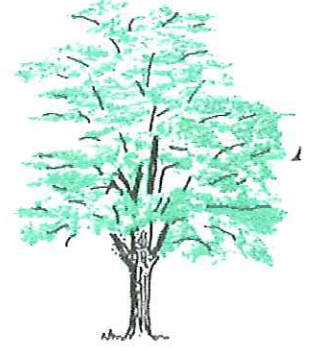




**MICHAEL COOPER M.ARB. Dip. P.R.A.  
ARBORICULTURAL CONSULTANT**



**32 Parkland Close  
Rossington  
Doncaster  
South Yorkshire  
DN11 0BH  
Tel No: [REDACTED]  
Email: [REDACTED]**

**Tree Surveys  
Mortgage Tree Surveys  
Planning Applications  
Planning Appeals  
Public Enquiries  
Expert Legal Witness**

Our Ref MC

3<sup>RD</sup> February 2009

Dear Peter,

**ARBORICULTURAL SURVEY, LESLIE ROAD, KENDRAY, BARNSELY.**

I refer to your recent instruction to carry out an Arboricultural survey at the above site. The following points are now outlined for your attention.

- 1 The trees on this site, in general terms, are a poor batch. This is due to a combination of the vandalism element in conjunction with the normal decay process plus damage sustained to their rooting systems. I believe this has been caused by the site clearance works which has led to many roots being severed and compacted.
- 2 My own view is that the entire site should be cleared of trees with new ones of a significant size being planted to provide a new treescape. Any trees not removed prior to the commencement of the development will in my opinion die a slow lingering death over the next 5-10 years. This will ultimately leave the future house owners/landlords facing a significant expense to remove trees that have been built around probably leaving them in a confined space.
- 3 On the aspect of tree retention all development on site should comply with the requirements of ***British Standard Institute Specification 5837 Trees in relation to construction; 2005.***
- 4 Any new tree planting should comply with ***British Standards 4043:1989, Transplanting root-balled trees and British Standard Institute Specification 3936: 1992, Nursery Stock Part 1. Specification for Trees and Shrubs.***

*Always remember to use the professionals*

- 5 All tree surgery work should be carried in accordance with ***British Standard Institute Specification 3998, Tree Surgery work.***
- 6 The site should be checked for the existence of any ***Tree Preservation orders, Conservation areas, Sites of Scientific Interest, Areas of Outstanding Natural Beauty, any deeds of covenant or/and other statutory instruments that may apply.***

Yours sincerely,



M. Cooper

Peter Rice  
Technical Manager  
Keepmoat Homes  
The Waterfront  
Lakeside Boulevard  
Doncaster  
South Yorkshire

# **KEY TO M. COOPER TREE SURVEY**

## **HEADINGS**

TR NO = TREE NUMBER

SPECIES= TREE SPECIES

HGT= OVERALL HEIGHT

STEM DIAM=TRUNK DIAMETER WHEN MEASURED AT 1.5 METRES  
FROM GROUND LEVEL

BR SPREAD = BRANCH SPREAD IN METRES ON ALL DIRECTIONS

HGT OF CRN CLRN= HEIGHT OF CROWN CLEARANCE TO THE  
BOTTOM BRANCH

AGE = Y= YOUNG TREE, SM = SEMI MATURE, M =MATURE, OM = OVER  
MATURE, VT = VETERAN

PHYS COND=PHYSIOLOGICAL CONDITION IE GOOD, FAIR, POOR,  
DEAD

STRUCTURAL CONDITION=OVERALL CONDITION, WEAKNESSES,  
DEFECTS ETC

PRELIMINARY MANAGEMENT RECOMMENDATIONS=SUGGESTED  
TREE SURGERY WORK

CAT = CATEGORY IN ACCORDANCE WITH BRITISH STANDARD  
INSTITUTE SPECIFICATION 5837 2005 FOR TREES IN RELATION TO  
CONSTRUCTION; RECOMMENDATIONS.

