SJ Stephens Associates

ARBORICULTURAL, LANDSCAPE & MANAGEMENT CONSULTANTS

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Arboricultural Method Statement

- for resurfacing of the path adjacent to Oak Hill House

At:-

Oak Hill Park
Hampstead
London NW3 7LN

On behalf of:-

Dawlin RTM Ltd
c/o Faraday Property Management Ltd
3rd floor (West)
52-54 High Holburn,
London WC1V 6RL

Prepared by:

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Inspection Date: 9th November 2012
Report Date: 15th November 2012

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1 BACKGROUND

1.1 This Arboricultural Method Statement relates to the resurfacing of the path adjacent to Oak Hill House, and provides recommendations for construction to avoid damage to adjacent trees. It has been instructed by Jack Thompson Smith of Faraday Property Management.

1.2 The tree survey was undertaken, and this report has been prepared, by Simon Stephens MA Oxon, Dip Arb (RFS), MArborA, C Env, MICFor a Registered Consultant with the Arboricultural Association, with over 20 years relevant experience.

1.3 This survey and report have been prepared in accordance with recommendations provided in BS 5837:2012, Trees in Relation to Construction.

2 REPORT LIMITATIONS

2.1 Trees are located in adjacent properties, so detailed inspection was not undertaken.

2.2 No soil excavation or root inspection was carried out.

2.3 These proposals have been drawn up by an arboriculturist, principally to protect tree roots. They should be checked by a suitably qualified engineer to confirm that the proposal will be fit for purpose.

3 FINDINGS AND PROPOSALS

3.1 Overview

3.1.1 New surfacing is required to the path, which is degrading and carries rainwater when wet making it hazardous.

3.1.2 There are a number of trees adjacent to the path and there are roots on the surface of the path. Severing these roots would cause damage to the trees, allowing decay to enter and could affect the stability of the trees.

3.1.3 These proposals provide a solution which will mimimise damage to tree roots.

3.2 Trees

3.2.1 The locations of trees adjacent to the path are shown on the plan enclosed as Appendix A. These are:

- T1 – a 16m Sycamore, with a girth of approximately 650mm
- T2 – a 12m Sycamore, with a girth of 300mm, growing on a steep bank and leaning over the path
- T3 – an 11m Scots pine, with a girth of 300mm, leaning away from the path over the car parking area of Oak Hill House.
- T4 – a 12m Oak, with a girth of 400mm, with an acute lean away from the path over the car parking area of Oak Hill House.

3.2.2 Of particular concern is the Oak (T4), where any root damage could affect the stability of the tree.

3.2.3 Root Protection Areas are shown, as circular areas centred on the trunk, on the plan enclosed as Appendix A. This shows the distance that construction should normally be kept back from a tree, to provide the Root Protection Areas recommended in BS 5837.

3.2.4 The areas where the path crosses these Root Protection Areas is shown on the drawing, highlighted light blue, as Ground Protection Areas. Any essential excavation within these areas should be undertaken by hand and no roots over 25mm diameter should be cut.

3.3 Construction Detail

3.3.1 A proposed construction detail is shown on the plan included as Appendix A.

3.3.2 Within the Ground Protection Areas all work should be undertaken by hand. Excavators, dumpers and other site traffic should not be allowed to track on these areas until roots are protected by the cellular confinement system.

3.3.3 Within the Ground Protection Areas, construction should avoid localised compaction, using both a two dimensional geogrid, and a three dimensional cellular confinement system as integral components of the sub-base. A typical section is shown on the drawing included as Appendix A. As well as being fit for purpose, the design and methodology should protect tree roots, by ensuring the following:-

- topsoil/organic matter should be removed carefully by hand to a maximum of 25mm, or less if roots are found nearer the surface.

- a permeable, non-woven geotextile membrane, should be laid on the ground, covering any exposed roots.

- clean (no fines), washed angular, 40/20mm, stone should be laid to fill voids and create a level base.

- a suitable two dimensional geogrid, such the TriAx Geogrid supplied by Tensar International (www.tensar.co.uk). or LBO220 Bi-orientated Geogrid supplied by Geosynthetics Ltd (www.geosyn.co.uk), should be laid over the entire area and underneath the edging.

- pressure treated timber edging boards, supported by driven stakes should be used.

