PLANNING STATEMENT

STIRLING HOUSE, NORTHAMPTON

NORTHAMPTONSHIRE COUNTY COUNCIL

BFLA/JKA/Sch.206

16th December 2013
PLANNING STATEMENT

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Site Address: Abington Vale Primary School, Stirling Campus
77 The Avenue,
Cliftonville,
Northampton.
NN1 5BT

Contact Details

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Contact: Christopher Chapman, Tel: 01536 513165
1.00 Introduction

This Planning Statement has been prepared by GSSArchitecture on behalf of Northamptonshire County Council. It supports an application for the erection of a fence on the boundary of Cliftonville Road, part of The Avenue and part of the south west boundary, adjacent to the residential development.

2.00 Use

Abington Vale Primary School’s Stirling Campus was newly opened in September 2013. The proposed fence will improve the safety and security of the children using the school playground. It will also serve to improve the road users’ safety by helping to avoid balls escaping the site onto the busy road.

3.00 Site Context

The site is situated 0.7 miles east of Northampton Town Centre on the south side of The Avenue. The school is surrounded by residential and commercial properties. To the west, across Cliftonville Road, is part of Northampton General Hospital. As such, Cliftonville Road is quite a through route for traffic for most of the day, particularly at peak times.

4.00 Amount

The proposal is for approximately a 60m length of fence, 4m high on the western and north western boundaries of the school site. No additional development is proposed under this application. All existing access points are to remain.

5.00 Layout

The existing boundary on Cliftonville Road and The Avenue comprises of an approximately 1.8m to 2.2m high red brick wall. The proposal is to keep the existing brick wall and erect a 4m high fence inside this wall line, helping to reduce the risk of balls escaping into the road during use of the school playground. Furthermore, the proposed fence will also enhance the school’s site security on this vulnerable edge to the school.

There are a number of trees located along the boundary adjacent to the proposed fence line. The location type and condition of these trees has been recorded in the tree survey schedule and plan included in this application. Furthermore, an arboricultural report and impact assessment was carried out as part of the original planning application for conversion into the school. We have included these here as they are still relevant, particularly the arboricultural method statement, which advises on how trees should be protected during any works in their immediate area/root protection areas.

The fence is to be erected behind the existing wall line the system will use panels mounted on posts which will be sunk into hand dug holes in the ground following advice given in the above method statements.

6.00 Scale and Appearance

The fence will step down along Cliftonville Road, following the fall of the road and the step down seen on the existing brick wall. The fence will be powder coated in Grey RAL 7012, which matches the window frame colour and facias used on the school building, as well as fencing used at the vehicle access point on the east of the site.
The fence will be a mesh made up of horizontal and vertical bars supported on posts at approximately 2.5m centres. Refer to drawings (90)02 and (90)04 for the extent of fencing and indicative elevation height.

7.00 Planning Policy

Much of the relevant planning policy documents are concerned with wider strategy guidance and were used to support the original planning application in September 2013, concerning the change of use to a school. Permission was granted to locate the school on this site and this application follows to request development to allow for the effective, safe and secure operation of the school.

The following lists the policies considered relevant to the application:

National Planning Policy Framework (NPPF)
Under ‘Core Planning Principles’, paragraph 17 page 5, it states planning should ‘encourage the reuse of existing resources, including conversion of existing buildings.’ The conversion of the existing commercial building into a primary school supported this guidance and this application seeks to improve the playground facilities of the school, as well as the safety of road users.

Following on, the NPPF states under heading the 'Promoting Sustainable Transport’ paragraph 38, page 10: ‘For larger scale residential developments in particular, planning policies should promote a mix of uses in order to provide opportunities to undertake day-to-day activities including work on site. Where practical, particularly within large-scale developments, key facilities such as primary schools and local shops should be located within walking distance of most properties’. And further under heading ‘Promoting Healthy Communities’ paragraph 72, page 17: ‘The Government attaches great importance to ensuring that a sufficient choice of school places is available to meet the needs of existing and new communities. Local planning authorities should take a proactive, positive and collaborative approach to meeting this requirement, and to development that will widen choice in education. They should:

- give great weight to the need to create, expand or alter schools; ...’

Now the school is operating in this town centre location, with good links to the surrounding residential developments, it has helped to alleviate the increased demand for primary school places in Northampton. The requirement for a higher boundary fence is a reasonable request from the school given the busy adjacent roads. The fence will improve the playground for pupils but also serve to improve school security and safety for road users.

