Tree Survey Report to BS5837:2012

Proposed Development at Papplewick Pumping Station, Nottingham

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Revision A - 13.03.13

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A2063
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Summary

The trees on site have been assessed in accordance with BS 5837:2012 “Trees in relation to design, demolition and construction - Recommendations”.

The proposal is for the construction of an education, exhibition and community centre adjacent to the existing engine house shed on the site of Papplewick Pumping Station, Rigg Lane, Ravenshead, Nottingham.

The land is adjacent to Grade II* listed buildings consisting of the Pumping Station. Gedling Borough Council was contacted to determine if any of the trees to be effected by the proposed development have any preservation orders (TPO). Mr David Spencer at the Council confirmed in his telephone call to our office on Friday 1 March 2013 that there are no TPO’s on any trees on the site of the Papplewick Pumping Station.

Some trees need to be removed to facilitate the construction of the new development including some high quality semi-mature trees currently located adjacent to the existing workshop building. This will have a short term impact on the visual amenity of the site, however the impact would be mitigated by the presence of a number of other significant trees in the locality which currently provide visual benefit to the site.

There are no reasons in arboricultural terms, why planning consent should not be granted.
Arboricultural Report

1 Introduction

1.1 Encon Associates have been instructed by Ashley Smart of the Papplewick Pumping Station Trust with regards to a planning application being made; to report on the following:

- Assess the quality of the Trees in proximity to the proposed construction works.
- Provide an Arboricultural Assessment with regard to the proposals.
- To recommend measures which will suitably protect retained trees during the development process.
- To recommend an appropriate level of mitigation where necessary, for the loss of existing trees.

1.2 Following an initial site visit, tree survey and discussion period, the following arboricultural information is provided in support of the application.

1.3 The report is based on the following drawings and documents, which have been supplied by the client or their agent:

- Topographical Survey drawing ref 3635_OGL dated 19 October 2012 by Oaks Surveys Ltd
- Proposed Site Plan drawing ref SK08 dated February 2013 by TA Architecture

2 Limitations & Methodology

2.1 The survey is concerned with the arboricultural aspects of the site only. The trees, on site have been surveyed and classified in accordance with BS 5837:2012 "Trees in relation to design, demolition and construction - Recommendations".

2.2 The survey was undertaken using the Visual Tree Assessment (VTA) methodology to conduct a preliminary assessment of the above ground portion of the tree.
2.3 Trees are large dynamic organisms whose health and condition can change rapidly, therefore due to the changing nature of trees and other site considerations, this report and any recommendations made are only valid for the 12 month period following the site survey which was conducted on 27 February 2013.

Third Party Liability

2.4 The limit of Encon Associates Limited indemnity over any matter arising out of this report extends only to the instructing client. Encon Associates Limited cannot be held liable for any third party claim that arises following this report.

Subsistence Risk

2.5 This report is primarily concerned with the condition of existing trees and the application of current guidance for their retention. Any discussion of soil characteristics is only presented where this may have a direct effect on tree growth. This report does not seek to address the specific area of subsidence risk assessment or damage to existing buildings or structures. Guidance is provided with regards to locating proposed trees in proximity to proposed new buildings.

Survey Method

2.6 The survey was undertaken from ground level with the aid of binoculars where necessary.

2.7 No aerial inspection nor invasive probing or drilling has been undertaken. No excavations were carried out nor soil or root samples taken.

2.8 The height of each subject tree was estimated.

2.9 The canopy spread of each subject tree was measured on four compass points using measuring tape - where access was difficult the spread was estimated.
2.10 The locations of the trees have been taken from the Topographical Survey drawing which locates the GPS position of each tree on site. The locations were visually verified during our visit and it is confirmed their positions appear to be accurate.

