Arboricultural impact analysis

Trees at and adjacent to

14 St Marks Crescent,
London
NW1 7TS

for

Nord Architects

Skerratt
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1. Introduction

1.1 This report contains a detailed appraisal of 5 trees within or immediately adjacent to the property boundary of 14 St Marks Crescent, London NW1 7TS, in relation to proposed residential development.

1.2 The report considers the health and safety of the trees under their current growing conditions and assesses the likely impact of the proposed development measured against the advice and guidance set out in *BS5837 2012: Trees in relation to design, demolition and construction – Recommendations.*

1.3 The site inspection for the tree survey on which this report is based took place on the afternoon of Tuesday 21 June 2016 in dry, sunny conditions.

1.4 I have been provided with Nord Architects digital (dwg) drawing file entitled 14SMCrescent_Planning_v2011 containing existing and proposed plans, elevations and sections.

1.5 The **Tree survey plan** in **Appendix a** of this report is based on Nord Architects existing lower ground floor plan. The **Tree constraints plan** in the same appendix is based on the same plan with the footprint of the proposed development at lower ground floor level overlaid.

2. Background information

2.1 Site layout, boundaries and topography

2.1.1 14 St Marks Crescent is a substantial Victorian, mid-terrace dwelling on 4 levels (lower ground, ground, first and second floor level) standing in a rectangular plot the longer axis of which runs north west to south east.

2.1.2 There is a narrow frontage area at street level, abutting the front elevation of the dwelling.

2.1.3 The level rear garden, in or adjacent to which the trees referred to in this analysis stand, is at lower ground floor level (about 2400mm below street level). The Regent's Canal runs along the north west facing rear boundary of the rear garden.

2.1.4 A low brick wall with a trellis above, reinforced with shrub planting, runs along the long north east facing side boundary of the rear garden.

2.1.5 A roughly 1800mm high brick wall with a trellis above runs along the long south west facing rear garden boundary.

2.1.6 The **Tree survey plan** in **Appendix a** shows the existing site layout and the locations of the trees referred to in this analysis.

2.2 Geology and soils

2.2.1 According to British Geological Survey (BGS) open-source data, the site is located upon deep Palaeogene London Clay bedrock.

2.2.2 No soil sampling was carried out on site.

2.3 Planning constraints

2.3.1 The proposed development site is within the London Borough of Camden's Primrose Hill conservation area.

2.3.2 At the time of writing it is not known if any of the trees referred to in this analysis are covered by a Tree Preservation Order (query pending).

2.4 The trees

2.4.1 The trees referred to in this analysis are described in detail in the **Tree survey schedule** in **Appendix a.** Their locations are shown on the **Tree survey plan** in the same appendix

2.5 The proposed development

2.5.1 The principal elements of the proposed development are:

- Removal of existing balcony and bay window
- Extension of the lower ground floor
- Associated minor external works

3. Analysis

3.1 General

3.1.1 The **Tree constraints & removals plan** in **Appendix a** shows the recommended Root Protection Area (RPA) for each tree, arranged symmetrically around the main stem. Each RPA highlights the primary potential area of conflict between proposed development and retention of existing trees, namely conflicting demands for space at and below ground level

3.1.2 I have considered whether it would materially improve the accuracy of this analysis if the RPAs of the Trees 001 and 005 were to be re-configured to take account of the canal that they stand next to, but have concluded that there is no detailed information available on which such an adjustment could be based.

3.1.3 Where appropriate, I have given consideration to above-ground conflicts in the analysis which follows, particularly headroom, lateral and overhead shading and perceived risk.

3.2 Trees to be removed

3.2.1 It will be necessary to remove Eucalyptus 002 for development purposes. This small tree has been severely reduced in a height and spread on a regular basis to prevent it becoming too large for its immediate surroundings.

3.2.2 Its removal will have a negligible impact upon the visual amenities of immediate neighbours and none at all upon those of the general public.