West Northamptonshire Joint Core Strategy (Pre-Submission February 2011)
The Core Strategy document is the first document to be produced in the West Northamptonshire Local Development Framework. All of the documents in the framework will together guide the future development of Northampton, Daventry and South Northamptonshire. The Core Strategy provides a long-term vision for the areas mentioned above and is the framework upon which more detailed plans will be attached. The document provides detailed policies, of which E6 ‘Education, Skills and Training’, on page 81 states ‘The role of .... educational institutions will be supported. New educational facilities will be encouraged and should be developed at sites which are accessible by sustainable transport modes ....’ We consider the position of the school provides easy access for the surrounding community, by foot and public transport, however in conjunction with this accessible location a suitable site boundary is required as put forward in this application.
Northampton Local Plan (Saved Policies)
Policy E20 New Development (design) paragraph 2.66 states ‘The appearance and quality of a street is a major contributory factor to the local environment. It is therefore important to safeguard this and maintain the scale, symmetry and coherence of the street.’ This proposal will retain the existing wall maintaining the dominant character of this frontage. The proposed fence will sit behind the existing wall line and extend above its top to increase the boundary height. The proposed fence is an open powder coated steel mesh which will allow views through, maintaining visibility above the wall of the large holly tree and the trunks of the tall trees on this boundary with their tops extending high above it. This will help to minimise the visual impact of the fence and help it to blend into the existing street scene. Paragraph 2.68 advises that ‘The Council will encourage the retention of walls and fences...’ as described this proposal will not be removing or altering any of the existing boundary treatments nor creating any additional access points. The proposal will only add an additional fence line behind the existing wall to increase security and usability of the school playground. The prevention of crime and vandalism is highlighted as a consideration in policy E40 Crime and Vandalism requiring due regard to be paid to the need to deter crime and vandalism through design, layout and landscaping. A robust fence has been specified, manufactured from twin horizontal wires sandwiching a single vertical wire, offering a high level of vandal resistance. Furthermore, there are no exposed panel ends adjacent to the posts which prevent panels being levered open at this point.

8.00 Conclusion
This application seeks permission for a new boundary fence to the Abington Vale Primary School Stirling Campus. The proposed fencing is of a reasonable scale and sits behind the existing brick boundary wall. Its erection will improve the playground facilities for the school which is operating on a very tight urban site, providing much needed school places in the town centre. The new fence will not only serve to improve the school’s outdoor play area but alleviate the potential risk of accident on the road from balls escaping onto the highway. The relevant national and local planning policy is in favour of schools being located on this kind of town centre site, and must recognise the requirement for suitable site boundaries.
Appendix A: General Comments relating to trees and construction

A1 Construction close to trees can be enormously damaging and detrimental to the tree’s health, often leading to their death and eventual removal. Development of a site, including construction of access routes, driveways and parking areas can result in substantial root severance of trees. Traditional driveway construction (excavation and backfilling with a compactable load-bearing sub-base material) can seriously damage tree roots. Such damage occurs because of a lack of understanding that roots mainly grow outwards from a tree’s trunk, near to the soil surface, rather than downwards.

A2 The majority of tree roots are in the upper metre of soil and they may spread outwards, in any direction where soil conditions are suitable, to a distance of up to three times the tree’s mature height.

A3 Any disturbance of the ground within the root spread of a tree can damage its roots, which may severely injure the tree. If roots are damaged close to the trunk, the anchorage and stability of the tree can be adversely affected. If they are damaged anywhere along their length, all of the fine roots which they serve will be destroyed.

A4 Damage to the fine roots by severance of a main root, or by compaction or alterations in levels, will prevent these fine roots from absorbing the water and nutrients which are essential for the well-being and growth of the tree. The tree may also be made unstable and pose a threat to the safety of people and property.

A5 The effects of damage from different causes, for instance by successive excavations for different services, or by excavation in one part and compaction in another part of the system, will be cumulative.

A6 If the root system is damaged, new roots must develop to sustain the tree. These may develop from the damaged root or by increased growth of other parts of the system. It may take years to replace all of the lost roots. Vigorous young trees are the most likely to be capable of rapid root regeneration, but mature trees find it very difficult to recover from major root damage. While roots may regenerate, they will not necessarily provide their original anchorage.

A7 Trees with damage may not show any immediate symptoms. If the root system is capable of rapid regeneration, the tree may recover without any noticeable ill-effects, but usually the symptoms will take several years to develop. Such symptoms may range from only minor branch dieback to deterioration and ultimate death of the tree, dependent on the severity of damage and the ability of the roots to regenerate.
Appendix B: How tree roots can be damaged during construction

B1 Most trees that have been growing undisturbed on a site for many years will have developed an extensive root system with the roots growing where the soil conditions are most favourable. There will be a balance between the development of the crown (which demands water) and the roots (which supply it). Any sudden alteration in the soil conditions within the tree’s rooting area (a circle of radius equal to the tree’s height) will therefore upset this balance.