2.11 The information contained within the “Schedule of Trees” includes the following for each surveyed tree:

1. **Tree reference number** - cross referenced with the Tree Survey drawing number A2063-01
2. **Species** - have been given their common and botanical name where specifically known
3. **Height** - have been estimated rather than measured
4. **Stem diameter** - have been calculated by measuring the circumference at a height of 1.5m from ground level to determine the diameter
5. **Branch spread** - the circles indicated on the tree survey plan are a representation of the overall spread of the crown.
6. **Height of crown clearance** - given in metres above adjacent ground level
7. **Age class** - young (YNG) up to 10 years, semi-mature (SM) 1/3 life expectancy, early mature (EM) 2/3 life expectancy, mature (M) over 2/3 life expectancy, over mature (OM) declining/moribund, veteran (V) exceptionally old tree at the end of its life.
8. **Condition & Comments** - good (G) sound tree needing little or no attention, fair (F) minor but rectifiable defects, poor (P) major structural and/or physiological defects that would be inappropriate to retain and/or expensive, dead (D) no longer alive or those dying and unlikely to recover. General observations on ‘physiological/ structural condition’ and ‘preliminary management’
9. **Estimated remaining contribution** - in years eg less than 10, 10-20, 20-40, over 40
10. **Category grading** - have been given a grade to classify the quality of each tree based on the Condition Classes and subcategories given overleaf
11. **RPA** - Protective measures as per BS 5837 section 4.6 which states that an area based on a radius equal to 12 times the stem diameter should be protected against damage to roots known as the “Root Protection Area” (RPA) given in m². A radius has also been given shown around each tree on the drawing.
2.12 Category grading for the assessment of tree quality (in accordance with Table 1 "Cascade chart for tree quality assessment" within BS 5837:2012) is described below:

**U**  Trees unsuitable for retention - Those in such a condition that they cannot be realistically be retained as living trees in the context of the current land use for longer than 10 years

**A**  Trees of high quality - With an estimated remaining life expectancy of at least 40 years

**B**  Trees of moderate quality - With an estimated remaining life expectancy of at least 20 years

**C**  Trees of low quality - With an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm

2.13 Subcategories grading for the assessment of tree quality (in accordance with Table 1 "Cascade chart for tree quality assessment" within BS 5837:2012) is described below:

1  Mainly arboricultural qualities - Trees that are a particularly good example of their species, especially if rare or unusual

2  Mainly landscape qualities - Trees, groups or woodlands of particular visual as arboricultural and/or landscape features

3  Mainly cultural values, including conservation - Trees, groups or woodlands of significant conservation, historical, commemorative or other value eg veteran trees or wood-pasture

For full description of subcategories, refer to Table 1, page 9 of BS 5837:2012
3  Project Requirements & Site Overview

The Site

3.1 The proposed development site is currently occupied by a number of existing trees adjacent to a workshop building consisting of a steel portal framed 'shed' with profiled sheeting roof within the grounds of Papplewick Pumping Station.

3.2 The site for the new development covers a footprint of approximately 620m².

Proposed Development

3.3 The proposal is to construct a new building to the west and north of the existing shed building to house new education, exhibition and community centre facilities as well as the existing machinery currently outside the front of the existing building. The building to the west will be two storeys in height and be constructed in keeping with adjacent buildings currently occupying the site. The construction of new patios and outside seating areas adjacent to the front of the existing shed and to the rear of the new building are also proposed. Construction of the new building will require the removal of 10 existing trees, as identified on Drawing 02 appended to the rear of this report. However a number of existing mature trees will remain as part of the overall site which means the overall character and visual amenity offered by the existing trees will not be adversely effected by the removal of some of the trees to make way for the new building.

4  Baseline Factors

Tree Preservation Orders (TPO) or Conservation Area (CA) Designation

4.1 The site falls within the planning jurisdiction of Gedling Borough Council (GBC) and is located in the Ravenshead/Papplewick area within the NG15 postal code of
Nottingham. As far as we are aware, the site is not within a local Conservation Area and, as confirmed by GBC, none of the trees on site are subject to any Tree Preservation Orders.

**Existing Trees on Site**

4.2 The significant trees are located mainly within a small ‘woodland area’ near the boundary of the site. 15 trees have been included in the survey as those trees likely to be effected by the construction of the new buildings. There are many other trees within the Papplewick Pumping Station site, however many of these are located away from the development and as such will not be effected by the construction works. A schedule of trees and their condition including their category for retention is attached in Appendix A.

4.3 Only trees with 75mm diameter trunks or greater and/or those likely to be affected by the proposals have been included within the survey and report.