3.3 Trees to be retained

3.3.1 The footprint of the proposed lower ground floor extension just overlaps the RPA, as drawn, of off-site Weeping Willow 005. In area terms the extent of the overlap is less than 1% of the total RPA.

3.3.2 In my view this degree of encroachment will have no measurable adverse impact upon Tree 005.

3.3.3 The RPAs of Sycamore 001, Apple 003 and off-site 004 are completely outside the footprint of the proposed development.

3.3.4 Above ground, the crowns of any of the trees referred to in this anlysis do not overhang the development footprint.

3.3.5 The degree of lateral shading and the perception of risk in extreme weather conditions will be no more after the development has been carried out, than it is at present.

4. Conclusions

4.1 As long as *unnecessary disturbance* is avoided, the modest proposed development considered in this analysis can, in my opinion, be achieved without adverse impact upon retained trees.

4.2 The removal of small Eucalyptus 002 will have a negligible adverse impact upon the visual amenities of immediate neighbours and of the general public.

4.3 The **Arboricultural Method Statement (AMS)** accompanying this analysis sets out appropriate working methods and tree protection measures to ensure that retained trees are not adversely affected.

Appendix a

Tree survey schedule
Tree survey plan
Tree constraints and removals plan

Explanatory notes

For general information on any entry in the detailed survey text, refer to the notes below which are organised on a column by column basis.

Tree number
All trees have been numbered in the survey text to correspond to the location numbers shown on the accompanying Tree survey plan. No trees have been marked on site.

Species
Common English names have been used wherever possible and Latin names are listed (in brackets in *italics*) in all cases.

Dimensions

Height - are recorded in m.

Stem diameter – recorded in mm at breast height (1.5m) wherever possible. Where measurement at 1.5m is not possible, one of the alternative methods set out in *Annex C of BS5837:2012* has been used.
If the diameter has been measured at a different height, this has been recorded, e.g. 60 @ 1m = 60mm diameter at 1m height.
Other abbreviations used:

av - average	est/e - estimated	
ms - multi-stemmed	max – maximum	gl - ground level

Crown spread - radial crown spreads in metres have been recorded at four points on the circumference of the crown (north, east, south and west). The accompanying Tree survey plan shows approximate crown shapes based on these measurements

Crown height - the height of the first major branch and the height of the lowest point of the crown are recorded in metres eg 3/3

Explanatory notes

Age

Y	Young	SM	Semi-mature
EM	Early mature	M	Mature
OM	Over-mature		

Where the precise age of a tree is known, it has been recorded in brackets adjacent to the general classification i.e. M(7).

Condition

Physiological condition

Gives a measure of biological vigour and of the presence or absence of disease, insect attack or other debilitating factors.

G	Good
F	Fair
P	Poor

Structural condition

Gives a measure of each tree's physical form and mechanical stability.

G	Good
F	Fair
P	Poor

Comments

Descriptive notes on the tree's shape, local environment and condition.

Recommendations

Management recommendations under existing conditions.

Explanatory notes

RPA radius
The radius of each tree's Root Protection Area (RPA) as defined in *BS5837:2012 – Trees in relation to design, demolition and construction - Recommendations*

Life expectancy
An approximate estimate for each tree's anticipated future safe life in the following ranges:

- <10 years
- 10-20 years
- 20-40 years
- 40+ years

Retention category
This grading is based on the recommendations set out in BS 5837:2012 *Trees in relation to design, demolition and construction - Recommendations.* The categories are summarised in the standard as follows:

- A Trees of high quality with an estimated remaining safe life of at least 40 years
- B Trees of moderate quality with an estimated remaining safe life of at least 20 years
- C Trees of low quality with an estimated remaining safe life of at least 10 years, or young trees with a stem diameter below 150mm
- U Trees 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 years

In addition the British Standard requires one or more subcategories to be applied to the main Retention Category. In summary these are as follows:

1. Mainly arboricultural qulaities (that is individual aesthetic characteristics)
2. Mainly landscape qualities
3. Mainly cultural values, including conservation

Tree survey schedule

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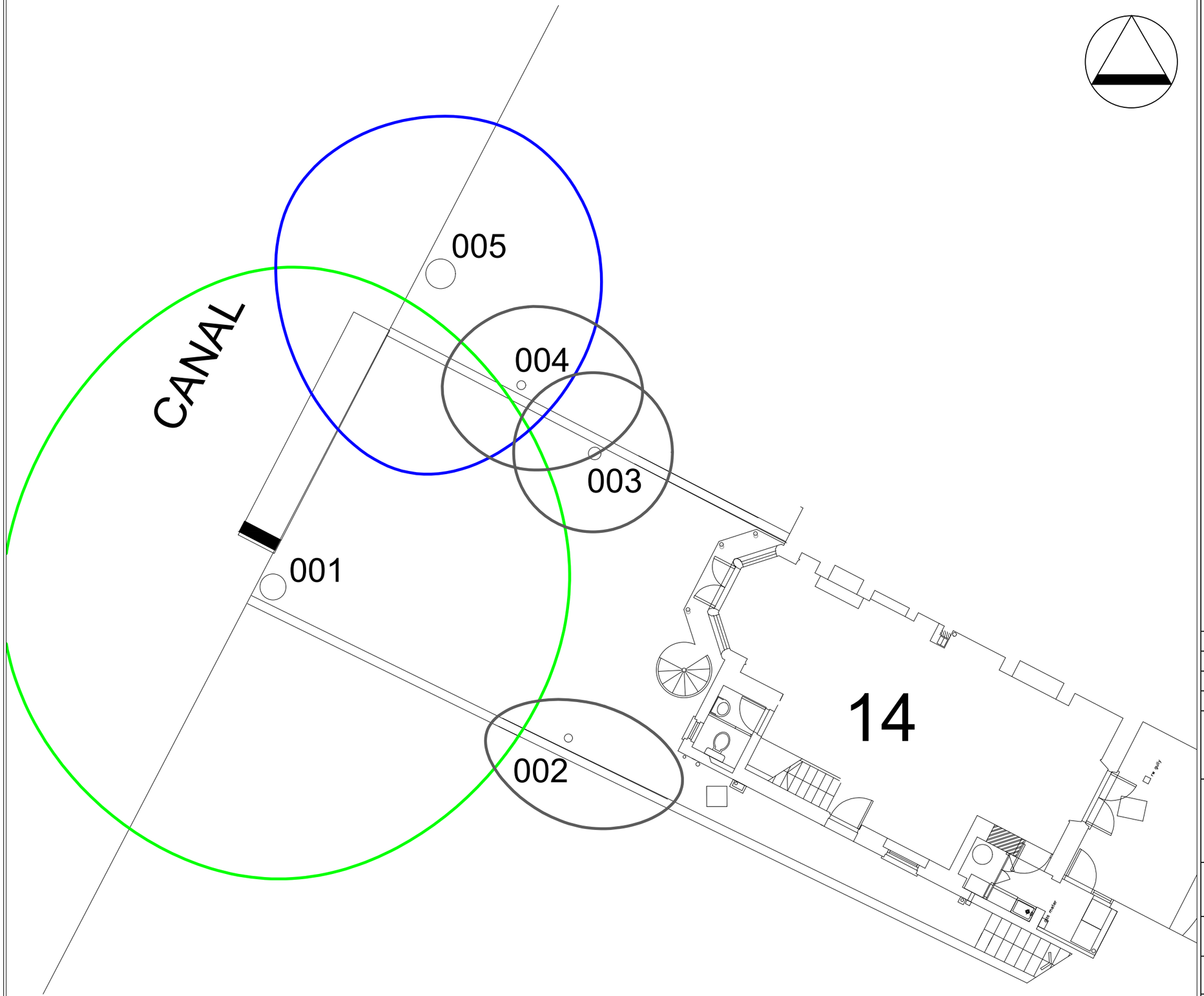
Tree No.	Species	Height (m)	Diam (mm)	Crown Spread (m)				Crown Height (m)	Age	Physiological Condition	Structural Condition	Comments	Recommendations	RPA Radius (m)	Life Expectancy	Retention Category	Retention Sub-category
				N	E	S	W										
001	Sycamore (*Acer pseudoplatanus*)	20 est	650	8	7	7	7	5/6	M	G	G	Single upright stem: quite well balanced crown pollarded (cut back to a branchless stem) in the distant past at 6m: stands on rear property boundary immediately adjacent to a canal: bulging brick retaining wall along canal edge at base: stem solid but heavily cankered	No immediate action required	7.80	40+	A	1
002	Eucalyptus *(Eucalyptus species)*	5	210 @ 1m	1	3	2	2	1/2	SM	G	F	Single leaning stem forks at 1m into 2: height and spread severely reduced on more than one occasion: regrown crown quite well balanced	Continue current maintenance regime	2.52	20-40	C	2
003	Apple (*Malus domestica* var)	5	160	2	2	2	2	2/2	SM	F	F	Single upright stem forks at 2m into 2: height and spread severely reduced in the recent past	No immediate action required	1.92	20-40	C	2
004	Silver Birch (*Betula pendula*)	9	220 est	2	3	2	2	3/3	SM	G	G	Single upright stem forks at 2m: height and spread reduced in the past: crown quite well proportioned: stands off-site in an adjacent garden	No immediate action required	2.64	20-40	C	1/2
005	Weeping Willow (*Salix alba 'Pendula'*)	8	750 est	4e	4	5	4e	2/1	M	G	G	Single leaning stem: main branch fork at 2m: pendulous crown well proportioned in context: stands off-site on the canal edge in an adjacent garden	No immediate action required	9.00	40+	B	1