B2 Root systems can be damaged by:

- Repeated passage of machinery, which will squeeze the soil, closing up the pores causing compaction, especially in the upper levels, and so reducing the amount of oxygen available to roots and preventing them from growing through the soil. Surviving roots may then not be able to grow through the compacted soil. It is essential therefore that all but the immediate area of the development is protected from construction operations by fencing as recommended in BS5837.
- Placing soil or other materials over the roots of a tree, which will impede air movement into and out of the soil and consequently reduce the availability of oxygen to the roots.
- The severance of a root, for example by trenching, which will destroy all parts of the root beyond that point. Even roots less than 10mm in diameter may be serving the fine roots over a wide area. The larger the root severed, the greater the impact on the tree.
- Damage to the bark on the root. The bark protects the root from decay, and is also essential for further root growth. It is loosely attached and easily damaged. If damage to the bark extends around the whole circumference, the root beyond will be killed.
- Alterations in soil level. Lowering the level will strip out the mass of roots near the surface. Raising the levels will have the same effect as soil compaction.
- Incorrect application of herbicide. There is frequently a need for operational land to be kept clear of weed growth for safety and as a fire precaution and herbicides provide an efficient method of killing both herbaceous and woody weeds. There are several types of herbicide with different modes of action and persistence, the most attractive of which tend to be those that can be applied to the ground, usually as a granule and which remain active in the soil for long periods. The wide-ranging root system of a tree may extend into the operational land from adjoining properties, and may absorb some types of herbicides which have been applied to the ground. Material absorbed in one part of the root system can kill the whole tree.
- Spillage of oils or other harmful materials, which can leach into the soil can also damage the root system. For instance, oil spilled into the soil is broken down by soil bacteria which deplete the oxygen and so asphyxiate the roots. Other materials may also have a direct toxic effect on roots.
Appendix C: Root Protection Areas (RPA’s)

C1 For the roots to be retained undamaged there must be no excavation, soil stripping or site grading within the protected zone - in other words, NO DIGGING. This means that construction will have to be above the existing ground level.

C2 The trees to be retained on site must be afforded the maximum protection as specified in Table 2 BS 5837 2012.

C3 In order to avoid damage to the roots or rooting environment of retained trees, the RPA should be plotted around each of the category A, B and C trees. This is a minimum area in square metres which should be left undisturbed around each retained tree.

C4 The RPA for each tree as determined in Table 2 should be plotted on the TCP taking full account of the following factors, as assessed by an arboriculturalist, which may change its shape but not reduce its area whilst still providing adequate protection for the root system.

4.1 The likely tolerance of the tree to root disturbance or damage, based on factors such as species, age and condition and presence of other trees. For individual open grown trees only, it may be acceptable to offset the distance by up to 20% in one direction.

4.2 The morphology and disposition of the roots, when known to be influenced by past or existing site conditions (e.g. the presence of roads, structures and underground services).

4.3 The soil type and structure.

4.4 Topography and drainage.

4.5 Where any significant part of a tree’s crown overhangs the provisional position of tree protection barriers, these parts may sustain damage during the construction period. In such cases, it may be necessary to increase the extent of tree protection barriers to contain and thereby protect the spread of the crown. Protection may also be achieved by access facilitation pruning. The need for such measures, including the precise extent of pruning, should be assessed by an arboriculturalist.
5.1 Barriers should be fit for the purpose of excluding construction activity and appropriate to the degree and proximity of work taking place around the retained tree(s). On all sites, special attention should be paid to ensuring that barriers remain rigid and complete.

5.2 The default specification for protective barriers is a vertical and horizontal scaffold framework, well braced to resist impacts with welded mesh panes securely fixed onto this framework. The vertical tubes should be spaced at a maximum interval of 3m and driven securely into the ground.

5.3 Where site circumstances and associated risk allow, an alternative specification should be prepared by the arboriculturalist and agreed with the Local Planning Authority. For example, 2m tall welded mesh panels on rubber or concrete feet, stabilised on the inside and joined together using a minimum of two anti-tamper couplers, installed so they can only be removed from inside the fence.

5.4 “Protected Trees No Entry” signs should be affixed to every fourth panel. The barriers should remain in place until completion of the construction phase and removed only on the consent of the Local Planning Authority.