**Summary of Significance of Site Tree Cover**

4.4 The existing site tree cover is summarised as follows:

<table>
<thead>
<tr>
<th>BS:5837 Category</th>
<th>Number of Trees</th>
<th>% of total tree cover</th>
<th>No of TPO’s (Yes/No)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>8</td>
<td>53%</td>
<td>No</td>
</tr>
<tr>
<td>B</td>
<td>6</td>
<td>40%</td>
<td>No</td>
</tr>
<tr>
<td>C</td>
<td>1</td>
<td>7%</td>
<td>No</td>
</tr>
<tr>
<td>U</td>
<td>0</td>
<td>0%</td>
<td>No</td>
</tr>
<tr>
<td>TOTAL</td>
<td>15</td>
<td>100%</td>
<td>0</td>
</tr>
</tbody>
</table>
4.5 The above table includes 'U' category trees which by definition are in such a condition that any existing value would be lost in less than 10 years and which should, in the current context be removed for reasons of sound arboricultural management.

Root Protection Area (RPA)

4.6 The Root Protection Areas (RPA's) have been calculated in accordance with BS5837, and are detailed in the Tree Schedule located in Appendix A of this report. Where ground constraints have had, or are likely to have, an effect on tree root development, for example, where level changes or changes in rooting medium (heavily compacted ground, areas of hard standing etc) have influenced tree root growth, RPA has been adjusted accordingly.

4.7 Detailed analysis of the ground conditions have not been carried out, however a visual assessment concluded that the trees appear to be growing in good, uncompacted ground, likely to consist of decent soils and growing medium. The whole area has a cover of 'leaf mulch' left in place from the fallen leaves of the deciduous species of trees in the area. No other vegetation or invasive ground cover is present other than mown grass in some areas. The trees have therefore enjoyed relatively un-competitive living conditions, free from constraints and disturbance and as a result have been able to mature into decent trees with little or no defects. Some have thrived better than others in competition with each other for growing space, light, moisture, nutrients etc which is typical within a 'woodland' environment and the small group of trees offer a visual amenity as part of a collective group, rather than as individual specimens.
5 Implications

5.1 The development proposals will result in the removal 10 trees and may have an impact on a further 5 trees. Those trees located to the west of the existing building (ref 1-9) will need to be felled and removed. Tree ref 7 is actually located just outside the footprint of the new building with approximately 25% of its Root Protection Area falling within the proposed footprint. However, it may be possible to retain this tree subject to foundation details in this area, although any excavations in this area are likely to result in disturbance of the roots of Tree 7 currently located close to the south-west corner of the proposed new building.

5.2 Trees 11, 12 and 13 are located close to the new building to the north of the existing shed, adjacent to the north-east facade. However, it is believed that the distance is such that these trees will be able to remain undisturbed by the new building works, although the RPA of tree 11 is approximately 10% within the footprint of the new building.

5.3 Trees 14 and 15 are very close to an area indicated as a new patio/seating area and may be retained if the new surfacing is constructed without excavating the ground within the RPA as indicated on Drawing 01, however we suspect this will not be possible and therefore these two trees are likely to need to be removed.

5.4 Following discussions with the architect, it was agreed that the area of hard landscaping should be adjusted to finish outside the RPA from the tree trunk which would ensure Tree 14 and 15 could be retained as part of the final scheme and would not need to be felled.

5.5 All other significant trees within the locality can be retained as there is sufficient distance between the trees and the proposed building and any construction works will avoid the calculated RPA exclusion zone around each tree.
5.6 Despite the need to remove 10 trees within the footprint of the new construction works, a significant number of existing trees within close proximity of the development will be able to remain undisturbed, thus retaining the visual amenity of the area once those trees have gone, minimising the impact caused by their removal.

**Infrastructure Requirements - Highway Sightlines, Lighting, CCTV, Services etc**

5.7 The location and species selection for new tree planting (if any is included in this scheme) should be carefully coordinated with other aspects of the design including street lighting, CCTV, underground and overhead service routes and avoidance of physical obstruction or damage should all be taken into account. Due consideration for future growth and periodic maintenance requirements are also necessary for successful integration of existing trees and/or new tree planting.

5.8 The installation of services within the rooting zones of trees can have a large detrimental impact on the long-term survival of retained trees leading to their unnecessary loss or root failure in high winds. No services should be installed within the RPA of any trees to be retained. Likewise, new tree planting should not be located where they might obstruct overhead power lines or cables. Early consultation and cooperation between the developer and utility companies is essential and proposed service routes should be coordinated with the landscape design proposals.