Client: Nord Architects
Location: 14 St Marks Crescent, London NW1 7 TS
Date: 21.06.16
Job No.: 479



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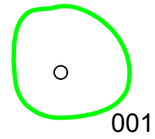

EXISTING TREE

Trees are coloured on plan to correspond to the Retention Categories specified in: *BS5837:20 12 T rees in relation to design, demolition and construction - Recommendations* as follows:

Category A - GREEN
Category B - BLUE
Category C - GREY
Category U - RED

REVISION		CHCK'D	APP'D	DATE

Client:

NORD ARCHITECTS

Job Title:

14 ST MARKS CRESCENT
LONDON
NW1 7TS

Drawing Title:

TREE SURVEY PLAN

Drawing Number:	Scale:
479.01.00	1:100 (A3)
Date: 21.06.16	Drawn by: RS

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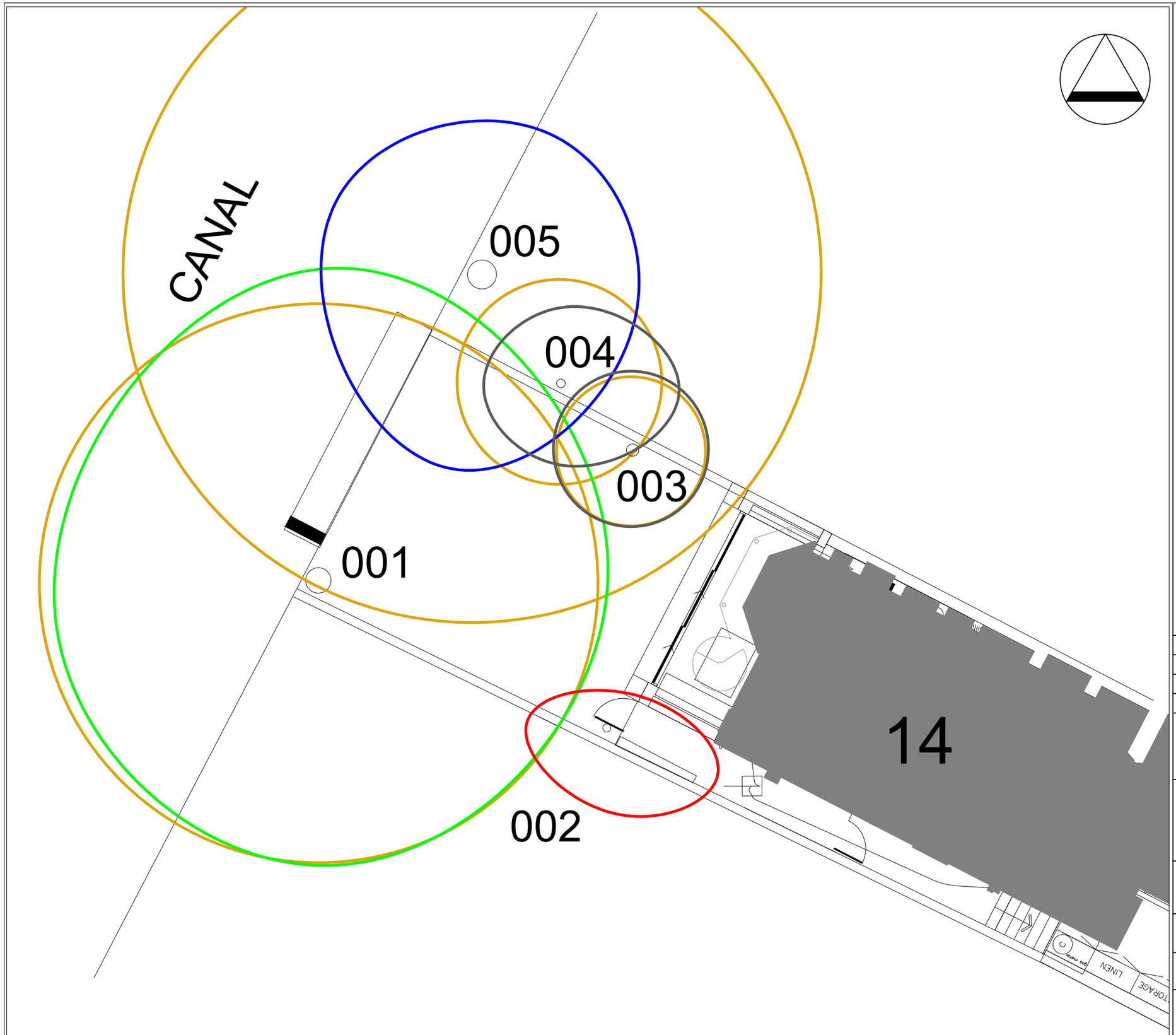

KEY

001

EXISTING TREE

Trees are coloured on plan to correspond to the Retention Categories specified in: *BS5837:20 12 T rees in relation to design, demolition and construction - Recommendations* as follows:

Category A - GREEN
Category B - BLUE
Category C - GREY
Category U - RED

001

ROOT PROTECTION AREA as defined in *BS5837:2012 Trees in relation to design, demolition and construction - Recommendations*

002

TREE TO BE REMOVED FOR DEVELOPMENT PURPOSES

PROPOSED DEVELOPMENT FOOTPRINT

REVISION		CHCK'D	APP'D	DATE

Client:

NORD ARCHITECTS

Job Title:

14 ST MARKS CRESCENT
LONDON
NW1 7TS

Drawing Title:

TREE CONSTRAINTS & REMOVALS PLAN

Drawing Number:	Scale:
479.02.00	1:100 (A3)
Date:	Drawn by:
21.06.16	RS

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