C6 Where it has been agreed during the design state, and shown on the tree protection plan, that vehicular or pedestrian access for the construction operation may take place within the root protection area (RPA), the possible effects of construction activity should be addressed by a combination of barriers and ground protection. The position of the barrier may be shown within the RPA at the edge of the agreed working zone but the soil structure beyond the barrier to the edge of the RPA should be protected with ground protection.

C7 For pedestrian movements within the RPA, the installation of ground protection in the form of a single thickness of scaffold boards on top of a compressible layer laid onto a geotextile, or supported by scaffold, may be acceptable.

C8 For wheeled or tracked construction traffic movements with the RPA, the ground protection should be designed by an engineer to accommodate the likely loading and may involve the use of proprietary systems or reinforced concrete slabs.
Figure 2  Default specification for protective barrier

Key
1  Standard scaffold poles
2  Heavy gauge 2 m tall galvanized tube and welded mesh infill panels
3  Panels secured to uprights and cross-members with wire ties
4  Ground level
5  Uprights driven into the ground until secure (minimum depth 0.6 m)
6  Standard scaffold clamps
Figure 3 Examples of above-ground stabilizing systems

a) Stabilizer strut with base plate secured with ground pins

b) Stabilizer strut mounted on block tray

Appendix D: How to avoid damage to trees during construction

The precautionary area of a tree can be defined as either the extent of the crown spread (the drip line), or half the tree’s height on either side of the tree. For excavation within the precautionary area, the key points to remember are:

D1 Do not excavate with machinery. Use trenchless techniques where possible. Otherwise dig only by hand. All excavations within the area below the crown must be carried out by hand, digging carefully around roots, retaining as many as possible.

D2 Do not sever any tree roots in excess of 25mm, unless the council’s Tree Officer agrees beforehand.

D3 Where small tree roots are to be cut, this should be done cleanly, as with the pruning of branches, using secateurs or a handsaw. Make a clean cut and leave as small a wound as possible.

D4 Roots exposed during construction should be kept moist and protected from frost and from drying out. If trenches are to be left open overnight, cover the roots with dry sacking. Remember to remove the sacking before backfilling.

D5 Backfill the trench with an inert granular material and top soil mix. Compact the backfill with care around the retained roots. On non-highway sites backfill only with excavated soil.

D6 Don’t store spoiled or building material, including chemicals and fuels within the tree’s crown and make sure you do not contaminate tree roots and surrounding soils.

D7 Do not lower or raise soil levels close to the tree.

D8 Do not allow the passage of vehicles across the unprotected soil surface, especially when the soil is wet, as this will cause breakage of surface roots, soil compaction and consequently reduced soil aeration.

D9 Construction materials must be permeable to allow gaseous exchange between the root system and the atmosphere, and be constructed in line with current guidelines to avoid soil compaction.

D10 Where car parking or roadways are to be constructed close to trees, it is essential that construction follows guidelines available in APN12 Arboricultural Practice Note issued by the Arboricultural Advisory and Information Service.
ARBORICULTURALIST’S REPORT

Terms of Reference

1.1 This report was requested by Paul Meakins of Wilby Tree Surgeons Limited, Tower Field Farm, Northampton, NN6 0QT.

1.2 The instruction to carry out an inspection of trees at Stirling House, Northampton was received by e-mail.

1.3 My report is to cover the species, age, dimensions, health, recommendations for any remedial work and suitability for retention in relation to any development that may take place and to include root protection areas for each tree.

Limitations

2.1 The content of this report is valid for a period of three years from the date shown above.

2.2 The report is for the sole use of the client and its reproduction or use by anyone else is forbidden unless written consent is given by the author.

2.3 This is an arboricultural report and as such, no reliance should be placed on comments relating to buildings or soil data.

2.4 This is not a full arboricultural survey. This can be supplied but will be subject to a further fee. Any safety implications identified during the inspection are of course noted within this report.

2.5 My observations and comments are based upon experience with previous cases. I have no formal engineering qualifications.

2.6 The inspection was undertaken from ground level.
The Site

3.1 This site is Stirling House, a large commercial building adjacent to Cliftonville, Northampton.

3.2 There are a number of large trees within the site and on surrounding land.

3.3 I carried out the survey on 17th January 2013 and collected data regarding trees and vegetation includes the species, age class, dimensions, condition and category for retention. Height data was gathered using a laser clinometer. DBH (diameter at breast height) was measured using a metric girding tape. Age and condition was estimated by examining the trees.