5.9 Undisclosed locating of above ground services, CCTV cameras, electrical substations, refuse stores, lighting and other infrastructure requirements can lead to unnecessary pruning of tree crowns or root loss during or post development. Likewise, underground apparatus should be ducted or otherwise protected at the time of construction, including common service trenches to minimise land take, facilitate future maintenance and enable trees to be planted nearby without conflict.
6 Tree Protection Measures

6.1 The existing trees to be retained as part of the development of the site should be protected with protective fencing as detailed in the Appendix of this report. Heras fencing panels should also be erected around all new tree planting work to demark the Construction Exclusion Zone (CEZ) should they be planted prior to the completion of the construction works.

7 Mitigating Tree Loss & New Tree Planting

7.1 Some tree loss will take place as a result of the construction of the new Exhibition Centre within the application land. The available space in proximity to the new building and the presence of many other existing trees in the locality mean that planting of new trees may not be entirely appropriate or necessary. If an area can be identified as being available and suitable for tree planting, then new trees could be planted as a means of compensation for those lost to make way for these new buildings. This is a suggestion which requires further investigation by the client and his designers and negotiation with the local planning authority.

8 Post Development Pressure

8.1 The proposed construction activities on site are of a significant nature and will naturally have an impact on the tree population in the area, however it is suggested that the loss of existing trees will be mitigated by the many other existing trees currently on site thus minimising the impact from their removal.

8.2 In consideration of these matters, there will be no appreciable post development pressure, and certainly none that would oblige the Council to give consent to inappropriate works.
9 Conclusions

9.1 Ten higher quality trees, mainly Beech and Sycamore with some Scots Pine and an Oak tree, will be lost as a result of the proposed construction activities on the site. The impact of the loss is mitigated in terms of the effect on the wider landscape by the presence of many other existing trees which will remain undisturbed.

9.2 Many other higher quality trees within the site will be retained as part of the final development and their future should be safeguarded by excluding any excavation works within the RPA and via the erection of protective fencing throughout the construction works to prevent damage being inflicted on any of the existing trees to be retained.

10 Recommendations

10.1 The tree protection measures given in section 6 above should be applied to all existing trees to be retained.

10.2 The development should be carried out in the following order:
   
   I. Remedial works, if necessary undertaken to the retained trees
   II. Tree protection fence installed
   III. Tree removal by qualified tree surgeon in a controlled and methodical manor
   IV. Development of site
   V. Removal of tree protection fence
   VI. Planting of new trees and implementation of proposed landscape scheme (if any)

10.3 All tree work should preferably be undertaken by trained and competent personnel to current Industry standards and guidance, including full Health & Safety Risk Assessment during the removal of existing trees to safeguard the general public and site operatives alike.
Signed for and on behalf of Encon Associates Limited

