



OAKFIELD
ARBORICULTURAL SERVICES

Arboricultural Assessment

Land at Heath Crescent, Norwich

OAS 19-293-AR01

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DISCLAIMER

While all reasonable efforts have been made to identify defects in the subject trees, the statements made in this report do not take into account the effects of extreme weather events, vandalism, accidents or changes to the site that may affect trees that have taken place since the date of the survey. Oakfield Arboricultural Ltd does not accept any responsibility in connection with these factors. The comments and observations made within this report will cease to be valid either within two years of the date of the survey (unless specifically stated elsewhere within the report), or when site conditions change or any works to trees take place that have not been specified within this report, whichever is the sooner.

Section 1 : Introduction

- 1.1 Oakfield Arboricultural Services Ltd were instructed by CODE Development Planners on behalf of the client Jarrold & Sons Ltd to undertake an arboricultural appraisal on the site known as Land at Heath Crescent, Norwich.
- 1.2 The appraisal was to collect data with regards to arboricultural constraints that may exist on the site with regards to establishing the principle of development for promotion through the Greater Norwich Local Plan (GNLP) process
- 1.3 Where appropriate, recommendations for tree works or removals will be made in order to facilitate the proposed redevelopment or to improve the overall condition of trees and abide by any legal 'Duty of Care' obligations that may exist.

Tree Survey

- 1.4 The survey was carried out in December 2019 in fair weather conditions and was carried out in accordance with BS:5837 2012 'Trees in Relation to Design, Demolition and Construction – Recommendations'.
- 1.5 In accordance with the BS:5837 recommendations, the survey will include all trees within the site that are 75mm in diameter at 1.5m, the survey may also include trees adjacent to the site up to a distance of 15m from the site boundary that may be affected by the proposed development. Trees may be represented individually or as part of larger groups and will be clearly marked on any provided plans.

Tree Categorisation

- 1.6 The purpose of the tree categorization method is to help identify the overall quality and value, in a non-fiscal sense, of the existing trees stock so as to allow an informed decision to be made concerning which trees should either be retained or removed in the context of proposed development. To qualify a tree must fall into one of the four categories A, B, C and U. Categories A, B and C are trees ranging from high to low quality with category U being trees of poor overall value. Further sub

categories reflect arboricultural, 1, landscape, 2, or cultural values, 3; all carry the same weight and a tree can have more than one criterion.

- Category A - Trees of high quality and value that are considered particularly good examples of their species and or essential components of groups such as dominant trees within avenues. Trees will have a minimum of 40 years life expectancy.
- Category B - Trees of moderate quality that may have been category A but have been downgraded due to impaired features such as significant remedial defects or poor past management that make their retention unsuitable beyond 40 years. Trees will have a minimum of 20 years life expectancy
- Category C - Trees of low quality that are unremarkable and have limited merit or such impaired condition they do not qualify for higher categories. Tree will have minimum of 10 years life expectancy
- Category U - Trees of poor quality and are in such condition they have less than 10 years useful life expectancy. Trees are generally recommended for removal regardless of any proposals.

Preliminary Management Recommendations

1.7 Any recommendations made for management of the trees are preliminary only and are not to be considered a detailed works specification, this is of particular note if tree works must be applied for via the relevant local council due to presence of tree preservation orders.

1.8 All work recommendations are done so on the basis they are carried out by qualified contractors and will be carried out in accordance as per the recommendation set out in BS:3998 'Recommendations for Tree Works'

Limitations

1.9 This is a preliminary assessment from ground level and observations have been made solely from a visual perspective for the purposes of assessment in terms relevant to planning and development. No invasive or other detailed internal decay detection devices have been used in assessing internal conditions.

- 1.10 Any conclusions relate to conditions found at the time of inspection. Any significant alteration to the site that may affect the trees that are present or have a bearing on planning implications (including level changes, hydrological changes, extreme climatic events or other site works) will necessitate a re-assessment of the trees and the site and render any previous advice/ findings invalid.
- 1.11 It must be noted this is not a health and safety risk assessment and should not be viewed as such. The survey carried out will assess general health; however it may not have been appropriate or possible to view all parts of the tree so as to fulfil the criterion of a health and safety risk assessment.
- 1.12 This is an arboricultural report and no such reliance must be given to comments relating to buildings, engineering, soil or ecological issues, in particular this is not a survey to comment of the effects of trees with regards to subsidence or heave.
- 1.13 All measurements are metric and approximate.
- 1.14 Any lack of comments regarding recommended work does not imply that any tree/s poses no level of risk and similarly it should not be implied that a tree will present an acceptable level of risk if any such recommended works are carried out. Trees are living things and exposed to extreme forces and other fungal or bacteria attack that are not necessarily visible to the naked eye and as such no tree should ever be viewed as safe. It is recommended that trees be regularly surveyed to ensure that any risk is limited as much as is practically possible.