Discussion

4.1 The integration of trees within a development relies heavily on careful planning when locating properties and retaining trees nearby. Provided these points are considered, a harmonious relationship between people, their houses and gardens and existing trees is possible.

4.2 The fourteen trees have been numbered and categorised according to Table 1 of BS5837 : 2012 Trees in relation to construction - Recommendations:

<table>
<thead>
<tr>
<th>Category</th>
<th>No of Trees</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>One</td>
<td>Those of a high quality with an estimated remaining life expectancy of at least 40yrs</td>
</tr>
<tr>
<td>B</td>
<td>Five</td>
<td>Those of a moderate quality with an estimated remaining life expectancy of at least 20yrs</td>
</tr>
<tr>
<td>C</td>
<td>Eight</td>
<td>Those of a low quality with an estimated remaining life expectancy of at least 10yrs, or young trees with a stem diameter below 150mm.</td>
</tr>
<tr>
<td>U</td>
<td>None</td>
<td>Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 yrs.</td>
</tr>
</tbody>
</table>
4.3 Any development proposal should consider that trees identified as retention categories A, B or C are generally those that should be retained. However, category C trees will usually not be retained where they would impose significant constraint on development.

4.4 Each tree to be retained within a development site warrants protection. The British Standard BS5837: 2012 Guide for Trees in Relation to Construction gives clear guidance as to the Root Protection Area (RPA) using Table 2 of the document. The attached tree schedule provides the RPA radius for each tree as well as the area in m².

4.5 There are however above ground constraints that may limit development close to trees. This includes the crown spread of the tree and, in some cases, it may be necessary to increase the extent of tree protection barriers to contain and thereby protect the spread of the crown. This consideration should also allow for future growth. Additional considerations are the obstruction of sunlight or daylight to the development.

4.6 The following appendices are attached to this report:

A Retention Categories
B Root Protection Areas
C How tree roots can be damaged during construction
D How to avoid damage to trees during construction

4.7 BS5837 calls for Root Protection Areas to be shown on the plan accompanying the planning application. I have included the required data in the attached tree schedule so that you can add the Root Protection Areas electronically.

4.8 For groups of trees, the data is an average for the trees within the group. However, when plotting the information onto your plan, you should be aware that Root Protection Areas will overlap considerably due to the proximity of the trees to each other within the group.

4.9 Section 5.3.1 of BS 5837 also calls for the inclusion of shading caused by retained trees where they would cause unreasonable obstruction of sunlight or daylight to a development. This is represented by a segment with a radius from the centre of the stem equal to the height of the tree, drawn from north west to east, indicating the shadow pattern throughout the main part of the day.
Conclusion

5.1 The trees present are locally significant and offer high levels of public visually amenity.

5.2 All retained trees should be protected with protective fencing in line with BS 5837 : 2012 Trees in relation to construction : Recommendations, at the distance specified for the Root Protection Areas in the attached schedule.

5.3 Prior to commencing any arboricultural work to the trees, it is essential to liaise with the Local Planning Authority as they may be protected by a Tree Preservation Order or within a Conservation Area.

5.4 Any arboricultural work should be carried out by a competent arborist in line with BS3998 British Standards for Tree Work. Should you require details of suitably qualified contractors, the Arboricultural Association maintains a list which is available by calling 01794 368717 or via their website (www.trees.org.uk).

Should you have any questions or require any clarification, please do not hesitate to contact me.

Yours sincerely

Bruce Hatton
ARBORICULTURAL IMPACT ASSESSMENT

Terms of Reference

1.1 This report was requested by Paul Meakins of Wilby Tree Surgeons Limited, Tower Field Farm, Northampton, NN6 0QT on behalf of GSS Architecture, 2 Spencer Parade, Northampton, NN1 5AA.

1.2 The instruction was to carry out an arboricultural impact assessment to support a Planning Application regarding a proposed development at Stirling House, Northampton.

Limitations

2.1 The content of this report is valid for a period of one year from the date shown above.

2.2 The report is for the sole use of the client and its reproduction or use by anyone else is forbidden unless written consent is given by the author.

2.3 This is an arboricultural report and as such, no reliance should be placed on comments relating to buildings or soil data.

Introduction

3.1 I carried out my original arboricultural survey at Stirling House, Northampton on 17th January 2013 and produced my report number 2403.