SS=SINGLE STEM TREE

MS= MULTI-STEM TREE

S=SHRUB OR SHRUBBERY

W=WOODLAND AREA OR WOODED PERIMIETER/SCREEN

H=HEDGELINE

G=GROUP

NB. WHEN ANY REFERENCE IS MADE IN THE REPORT ON WOUNDS  
OR A HEIGHT MEASUREMENT, THIS IS TAKEN AS BEING FROM  
GROUND LEVEL

| TR NO | SPECIES                             | HGT m | STEM DIAM mm | BR SPREAD m                          | HGT OF CRN CLRN m | AGE | PHYS COND | STRUCTURAL CONDITION.  | PRELIMINARY MANAGEMENT RECOMMENDATIONS | EST. REMAIN CONT years | C A T |
|-------|-------------------------------------|-------|--------------|--------------------------------------|-------------------|-----|-----------|--|--|------------------------|-------|
| T1    | Crataegus monogyna, Hawthorn.       | 6m    | 180mm<br>GL  | N 2.4m<br>E 1.5m<br>S 2.4m<br>W 2.3m | 2m                | M   | Poor      | Two stems arising at ground level which eventually divides to produce four stems.<br><br>Rubble tipped or bulldozed around the basal area.<br><br>Numerous old wounds.<br><br>This tree is growing adjacent to the boundary fence. | No work required                       | 10                     | C3    |
| T2    | Crataegus monogyna, Hawthorn.       | 7m    | 170mm        | N 2.5m<br>E 0.0m<br>S 2.6m<br>W 2.7m | GL                | M   | Poor      | One main stem throughout the crown with one lateral stem being produced at 1m to the east.   | No work required                       | 10                     | C3    |
| T3    | Populus balsamifera, Balsam Poplar. | 16m   | 430mm        | N 4.5m<br>E 4.6m<br>S 3.1m<br>W 3.6m | 1.4m              | M   | Fair      | One stem throughout the crown.<br><br>Sucker shoots at ground level<br><br>Large wound on the lowest branch to the north west.<br><br>Rubble tipped or bulldozed around the basal area.  | No work required                       | 10                     | C3    |

| TR NO | SPECIES                             | HGT m | STEM DIAM mm | BR SPREAD m                          | HGT OF CRN CLRN m | AGE | PHYS COND | STRUCTURAL CONDITION.   | PRELIMINARY MANAGEMENT RECOMMENDATIONS | EST. REMAIN CONT years | C A T |
|-------|-------------------------------------|-------|--------------|--------------------------------------|-------------------|-----|-----------|---|--|------------------------|-------|
| T4    | Populus balsamifera, Balsam Poplar. |       |              | N E S W                              |                   | M   | Poor      | This tree is heavily suppressed by T3.<br>Length of plastic string attached to the main stem which is slightly embedded into the bark<br>One sided crown      | Poor tree.<br>Remove and replant       | R                      | R     |
| T5    | Populus balsamifera, Balsam Poplar. |       |              | N E S W                              |                   | M   | Poor      | This tree is extensively decayed at the base of the trunk   | Poor tree.<br>Remove and replant       | R                      | R     |
| T6    | Acer pseudoplatanus, Sycamore.      | 15m   |              | N E S W                              |                   | M   | Poor      | The stem of this tree is in a poor condition to the south east. The roots have been damaged by the excavation/clearance works,                                | Poor tree.<br>Remove and replant       | R                      | R     |
| T7    | Acer pseudoplatanus, Sycamore.      | 15m   | 300mm        | N 3.4m<br>E 4.3m<br>S 2.6m<br>W 4.1m | 6m                | M   | Fair      | One stem throughout the overall crown. Some old branch stubs at 5m to the north.<br>Sucker shoots at ground level.<br>A stem has been removed at ground level | Remove sucker shoots                   | 10                     | C2    |

