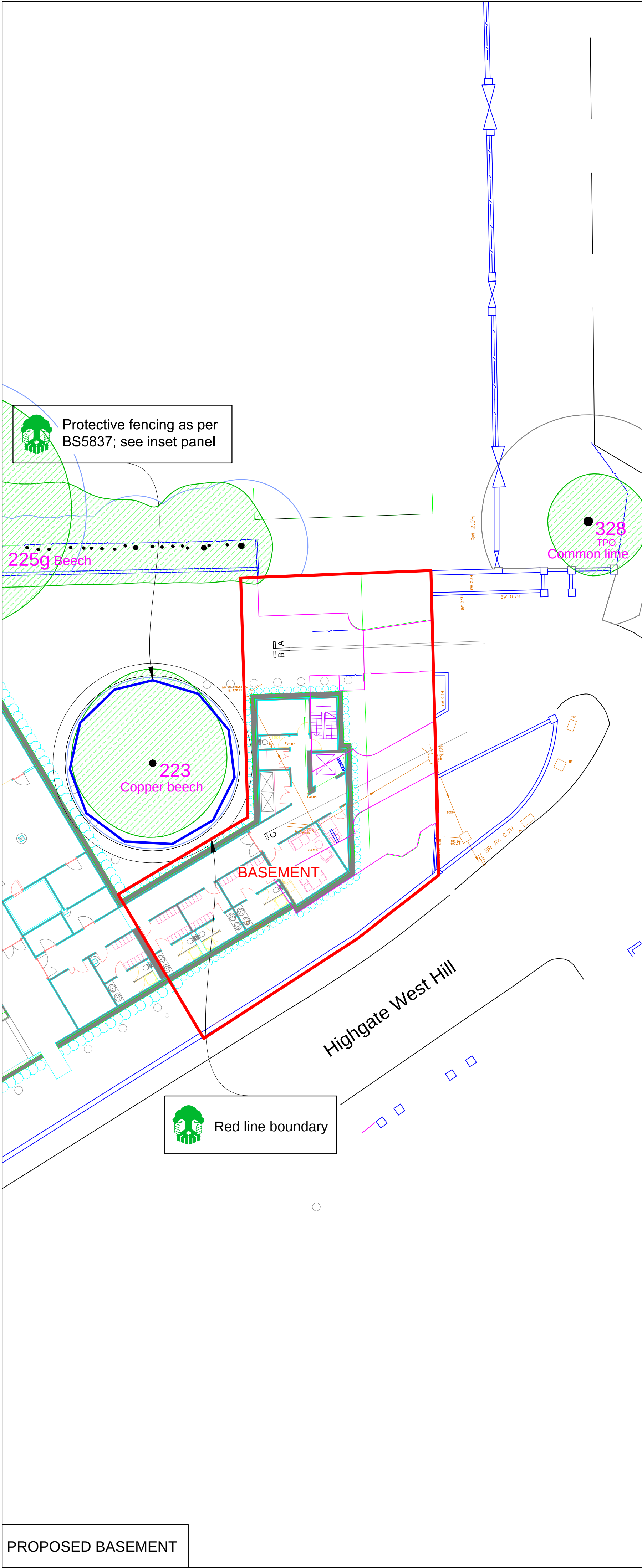
APPENDIX 2
Tree Locations Plan



Simon Jones Associates Ltd.		
Project:	The Gatehouse, 41 Highgate West Hill, London	
Client:	Witanhurst Construction Management	
Drawing:	TREE LOCATION PLAN	
Drawing No:	SJA TLP 13074-01	Revision No:
Based On:	Topo. survey	
Drawn By: MR	Date: June 2013	Scale: 1:200 @A2
Tel:(01737) 813058	Fax:(01737) 816140	sja@sjatrees.co.uk
Tree nos.: ● 223	Canopies of trees: 	
For further information refer to the SJA Tree Schedule Do not scale from this drawing; please check all dimensions on site, and notify us of any discrepancies. Simon Jones Associates cannot be held responsible for inaccuracies in the topographical plan on which this drawing is based. © Simon Jones Associates Ltd. 2013. This drawing is copyright and may not be used or changed without the written consent of Simon Jones Associates.		

APPENDIX 3

Tree Protection Plan



Arboricultural Impacts: Summary
(For details, see below)

Impact	Nos of Trees
Trees to be removed	0
Trees with existing structures to be demolished within RPAs	0
Trees with existing hard surfaces to be removed within RPAs	0
Trees where manual excavation needed within RPAs	0
Trees where above soil surfacing needed within RPAs	0
Trees with proposed underground services within RPAs	0
Trees that will require pruning	0

Protective Fencing

To be erected prior to the commencement of all works on site, and retained in place throughout construction. To comprise either 2.4m wooden site hoarding, or a 2m high scaffolding framework, with uprights at maximum 3m spacings, every other one braced to the ground with 45 degree struts; supporting standard anti-climb 'Heras' welded mesh fence panels secured with anti-lift devices to concrete or plastic bases pinned to the ground by scaffold uprights sunk to a minimum depth of 600mm; individual panels fixed to each other with at least 2 clamps and to scaffolding with heavy-duty cable ties. "TREE PROTECTION ZONE - KEEP OUT" or similar notices to be attached to every fifth panel.

TREE PROTECTION FENCING as shown in BS 5837: 2012, Section 6.2.2 & Figure 2.

Simon Jones Associates Ltd.

Project:

The Gatehouse, 41 Highgate West Hill, London

Client:

Witanhurst Construction Management

Drawing:

TREE PROTECTION PLAN

Drawing No:

SJA TPP 13074-01

Revision No:

Based On:

Owen Architects proposed basement & ground floor plans and Balston Agius dwg. no. B337 PLG-042

Drawn By:

MR

Date:

June 2013

Scale:

1:200 @ A1

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sja@sjatrees.co.uk

Tree nos.:

● 223

Canopies of trees to be retained:

Category 'B' RPA:

Category 'C' RPA:

Protective fencing:

For further information refer to the SJA Tree Schedule.
Do not scale from this drawing please check all dimensions on site, and notify us of any discrepancies. Simon Jones Associates cannot be held responsible for inaccuracies in the topographical plan on which this drawing is based.
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APPENDIX 4
Proposed Tree Locations plan