3.2 This supplementary report has been commissioned by Wilby Trees to assess the arboricultural impact of the layout.

3.3 For ease of cross referencing, the original schedule detailing specific information on each tree is included at appendix 1. Details of the measurement conventions relating to this are contained in the original report and have not therefore been duplicated in this document.
Proposed Layout Plan

4.1 To facilitate the preparation of this report, a scaled copy of the proposed layout was provided (90 01 Rev A). My observations regarding the impact on the trees are based upon this drawing and the locations of the plotted trees within and adjacent to the site.

Protection of Retained Trees

5.1 All felling and pruning operations should be undertaken by an Arboricultural Association Approved Contractor, operating in accordance with British Standard 3998 2012 – Recommendations for Tree Work and other current industry best practice guidelines. This work should ideally be completed and the protective barriers erected prior to any other site clearance or construction work commencing.

5.2 The trees proposed for retention will need to be rigorously protected throughout the development period to avoid them being accidentally damaged. Protective barriers should be erected prior to any work commencing.

5.3 The default specification for protective barriers is a vertical and horizontal scaffold framework, well braced to resist impacts with welded mesh panes securely fixed onto this framework. The vertical tubes should be spaced at a maximum interval of 3m and driven securely into the ground.

5.4 Where site circumstances and associated risk allow, an alternative specification should be prepared by the arboriculturalist and agreed with the Local Planning Authority. For example, 2m tall welded mesh panels on rubber or concrete feet, stabilised on the inside and joined together using a minimum of two anti-tamper couplers, installed so they can only be removed from inside the fence.

5.5 “Protected Trees No Entry” signs should be affixed to every fourth panel. The barriers should remain in place until completion of the construction phase and removed only on the consent of the Local Planning Authority.

5.6 Extreme care will also need to be exercised when removing and reinstating redundant areas of existing hard surfacing within the tree’s rooting zones. Further advice can be provided on these issues once a final layout has been agreed.

5.7 No other site clearance, surface removal or ground level changes should be carried out unless authorised by the Local Planning Authority. This includes storage or dumping of materials within the exclusion zones defined by the protective fencing.
5.8 No materials that are likely to have an adverse effect on tree health should be stored or discharged within 10m of the trunk of a retained tree, nor should fires should be lit within 20m of the trunk.

**Arboricultural Impact**

6.1 I have made an appraisal of the proposals and their potential impact on the trees. These impacts include removals, proximity issues, surface changes and protection during demolition and construction.

6.2 The following table details the potential conflict that the proposed operations to re-develop the site may create.

<table>
<thead>
<tr>
<th>Tree</th>
<th>Ret Cat</th>
<th>RPA Root Protection Area</th>
<th>Conflict</th>
<th>Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1 – Cedar</td>
<td>B1</td>
<td>9.4m</td>
<td>New area of hard standing to be constructed within RPA.</td>
<td>Use specialist construction methodology outlined in AMS.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Conflict between RPA &amp; canopy support post</td>
<td>Carry out work in accordance with AMS</td>
</tr>
<tr>
<td>T2 – Horse Chestnut</td>
<td>C1</td>
<td>12.9m</td>
<td>Conflict between RPA &amp; canopy support post</td>
<td>Carry out work in accordance with AMS</td>
</tr>
<tr>
<td>T12 – Corsican Pine</td>
<td>B1</td>
<td>10m</td>
<td>Conflict between RPA and new access ramp</td>
<td>Conflict is less than 5% of total RPA, so there should be no detriment to the tree.</td>
</tr>
</tbody>
</table>

6.3 The proposed work should cause no detriment to the three tree outlined above.

6.4 The remaining trees on site and on adjacent land will be unaffected by the development proposals provided the attached guidance is followed. The ultimate sizes of retained trees should not cause unwanted shading or dominance of the completed development.
Prior to commencing any arboricultural work to the trees, it is essential to liaise with the Local Planning Authority as they may be protected by a Tree Preservation Order or within a Conservation Area.

Any arboricultural work should be carried out by a competent arborist in line with BS3998 British Standards for Tree Work. Should you require details of suitably qualified contractors, the Arboricultural Association maintains a list which is available by calling 01794 368717 or via their website (www.trees.org.uk).

Should you have any questions or require any clarification, please do not hesitate to contact me.