Mark J Bentley  B.A. (Hons.), Dip L.A., M.C.I.H.T

Date:  4 March 2013
Appendix A

Schedule of Trees
<table>
<thead>
<tr>
<th>Ref</th>
<th>Species</th>
<th>Height</th>
<th>Stem Growth</th>
<th>Branch Spread</th>
<th>Height Clearance</th>
<th>Species</th>
<th>Comments &amp; Recommendations</th>
<th>Wet</th>
<th>Ash</th>
<th>BPA (mg/l)</th>
<th>RPA radius</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PS (Glossostylis)</td>
<td>15</td>
<td>500</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>SW</td>
<td>Good condition, but serve form. More land use support. Do not clear in forest. Maintain height and diameter growth.</td>
<td>40</td>
<td>45</td>
<td>103</td>
</tr>
<tr>
<td>2</td>
<td>Sorex (Glossostylis)</td>
<td>15</td>
<td>500</td>
<td>5</td>
<td>5</td>
<td>6</td>
<td>46</td>
<td>SW</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Sedum (Glossostylis)</td>
<td>15</td>
<td>500</td>
<td>5</td>
<td>5</td>
<td>7</td>
<td>46</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Sedum (Glossostylis)</td>
<td>15</td>
<td>500</td>
<td>5</td>
<td>5</td>
<td>7</td>
<td>46</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Sedum (Glossostylis)</td>
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<td>500</td>
<td>5</td>
<td>5</td>
<td>6</td>
<td>46</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Sedum (Glossostylis)</td>
<td>15</td>
<td>500</td>
<td>5</td>
<td>5</td>
<td>7</td>
<td>46</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ref</td>
<td>Species</td>
<td>Height (m)</td>
<td>Stem Diameter (mm)</td>
<td>Base Spread (m)</td>
<td>Height Stem Cleared (m)</td>
<td>Species</td>
<td>Comments &amp; Recommendations</td>
<td>Date</td>
<td>Category</td>
<td>RPA (m²)</td>
<td>RPA units</td>
</tr>
<tr>
<td>-----</td>
<td>----------------</td>
<td>------------</td>
<td>--------------------</td>
<td>----------------</td>
<td>------------------------</td>
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<td>-----------------------------</td>
<td>------</td>
<td>----------</td>
<td>----------</td>
<td>-----------</td>
</tr>
<tr>
<td>23</td>
<td>Silverine (E. grandis)</td>
<td>11</td>
<td>100</td>
<td>1</td>
<td>1</td>
<td>6</td>
<td>VWM</td>
<td>2011</td>
<td>E</td>
<td>41</td>
<td>350</td>
</tr>
<tr>
<td>24</td>
<td>Eucalyptus</td>
<td>17</td>
<td>250</td>
<td>5</td>
<td>3</td>
<td>5</td>
<td>V</td>
<td>2011</td>
<td>E</td>
<td>26</td>
<td>300</td>
</tr>
<tr>
<td>25</td>
<td>Eucalyptus</td>
<td>17</td>
<td>250</td>
<td>5</td>
<td>8</td>
<td>5</td>
<td>V</td>
<td>2011</td>
<td>E</td>
<td>26</td>
<td>300</td>
</tr>
</tbody>
</table>
Appendix B

Tree Survey Plan
Appendix C

Outline Method Statement & Tree Protection Details
Outline Method Statement for Tree Protection Throughout the Development & Construction Period

The following Outline Arboricultural Method Statement (AMS) includes a Tree Protection Plan (TPP) which identifies:

- Trees to be retained
- Construction Exclusion Zones (CEZ)
- Measurements to identify RPA in relation to centres of trees.

1.1 Construction Exclusion Zone

1.2 The Construction Exclusion Zone (CEZ) required by the current edition of BS 5837:2012 relates to the stem diameter of each tree when measured at a height of 1.5m from ground level, adjusted where necessary to account for actual rooting patterns on site. The RPAs are to be afforded protection at all times and will be protected by fencing barriers. No works will be undertaken within any RPA that causes compaction to the soil or severance of tree roots.

1.3 There is no planned construction of foundations or installation of services within any RPA around the existing trees to be retained.

2.0 Protective Fencing

2.1 A protective fence should be erected prior to the commencement of any site works e.g. before any materials or machinery are brought on site, any construction work starts or any stripping of soil commences. The barrier needs to have signs attached stating that this is a Construction Exclusion Zone and that no works are permitted
within the barrier. The barrier may only be removed following completion of all construction works.

2.2 The fence is required to be sited in accordance with the Tree Protection Plan enclosed with this method statement in Appendix E. The fence must ideally be constructed as per figure 2 in BS 5837:2012 (see below) and be fit for the purpose of excluding any construction activity. The construction on site should be excluded from the RPA with ‘Heras’ type Fencing construction, along with a formal briefing of any work person by the site manager with regards to the contents of this method statement.

3.0 Precautions in respect of Temporary Works

3.1 If temporary access is required to an RPA then access may only be gained after consultation with the Local Planning Authority and following placement of materials such as concrete slabs or geo-textile fabrics that will spread the weight of any vehicular load and prevent compaction to the soil. For pedestrian movements within any RPA then a single thickness scaffold board on top of a compressible layer laid onto a geotextile fabric may be acceptable.

4.0 Access Details

4.1 There is no requirement for any special measures related to the retained trees if access for all construction vehicles is kept to the west of the trees to be retained and stay well outside of the RPA.
5.0 Contractors Car Parking

5.1 This is likely to be off site, however if onsite parking is require, the area designated for parking needs to be away from the area around the trees to be retained.