| TR NO | SPECIES                         | HGT m | STEM DIAM mm | BR SPREAD m                          | HGT OF CRN CLRN m | AGE | PHYS COND | STRUCTURAL CONDITION.   | PRELIMINARY MANAGEMENT RECOMMENDATIONS                       | EST. REMAIN CONT years | C A T |
|-------|---------------------------------|-------|--------------|--------------------------------------|-------------------|-----|-----------|---|--|------------------------|-------|
| T8    | Acer pseudoplatanus, Sycamore.  | 15m   | 340mm        | N 2.1m<br>E 4.5m<br>S 3.2m<br>W 4.6m | 6m                | M   | Fair      | One stem throughout the overall crown.<br><br>Numerous old branch stubs on the first 6m of the main stem.<br><br>Sucker shoots at ground level. Some of the branches are crossing and rubbing on the branches from T7 | No work required<br><br>Remove crossing and rubbing branches | 10                     | C2    |
| T9    | Acer pseudoplatanus, Sycamore.  |       | 300mm        | N 2.1m<br>E 1.0m<br>S 3.2m<br>W 4.8m | 6m                | M   | Fair      | One stem throughout the overall crown.<br><br>Sucker shoots at ground level<br><br>Major limb removed at 0.75 to the west.<br><br>One sided crown with no branch spread to the east                                   | Remove sucker shoots   | 10                     | C2    |
| T10   | Fraxinus excelsior, Common Ash. |       |              | N<br>E<br>S<br>W                     |                   | M   | Poor      | This tree is in a dangerous condition due to advanced decay on the main stem  | Poor tree.<br><br>Remove and replant                         | R                      | R     |

| TR NO | SPECIES                        | HGT m | STEM DIAM mm | BR SPREAD m | HGT OF CRN CLRN m | AGE | PHYS COND | STRUCTURAL CONDITION.  | PRELIMINARY MANAGEMENT RECOMMENDATIONS | EST. REMAIN CONT years | C A T |
|-------|--------------------------------|-------|--------------|-------------|-------------------|-----|-----------|--|--|------------------------|-------|
| T11   | Acer pseudoplatanus, Sycamore. | 10m   |              | N E S W     |                   | M   | Poor      | This tree has a large bark wound on the main stem.<br>The roots have been damaged by the excavation/clearance operations<br>Section of metal embedded into the main trunk<br>Numerous broken limbs | Poor tree.<br>Remove and replant       | R                      | R     |
| T12   | Acer pseudoplatanus, Sycamore. |       |              | N E S W     |                   | M   | Poor      | This tree is badly damaged with extensive bark damage.<br>Coral spot infection is widespread in the crown which is dying back extensively  | Poor tree.<br>Remove and replant       | R                      | R     |
| T13   | Prunus sp, Cherry.             |       |              | N E S W     |                   | M   | Poor      | This small tree has probably evolved as a shoot from the root stock of an ornamental cheery or is a chance seedling. Its main stem is badly damaged due to its proximity to the main fence         | Poor tree.<br>Remove and replant       | R                      | R     |

| TR NO | SPECIES   | HGT<br>m | STEM<br>DIAM<br>mm | BR<br>SPREAD<br>m | HGT<br>OF<br>CRN<br>CLR<br>m | AG<br>E | PHYS<br>COND | STRUCTURAL CONDITION.   | PRELIMINARY<br>MANAGEMENT<br>RECOMMENDATIONS | EST.<br>REMAIN<br>CONT<br>years | C<br>A<br>T |
|-------|---|----------|--------------------|-------------------|------------------------------|---------|--------------|---|--|---------------------------------|-------------|
| T14   | Prunus sp,<br>Cherry.   |          |                    | N<br>E<br>S<br>W  |                              | M       | Poor         | This small tree has probably evolved as a shoot from the root stock of an ornamental cheery or is a chance seedling. Its main stem is badly damaged due to its proximity to the main fence  | Poor tree.<br><br>Remove and replant         | R                               | R           |
| T15   | X Cupressocyp.<br>leylandii<br>'Castlewellan',<br>Golden<br>Leyland's<br>Cypress. |          |                    | N<br>E<br>S<br>W  |                              | M       | Poor         | Half of the crown of this conifer is fire damaged   | Poor tree.<br><br>Remove and replant         | R                               | R           |
| T16   | Acer<br>pseudoplatanus,<br>Sycamore.  |          |                    | N<br>E<br>S<br>W  |                              | M       | Poor         | Numerous dead branches.<br><br>The crown of this tree has been damaged as a result of a fire.<br><br>The roots have been damaged due to the excavation/site clearance works.<br><br>Large metal object embedded at the point where the two stems divide at 1m | Poor tree.<br><br>Remove and replant         | R                               | R           |