Yours sincerely

Bruce Hatton
*Dip. Arb. (RFS)  F. Arbor. A.  MICFor.*
<table>
<thead>
<tr>
<th>Tree No</th>
<th>Species</th>
<th>Height (m)</th>
<th>Clear Stem Height</th>
<th>1st Branch to</th>
<th>DBH 1 (m)</th>
<th>DBH 2 (m)</th>
<th>DBH 3 (m)</th>
<th>DBH 4 (m)</th>
<th>DBH 5 (m)</th>
<th>DBH Calc (m)</th>
<th>Crown Spread N</th>
<th>Crown Spread E</th>
<th>Crown Spread S</th>
<th>Crown Spread W</th>
<th>Age Class</th>
<th>Physiological Condition</th>
<th>Structural Condition</th>
<th>Comment</th>
<th>Life Expectancy</th>
<th>RPA radius (m)</th>
<th>RPA (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Cedrus atlantica (Atlas Cedar)</td>
<td>24</td>
<td>10</td>
<td>N</td>
<td>0.780</td>
<td>0.780</td>
<td>7</td>
<td>6</td>
<td>6</td>
<td>4</td>
<td>Mature</td>
<td>Good</td>
<td>Good</td>
<td></td>
<td>B</td>
<td>40+</td>
<td>9.4</td>
<td>275.3</td>
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ARBORICULTURAL METHOD STATEMENT

Terms of Reference

1.1 This Arboricultural Method Statement was requested by by Paul Meakins of Wilby Tree Surgeons Limited, Tower Field Farm, Northampton, NN6 0QT on behalf of GSS Architecture, 2 Spencer Parade, Northampton, NN1 5AA.

1.2 It has been compiled to aid the protection of trees to be retained at Stirling House, Northampton. Implementation of the protection methods and specialist construction detailed here are integral to achieving this goal.

1.3 The information contained within this Arboricultural Method Statement is in line with BS5837 : 2012 ‘Trees in relation to construction – recommendations’.

1.4 This method statement is to be made available to all operatives on site during the construction process, so that they understand the scope and importance of the measures set out for tree protection.

Phasing & Monitoring of Development

2.1 Phasing is governed by operational constraints and therefore subject to change. The project’s arboriculturalist must be notified of any changes to this schedule.

2.2 Phase 1 – Pre-development stage

2.2.1 Tree protection measures implemented
2.2.2 Site inspection by arboriculturalist

2.3 Phase 11 – Development stage

2.3.1 Site accessible to construction traffic
2.3.2 Site compound / WC / materials
2.3.3 Development
2.3.4 Completion of development
2.4 Phase 111 – Post development stage

2.4.1 Removal of protective barriers
2.4.2 Hard and soft landscaping

Root Protection Areas

3.1 For details of the locations of trees to be retained, Root Protection Areas and Tree Protection Barriers, reference should be made to the Tree Constraints Plan.

3.2 It is the responsibility of everyone involved in the project to respect the tree protection measures and observe the necessary precautions within and adjacent to them.

3.3 There will be no harmful substances, such as cement, resin, paint, etc, stored, mixed or spilled within the Root Protection Area of any tree.

3.4 Contractor car parking will be within Root Protection Areas, but on existing tarmac which has existing marked out parking bays. Where there are trees adjacent, they will be protected with heras panels set in concrete feet and fixed with three clamps.

Tree Pruning

4.1 No pruning work is currently proposed. However, if pruning is required, consent will be obtained from the Local Authority prior to any work being carried out.

4.2 If required, it will be carried out in accordance with BS3998 2010 Recommendations for Tree Work and in line with any work already agreed with the LPA. The contractor shall ideally be chosen from the Arboricultural Association’s Approved Contractor list. Under no circumstances shall construction personnel undertake any tree pruning operations.

4.3 The statutory protection afforded by the Wildlife & Countryside Act and Countryside & Rights of Way Act will be adhered to.

Tree Protection Barriers

5.1 The Tree Constraints Plan shows the alignment of Tree Protection Barriers which must be installed before any of the following take place:

5.2.1 Plant and material delivery
5.2.2 Demolition
5.2.3 Construction work
5.2.4 Utility installation
5.2.5 Landscaping

5.3 Once erected, all barriers will be regarded as sacrosanct and will not be removed or altered without prior approval by the arboriculturalist or the LPA.

5.4 As the majority of the Root Protection Areas are already covered by hard surfacing that will not be removed, the Tree Protection Barriers will not be erected at the extent of the RPA’s, but in positions that protect all tree stems and any ground that is not under tarmac.

5.5 The Tree Protection Barriers will be as per Fig 3 of BS5837 2012, comprising of heras panels secured by three clamps and set into concrete feet. “Protected Trees No Entry” signs should be affixed to one of the panels protecting each tree.

5.6 The Tree Protection Barriers should remain in place until completion of the construction phase and removed only on the consent of the Local Planning Authority.

5.7 Should any alternative method of barrier construction be proposed, consultation with the project arboriculturalist will be obtained to clarify the efficacy of the revised design prior to seeking consent from the LPA.