6.0 Site Huts and Toilets

6.1 The area designated for site accommodation needs to be away from the area around the trees to be retained.

7.0 Storage Space

7.1 The storage of materials should ideally be on existing hard standing outside of the RPA.

8.0 Additional Precautions

8.1 No services should be planned to be installed within any RPA.

8.2 No storage of materials or lighting of fires should take place within the RPA. No mixing or storage of materials should take place up a slope where they may leak into a RPA.

8.3 No fires to be lit within 20 metres of any tree stem and the fire size and wind direction should be taken into account so that, no flames come within 5.0m of any foliage.
8.4 No high-sided vehicles or cranes should access the site close to any trees to be retained and should not come into contact with any branches or travel within the RPA.

8.5 No notice boards, cables or other services to be attached to any tree.

8.6 Materials which may contaminate the soil should not be discharged within 10m of any tree stem. When undertaking the mixing of materials it is essential that any slope of the ground does not allow contaminants to run towards a tree root area.

9.0 Site Gradients

9.1 No alterations of soil levels to take place within the RPA of the protected trees

10.0 Demolition Works

10.1 No demolition works to take place with the RPA of the protected trees

11.0 Hard Surfaces

11.1 No proposals to construct hard surfaces to be constructed within the RPA.

12.0 Soft Landscaping

12.1 Any new planting scheduled to be carried out within any RPA needs to be done so with consideration of the existing trees roots. Planting pits need to be hand dug, and extreme caution exercised to ensure no roots are severed during digging.
13.0 Use of Herbicides

13.1 No herbicide use is predicted, however if used, it should be done so in strict accordance with the manufacturer’s instructions and contact with any tree foliage should be avoided.

14.0 On Site Monitoring Regime

14.1 All operations to be monitored by the main contractor. The site manager shall contact the appointed specialist if there is a breach of the RPA and tree protection measures. The appointed specialist shall recommend an action plan to incorporate mitigation measures where necessary.

15.0 Use of Sub-Contractors

15.1 The main-contractor will be responsible for ensuring sub-contractors do not carry out any process or operation that is likely to adversely impact upon any tree on site.

16.0 Contingency Plan

16.1 Water should be readily available on site to be used to flush split materials through the soil and avoid contamination to tree roots. At the time of any spillage the main contractor needs to contact an appointed specialist for advice.
17.0 Remedial Tree Works

17.1 Any recommended tree works should be undertaken prior to the commencement of construction activities. All tree works are to be carried out in accordance with BS 3998 British Standard Tree Work - Recommendations 2010.

18.0 Responsibilities

18.1 It will be the responsibility of the main contractor to ensure that the planning conditions are adhered to at all times and that a monitoring regime in regards to tree protection is adopted on site.

18.2 The main contractor will be responsible for contacting the Local Planning Authority at any time issues are raised related to the trees on site.

18.3 If at any time pruning works are required permission must be sought from the Local Planning Authority first and then carried out in accordance with BS 3998.

18.4 The main contractor will ensure the build sequence is appropriate to ensure that no damage occurs to the trees during the construction processes. Protective fences will remain in position until completion of ALL construction works on the site.

18.5 The fencing and signs must be maintained in position at all times and checked on a regular basis by an on-site person designated that responsibility.
Example of "Keep Out" Sign:

**TREE PROTECTION ZONE**

**KEEP OUT!**

- No digging or trenching
- No storage of plant or materials
- No vehicular access
- No fire lighting
- No chemical handling
- Avoid plant contact with tree canopy

Report any tree or fence damage to the Site Manager immediately
Appendix D

Tree Protection Plan
Appendix E

Photographic Record
**Photo 1** - View of the Oak tree (Ref 1) adjacent to the old tool shed

**Photo 2** - View of the Oak tree (Ref 1) as part of a group of trees to the west of the existing "shed"

**Photo 3** - View of the group of Pine trees, Sycamore and Beech with the "woodland" seating area

**Photo 4** - View of the Sycamore (Ref 2) and Scots Pine (Ref 4) adjacent to the existing building
Photo 5 - View of the Sycamore with a slightly curved trunk (Ref 8) and group of Pines and Beech in the background

Photo 6 - View of the Pine (Ref 10) close to the rear of the existing building. It is expected that the roots will extend under the building.

Photo 7 - View of the group of trees to the east of the existing building (Ref 11-15)

Photo 8 - View of the group of trees to the east of the existing building (Ref 11-15)