- a suitable 100m deep, cellular confinement system should then be constructed to manufacturers instructions on top of the geogrid. Products that might be considered include Geoweb, supplied by Cooper Clarke Group Ltd (01204 862 222) or Cellweb, supplied by Geosynthetics Ltd (01455 617 139).
- the cellular confinement system should be filled with clean (no fines), washed angular, 40/20mm, stone to provide load support, while allowing air and moisture to permeate to the root zone.

- a 40mm layer of macadam should then be laid and consolidated, prior to laying 16mm of resin bonded gravel to manufacturers recommendations.

- removed topsoil should be used to grade to surrounding ground levels.

3.3.4 This construction method will inevitably result in an increase in levels within the Ground Protection Areas. At the bottom of the hill, an additional step could be constructed to accommodate this change. Above the Ground Protection Areas, levels can grade out to existing.

4 CONCLUSION

4.1 This Arboricultural Method Statement will protect tree roots, while allowing the path to be upgraded.

4.2 These proposals have been drawn up by an arboriculturist, principally to protect tree roots. They should be checked by a suitably qualified engineer to confirm that the path construction detail will be fit for purpose.

Oak Hill House

T4
Oak
B

T3
Scots pine
B

T1
Sycamore
B

T2
Sycamore
B–C

A
A

Canopy spread
Root Protection Area
Ground Protection Area

Existing
steps

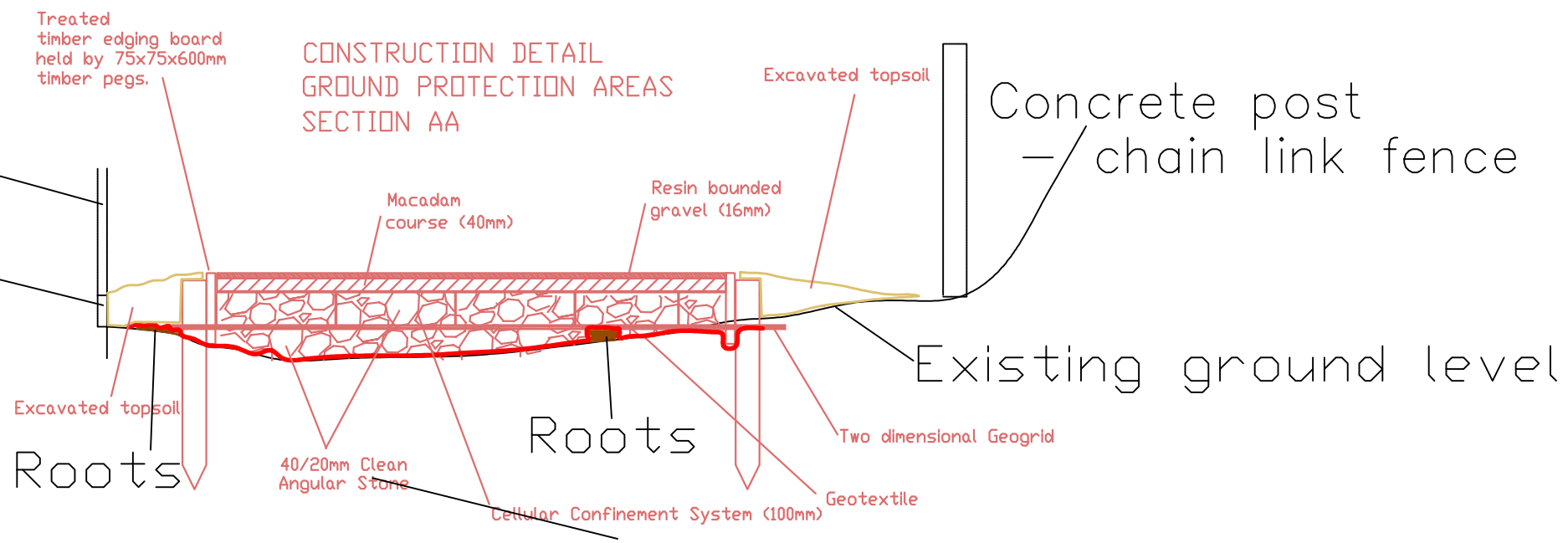
Scale
0 5m 10m

W E S

Closeboard fence

Gravel Board

CONSTRUCTION DETAIL
GROUND PROTECTION AREAS
SECTION AA



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JOB TITLE
OAK HILL PARK

DRAWING TITLE
ARBORICULTURAL METHOD STATEMENT

DRAWING NUMBER	REV
295-002	

REVISIONS

SCALE	DATE	DRAWN BY
1:200 at A3	NOV 12	S Stephens