**Restrictions with Tree Protection Areas**

6.1 Inside the exclusion area of barriers, the following shall apply:

6.1.1 No mechanical excavation whatsoever
6.1.2 No excavation by any other means without arboricultural site supervision
6.1.3 No hand digging without a written method statement having first being approved by the arboriculturalist
6.1.4 No lowering of levels for any purpose (except removal of grass sward using hand tools)
6.1.5 No storage of plant or materials
6.1.6 No storage or handling of any chemical including cement washings
6.1.7 No vehicular access
6.1.8 No fire lighting
6.2 Storage of substances injurious to tree health, including fuels, oil, bitumen, cement (including cement washings) builders sand, concrete mixing and other chemicals will be in the area shown on the Tree Constraints Plan, located at the front of the building and outside of all Root Protection Areas.

6.3 No fire shall be lit such that flames come within 5m of tree foliage

**Soft Landscaping within Root Protection Areas (RPA)**

7.1 Ground preparation will be carried out sensitively to ensure root damage is mitigated as much as is practicable. At no time is any heavy plant to be used within any RPA. Removal of existing vegetation will be carried out by hand, or with light machinery.

7.2 At no time shall a rotavator be used within any RPA to prepare the soil. Any levelling will be done by hand and with the use of hand tools.

**Hard Surface Removal / Construction within Root Protection Areas (RPA)**

8.1 There is to be no hard surface removal or re-surfacing within any Root Protection Area, or within the development site as a whole.

**Hardstanding construction within RPA of T1**

9.1 The area to be paved has been reduced in order to avoid any level changes within the RPA of T1. The remaining area will be soft landscaped.

9.2 Construction of the replacement hard surfaces will incorporate two main components, a geogrid and an aggregate sub-base.

9.3 Geogrids are a high tensile strength synthetic grid designed to support roads on soft ground. When placed on a geogrid, appropriate granular sub-base material penetrates the mesh, but is unable to pass through it, forming a positive interlock creating a reinforced platform.

9.4 The aggregate should be of low fines so that even when compacted, it is free draining and will allow oxygen to diffuse into the soil.

9.5 Construction of a surface using a geogrid and aggregate sub-base will be as follows:
9.5.1 Fill in any hollows with sharp sand by manual grading.
9.5.2 Lay the geogrid onto the soil to cover area of the driveway.
9.5.3 Construct an edging if necessary with boards attached to pegs driven through the geogrid.
9.5.4 Cover the geogrid with 100mm of aggregate. This should not be tipped onto the geogrid, but placed at one end and pushed onto the geogrid so that any machinery moves on the spread sub-base, not directly onto the geogrid and not on the ground either side of it.
9.5.5 Compact the sub-base to ensure binding with the geogrid.
9.5.6 Place the final surface. It is recommended that this consists of gravel or block paviours to allow free drainage and gaseous exchange.

9.6 The recommended specialist material is a cellular confinement system call Cellweb, manufactured by Geosynthetics Ltd.

**Installation of Concrete Pads**

10.1 The location of the concrete pads to support the canopy in the Root Protection Areas of T1 & T2 should be carefully selected to provide the necessary support to the structure and to avoid any underground services.

10.2 The concrete pads will be 1m x 1m and 60cm deep, sited so that 45cm is below ground level.

10.3 Roots in excess of 25mm diameter must be left undisturbed and a new location for the pile selected.

10.4 There will be no additional excavation within any RPA.

10.5 Following excavation, the holes will be lined with a non permeable membrane before concrete is poured in to create the supporting pad.

10.6 No concrete will be mixed within the RPA or crown spread of any tree within the site, nor storage of cement, concrete, plaster, resins, paints or adhesives.

10.7 Ground protection using heavy duty polythene or plywood will be used to protect surrounding soils from accidental spillage.
10.8 Once the concrete pads are installed and fit for use, the construction can commence. This must be done to avoid any increased ground pressure within any RPA and all weight will be supported by the concrete pads.

Project Contacts

11.1 Chris Chapman, GSS Architecture, 2 Spencer Parade, Northampton, NN1 5AA
01604 631919  cc@gotch.co.uk

11.2 Steve Dix, Contracts Manager, Jeakins Weir, 07968-322738  stevedix@jeakinsweir.co.uk

11.3 Bruce Hatton, BHA Trees Ltd, 07801 455 333  info@bhatrees.co.uk

Should you have any questions or require any clarification, please do not hesitate to contact me.

Yours sincerely

Bruce Hatton