Section 2 : Survey Findings

Site Description

- 2.1 The site known as Land at Heath Crescent is owned by Jarrold & Sons Ltd. The site closed in August 2016, however, a small pavilion/changing facility, bowling green and two tennis courts still exist on site. The site also includes areas of grass and hard standing, the access drive from Heath Crescent as well as a dwelling on Prince Andrews Road forming part of the western part of the site.

2.2 Located in an urban area the site is bounded by residential dwellings to the north, south and west with an industrial area to the east. Access to the site is gained via an existing access point off Heath Crescent on the NW boundary.

Tree Protection

2.3 The relevant council has not been contacted at this stage with regards to any tree protection orders on or adjacent to the site.

2.4 The site does not sit within a conservation area.

Species Composition

2.5 The following species were surveyed:

- Cherry species
- Beech
- Hawthorn
- Sorbus species
- Maple species
- Silver Birch
- Lawson Cypress species

Tree Discussion

2.6 The surveyed vegetation was predominantly located to the boundaries and predominantly semi mature in age. Mostly trees were unmanaged although some remedial works to boundary hedges appear to still be undertaken. Overall trees offer little in arboricultural or landscape value with the exception of T16 - T18 having some arboricultural merit and G4 offering some screening value to existing residents.

Category Grading

2.7 Of the vegetation recorded within the site there is a majority split between the following:

- Category B 17% - 3 individuals, one group
- Category C 83% - 14 individuals, 3 groups

Section 3: Preliminary Work Recommendations

Management Recommendations

3.1 Although the majority of hedgerows along the boundaries of the site and the areas of grassland within the site have been maintained, the trees and some small areas of boundary hedgerows appear not to have undergone any major management over the years, however, given the lack of maturity and that some vegetation is overhanging from offsite locations, regular management is not necessarily required. At this point there is no urgent requirement for works to be undertaken.

Section 4 : Development Implications

Proposal

3.2 Due to the stage of preparation of the Greater Norwich Local Plan (GNLP) a fixed development layout is not currently available and therefore is not assessed as part of this report and should not be viewed as a full implications assessment (AIA) ; however the following observations can be made:

- Overall there are relatively few tree constraints within the site boundary with only T17 having any significant effect on any potential layout.
- It is anticipated that internal hedging and small trees such as T2- T7, G1 and G3 would be removed to accommodate any layout, such removals should not pose a constraint.
- All other vegetation would easily be retained but most are of low overall value so removals other than Category B trees would not have any detrimental effect on the site's arboricultural or landscape value.
- There are very little concerns with regards to shading issues.

- 3.3 Overall the trees pose little material constraints to any proposed development of the site but considerations should be given to the retention and incorporation of T17 and either the whole or parts of G4.

Recommendations

- 3.4 Allocation of the site for residential development within the Greater Norwich Local Plan (GNLP) and subsequent delivery of new homes would not be unduly impeded by the existing trees on site. Should the site progress to the preparation and determination of a planning application a planning condition should be attached to any outline planning consent requiring a formal implications assessment to be undertaken to inform a detailed design proposal at the reserved matters stage. This should advise on any specialist construction detail required to aid tree protection that may include but not limited to foundation design, construction or replacement or hard surfaces, boundary treatments, tree protection and any landscape proposals.
- 3.5 The planning condition should also require the production of a method statement to outline a methodical construction process and outline any tree protection methods that are to be utilised throughout the construction process as well as giving specific information on construction materials to be used, tree works, location of tree protection fencing and areas of hard landscaping. This should be in conjunction with a tree protection plan showing the above in visible format.

Appendix 1 Tree Survey Schedule

Tree Ref. No.	Species (Common Name)	Height (m)	Canopy Spread				Grnd Clrnc	DBH (mm)	RPR (cm)	RPA (m)	Age class	Gen Cond	Structural Defects/Comments	Estimated remaining contribution (BS 5837)	BS Cat	BS Sub Cat	Prelim Tree Work Recommendations
			N	E	S	W											
T1	Cherry Plum	6	2	3	2	3	1	300	360	40.69	MA	F	No overall value	10+	C	1	
T2	Maple	7	2	2	2	2	1	150	180	10.17	Y	F	Young tree easily replaced	40+	C	1	
T3	Hawthorn	5	3	2	2	3	1	200	240	18.09	MA	F	No overall value	20+	C	1	
T4	Maple	7	2	3	3	2	1	100	120	4.52	Y	F	Young tree easily replaced	40+	C	1	
T5	Pine	14	3	4	4	3	0	400	480	72.35	MA	F	Stem ivy dominated. Large king to main stem. Unsure of ownership	10+	C	2	
T6	Cherry	6	1	1	1	1	1	150	180	10.17	MA	F	No overall value	20+	C	1	
T7	Cherry	9	3	2	2	3	1	300	360	40.69	MA	F	Poor form	20+	C	1	