| TR NO | SPECIES                        | HGT m    | STEM DIAM mm | BR SPREAD m                              | HGT OF CRN CLRN m | AGE | PHYS COND | STRUCTURAL CONDITION.   | PRELIMINARY MANAGEMENT RECOMMENDATIONS | EST. REMAIN CONT years | C A T |
|-------|--------------------------------|----------|--------------|--|-------------------|-----|-----------|---|--|------------------------|-------|
| T17   | Salix sp,<br>Willow.           |          |              | N<br>E<br>S<br>W                         |                   | M   | Poor      | This tree is extensively decayed.<br><br>The branches of this tree are hanging over into the development site<br><br>This tree growing is in the garden of a private property             | Poor tree.<br><br>Remove and replant   | R                      | R     |
| H1    | Sambucus nigra,<br>Elderberry. | 4-<br>5m | 120cm        | Ave<br>3m<br>Overall<br>branch<br>spread | GL                | M   | Poor      | This is a line of Elderberry shrubs growing behind the boundary fence line.<br><br>Any overhanging branches and those growing through the fence would need to be cut back to the boundary | Prune back overhanging branches        | 10                     | C3    |

| TR NO | SPECIES  | HGT m | STEM DIAM mm | BR SPREAD m                     | HGT OF CRN CLRN m | AGE | PHYS COND | STRUCTURAL CONDITION.  | PRELIMINARY MANAGEMENT RECOMMENDATIONS   | EST. REMAIN CONT years | C A T |
|-------|--|-------|--------------|---------------------------------|-------------------|-----|-----------|--|--|------------------------|-------|
| H2    | X Cupressocyp. leylandii, Leyland's Cypress.   | 6-7m  | 130mm        | Ave 2m<br>Overall branch spread | GL                | M   | Fair      | This is a line of 16 conifers growing on the development site. They are not planted on the boundary line but instead they are positioned well into the site.<br>Their retention may not be advisable as they may sterilise the greater part of a garden subject to the development design layout | No work required   | 10                     | C3    |
| H3    | Crataegus monogyna, Hawthorn.<br>Acer campestre, Field Maple.<br>Cornus alba, Dogwood.<br>Alnus sp, Alder. | 4-6m  | 130mm        | Ave 3m<br>Overall branch spread | GL                | M   | Fair      | This is a shrubbery/hedge line at the end of the site bordering onto the adjacent dwellings.<br>It is in an unkempt condition and simply requires seasonal pruning to bring it into a useful condition   | Carry out pruning as required for each species                                       | 10                     | C3    |
| H4    | Sambucus nigra, Elderberry.<br>Ligustrum ovalifolium, Privet.  | 5m    | 120mm        | Ave 3m<br>Overall branch spread | GL                | M   | Fair      | These are multi-stemmed shrubs/trees growing in the garden of a private property.<br>The branches of these small trees are hanging over into the development site  | Prune the overhanging branches back to the boundary fence or remove the shrubs/trees | 10                     | C3    |

## ROOT PROTECTION ZONE

The attached sheet(s) provide the root protection areas for each tree on site that is recommended for retention. This allows for developers to calculate the distance within which they can build in proximity to each tree.

I have provided two figures, these being;

### **The Overall Root protection zone.**

This is in effect the total area around the trees canopy and rooting area which is required to be kept free of any development or encroachment to ensure it survives the development and post development period.