Tree Ref. No.	Species (Common Name)	Height (m)	Canopy Spread				Grnd Clnrc	DBH (mm)	RPR (cm)	RPA (m)	Age class	Gen Cond	Structural Defects/Comments	Estimated remaining contribution (BS 5837)	BS Cat	BS Sub Cat	Prelim Tree Work Recommendations
			N	E	S	W											
T8	Cherry	6	3	2	2	2	0	250	300	28.26	MA	F	Poor form	10+	C	1	
T9	Sorbus	4	1	1	1	1	0	75	90	2.54	MA	F	No significance	10+	C	1	
T10	Sorbus	8	2	3	2	2	1	250	300	28.26	MA	F	No significance	10+	C	1	
T11	Cherry	10	1	1	1	1	1	250	300	28.26	MA	F	Lombardy specimen	10+	C	1	
T12	Sorbus	10	1	1	1	1	1	250	300	28.26	MA	F	Lombardy specimen	10+	C	2	
T13	Sorbus	8	2	3	2	2	1	275	330	34.19	MA	F	No significance	10+	C	1	
T14	Cherry	10	3	3	4	3	500	253	304	28.94	MA	F	Multi-stemmed poor overall value	10+	C	1	
T15	Sorbus	4	1	1	1	1	100	254	305	29.17	MA	F	No significance	10+	C	1	
T16	Maple	10	5	4	3	2	2	300	360	40.69	MA	F	Offsite poor past pruning	20+	B	2	

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			N	E	S	W											
T17	Beech	13	5	7	7	6	3	750	900	254.34	MA	F	Appears stressed, reduced in past	20+	B	2	Monitor
T18	Silver Birch	12	2	2	2	2	1	200	240	18.09	MA	F	Offsite	20+	B	1	
T19	Hawthorn	9	3	2	2	1	1	150	180	10.17	MA	F	No significance	20+	C	1	
G1	Cherry, Hawthorn, Willow	10	As on plan				0	150	180	10.17	MA	F	Located to tennis courts unmanaged and poor value	20+	C	1	
G2	Hawthorn	3	As on plan				0	150	180	10.17	MA	F	Boundary hedge	40+	C	2	
G3	Cypress	3	As on plan				0	150	180	10.17	MA	F	Boundary hedge to bowls lawn. Areas of dead stems	20+	C	3	
G4	Cypress	10	As on plan				0	200	240	18.09	MA	F	Small groups to residential boundary. Well pruned gives some screening to residents	20+	B	2	

Tree Schedule Explanatory Notes

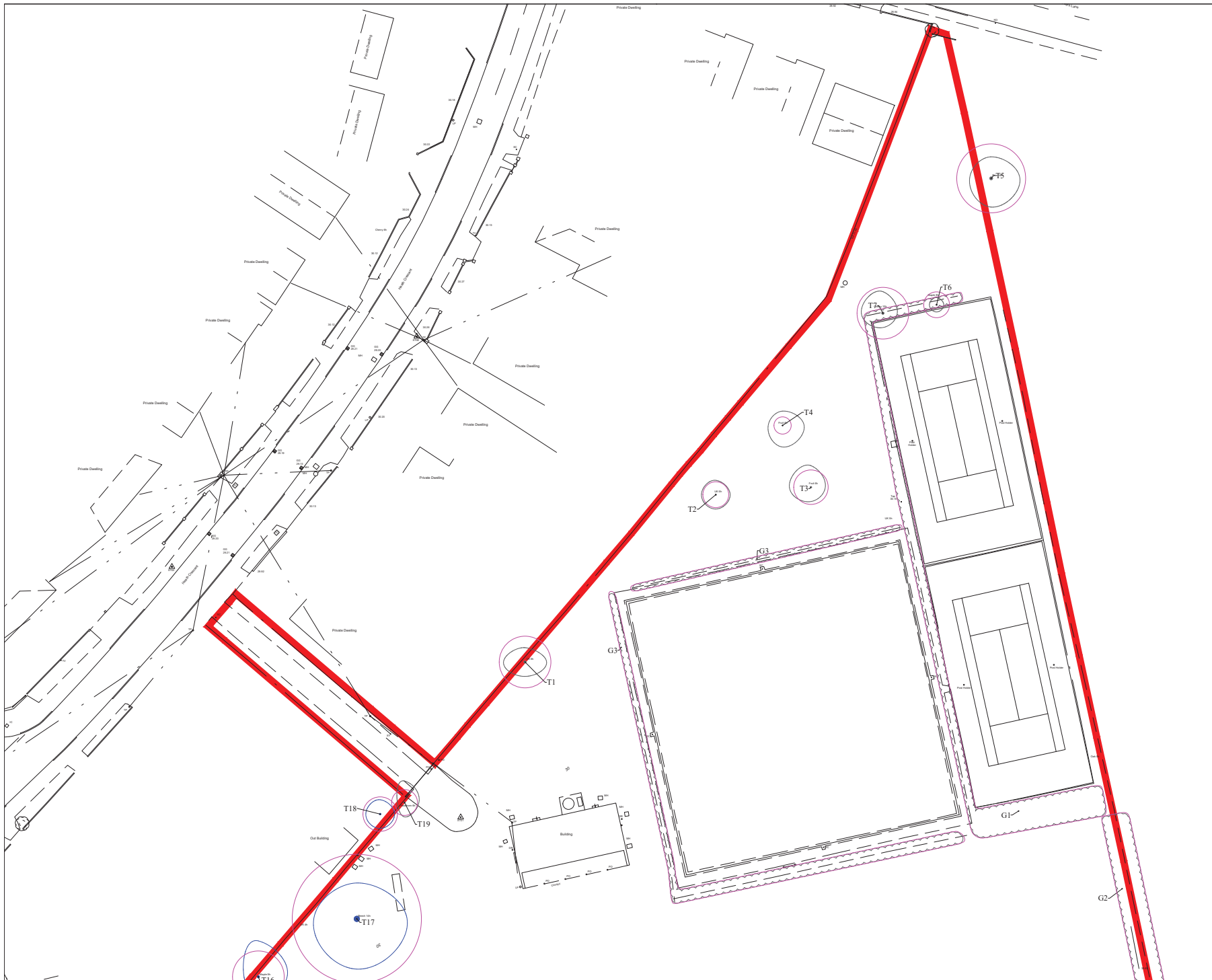
Ref.no	Identifies trees, groups and hedges on the accompanying plan.
Species	Common names are provided to aid wider comprehension.
Height	Describes the approximate height of the tree measured in metres from ground level
Canopy Spread	Indicates the crown radius from the base of the tree in four compass directions, recorded to the nearest metre.
Ground Clearance	Height of crown clearance above adjacent ground in metres.
DBH (mm)	DBH is the diameter of the stem measured in cm at 1.5m from ground level for single stemmed trees or just above root flare for multi-stemmed trees. Stem Diameter may be estimated where access is restricted.
RPR (cm)	Root Protection Radius (RPR) is area required to be protected measured radially from the trunk centre.
RPA (m²)	Root Protection Area (RPA) is the minimum rooting area in m ² which should remain undisturbed around each tree.
Age Class	Age of the tree expressed as Y- Young, MA- Middle-Aged, EM- Early Mature, M- Mature or OM- Over-Mature
General Condition	Overall condition of tree expressed as :Good, Fair, Poor, Dead
Structural defects/Comments	May include general comments about growth characteristics, how it is affected by other trees and any previous surgery works. Also specific problems such as dead wood, pests, diseases, broken limbs. Etc
Estimated Remaining Years	Categorised in year bands of less than 10, 10+, 20+, 40+
BS Category	B.S. Cat refers to (BS 5837:2005 Table 1) and refers to tree/overall group quality and value; 'A' - High; 'B' - Moderate; 'C' - Low; 'U' - Remove.
Sub Category	Sub Cat refers to the retention criteria values where 1 is arboricultural, 2 is landscape and 3 is cultural including conservational, historic and commemorative