### **The Root Protection Radius**

This is the radius of any area necessary to meet the requirements of the overall root protection zone. This should ideally be applied across the full width of the trees canopy.

**NB These calculations are in accordance with the requirements of the British Standard Institute Specification 5837, 2005**

Survey carried out in January 2009 by;  
Michael Cooper. M.Arb. Dip. P.R.A

Site: Leslie Road  
Kendray, Barnsley

Carried out on behalf of client:  
Keepmoat Homes, Technical Manager; Peter Rice.

| TR NO | SPECIES                               | TRUNK DIAMETER | ROOT PROTECTION AREA RADIUS | OVERALL ROOT PROTECTION AREA |
|-------|---------------------------------------|----------------|-----------------------------|------------------------------|
| T1    | Crataegus monogyna,<br>Hawthorn       | 180mm<br>GL    | 1.8m                        | 10.18 sq mt                  |
| T2    | Crataegus monogyna,<br>Hawthorn       | 170mm          | 2.04m                       | 13.08 sq mt                  |
| T3    | Populus balsamifera,<br>Balsam Poplar | 430mm          | 5.16m                       | 83.66 sq mt                  |
| T4    | Populus balsamifera,<br>Balsam Poplar | R              | R                           | R                            |
| T5    | Populus balsamifera,<br>Balsam Poplar | R              | R                           | R                            |
| T6    | Acer pseudoplatanus,<br>Sycamore      | R              | R                           | R                            |
| T7    | Acer pseudoplatanus,<br>Sycamore      | 300mm          | 3.60m                       | 40.72 sq mt                  |
| T8    | Acer pseudoplatanus,<br>Sycamore      | 340mm          | 4.08m                       | 52.30 sq mt                  |
| T9    | Acer pseudoplatanus,<br>Sycamore      | 300mm          | 3.60m                       | 40.72 sq mt                  |
| T10   | Fraxinus excelsior,<br>Common Ash     | R              | R                           | R                            |
| T11   | Acer pseudoplatanus,<br>Sycamore      | R              | R                           | R                            |

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Site: Leslie Road  
Kendray, Barnsley

Carried out on behalf of client:  
Keepmoat Homes, Technical Manager; Peter Rice.

| TR NO | SPECIES   | TRUNK DIAMETER | ROOT PROTECTION AREA RADIUS | OVERALL ROOT PROTECTION AREA   |
|-------|---|----------------|-----------------------------|--|
| T12   | Acer pseudoplatanus, Sycamore   | R              | R                           | R  |
| T13   | Prunus sp, Cherry   | R              | R                           | R  |
| T14   | Prunus sp, Cherry   | R              | R                           | R  |
| T15   | X Cupressocyparis leylandii 'Castlewellan' Golden Leyland's Cypress                                       | R              | R                           | R  |
| T16   | Acer pseudoplatanus, Sycamore   | R              | R                           | R  |
| T17   | Salix sp, Willow  | R              | R                           | R  |
| H1    | Sambucus nigra, Elderberry  |                |                             | A root protection area measuring 2m beyond the edge of the crown spread is recommended |
| H2    | X Cupressocyparis. leylandii, Leyland's Cypress   |                |                             | A root protection area measuring 2m beyond the edge of the crown spread is recommended |
| H3    | Crataegus monogyna, Hawthorn.<br>Acer campestre, Field Maple.<br>Cornus alb, Dogwood.<br>Alnus sp, Alder. |                |                             | A root protection area measuring 2m beyond the edge of the crown spread is recommended |

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| TR NO | SPECIES  | TRUNK DIAMETER | ROOT PROTECTION AREA RADIUS | OVERALL ROOT PROTECTION AREA   |
|-------|--|----------------|-----------------------------|--|
| H4    | Sambucus nigra,<br>Elderberry.<br>Ligustrum ovalifolium<br>Privet. |                |                             | A root protection area measuring 2m beyond the edge of the crown spread is recommended |