Appendix 2 Photos










Appendix 3 Tree Constraints Plans

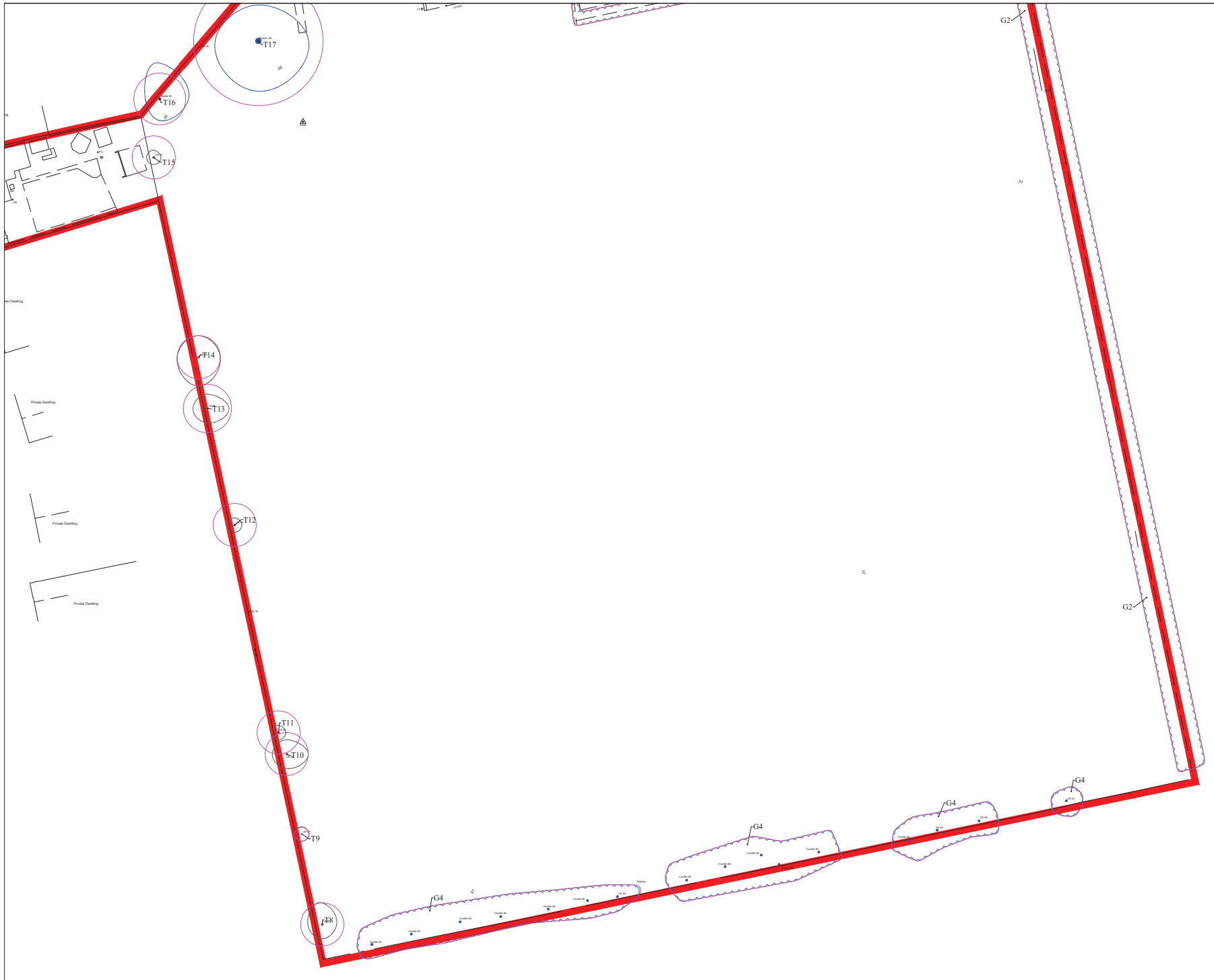


KEY

-  Existing Tree colour referenced in accordance with BS 5837 2005.
-  Existing hedge or group, colour coded as above in accordance with BS 5837.
-  Blue - Cat B Trees of moderate quality and value
-  Grey - Cat C Trees of low quality and value
-  Root Protection Area as calculated in accordance with BS 5837



REV:	DATE:	REVISIONS/DETAILS:	DATE:	TITLE:
				Tree Constraints Plan
CLIENT:		SITE:		
Jorrod & Sons Ltd		Land at Heath Crescent, Norwich		
DRAWN BY:	CHECKED BY:	SCALE:	DATE:	DWG. NO.:
SPM	SPM	1:200 (A1)	Dec 2019	QAS 19-293-TS01
				REV.:



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REV.	DATE	BY	DETAILS
CLIENT		SYMBOL TITLE	
Jarrod & Sons Ltd		Tree Constraints Plan	
SITE			
Land of Heath Crescent, Norwich			
DRAWN BY	CHECKED BY	SCALE	DATE
SPM	SPM	1:250 0m	Dec 2019
DWG NO.	DATE		REV.
045 19-293-T502			