



**Northfleet
Harbourside**

Arboricultural Impact Assessment



Landscape
Architecture



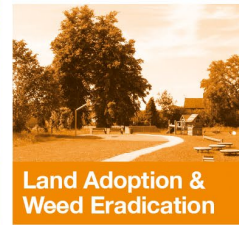
Landscape
Planning



Arboriculture
& Tree Works



Ecology & Habitat
Management



Land Adoption &
Weed Eradication



Urban
Design

JAMES BLAKE

A S S O C I A T E S

Arboricultural Impact Assessment

Northfleet Harbourside

on behalf of

Schofield Lothian

19 August 2022

JBA 22/175 AR01

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Project	Northfleet harbourside
Report	Arboricultural Impact Assessment
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1 SUMMARY

- 1.1 This Arboricultural Impact Assessment has been commissioned by Schofield Lothian to accompany their planning submission for the redevelopment of Northfleet Harbourside.
- 1.2 This report has been prepared in accordance with British Standard 5837: Trees in relation to design, demolition and construction – Recommendations (2012). This document provides best practice advice, assessment and guidance with regards to the design, planning and implementation of new developments.
- 1.3 This report concludes that the proposal is acceptable, and it is recommended that the proposal is approved subject to a planning condition requiring a detailed arboricultural method statement, an extensive scheme of new tree planting and successful tree protection methodology.

2 INSTRUCTIONS

- 2.1 James Blake Associates Ltd has been instructed to carry out a survey of trees and significant vegetation within and directly adjoining land at Northfleet in relation to the application for redevelopment of the site.
- 2.2 Our assessment was carried out in accordance with BS 5837:2012 'Trees in relation to design, demolition and construction - Recommendations'.
- 2.3 Details of all surveyed vegetation can be found within the Tree Survey Schedule in **Appendix 1**. All trees were visually inspected from ground level only. No diagnostic equipment was used, or detailed decay investigation carried out, during the survey.
- 2.4 This survey is intended for planning purposes only and does not include all shrubs, vegetation and small trees on site. The survey is not intended to inform the detailed design of foundations (further information on vegetation can be provided upon request).
- 2.5 Our report is prepared to provide supporting evidence and justification for redevelopment in relation to the existing trees and vegetation within and neighbouring the site.
- 2.6 The contents of this report are copyright of James Blake Associates Ltd and may not be copied without the author's permission. James Blake Associates Ltd's Terms and Conditions apply to this report and all associated works in conjunction with this project.

Documents provided

- 2.7 This report has been prepared with reference to the following documentation:
- 3D topographical survey by VU.CITY; and
 - Proposed site layout "Northfleet Harbourside Illustrative Landscape Masterplan".

3 OBSERVATIONS

Site visit

- 3.1 The site was surveyed by Charles Hey, Consultant Arboriculturist, on 15 August 2022 to identify, measure and locate trees and significant vegetation within, and directly adjoining, the site.

Site and context

- 3.2 The site is an urban area of land on the north-western edge of Northfleet, and contains Ebbsfleet United Football Club grounds in the centre of the site.
- 3.3 The A226 road runs through the site. The A2 runs parallel with the southern boundary, approximately 2km to the south.
- 3.4 A significant belt of mainly semi-mature trees run along the south-western boundary, along the railway banking. The central part of the site is filled with limited vegetation, mostly occasional individual trees.
- 3.5 A wooded area runs along the south-eastern boundary, on the far side of Grove Road.
- 3.6 Throughout the site there are a range of specimen trees and groups that do contribute to the wider landscape. However the overall quality varies considerably and many are of low value as individuals due to structural defects or poor historical management or other reasons.

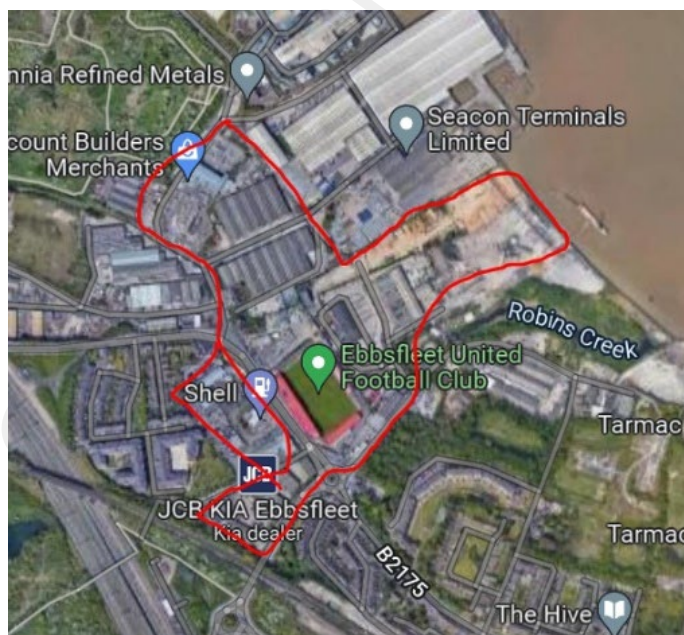


Fig 1. Approximate site boundary in relation to its surroundings.

4 VIEWS OF TREES



Photograph 1 (above). T4, gum tree, left, and T5, Leyland cypress, right. Viewed looking towards the north-west.

Photograph 2 (left). G6, silver birch. Viewed looking towards the west.

Photograph 3 (right). G7, Lawson cypress and sycamore. Viewed looking towards the south.



Photograph 4 (below). G8, Norway maple, maidenhair tree and tulip tree. Viewed looking towards the south.





Photograph 5 (left). G10, tree of heaven.
Viewed looking towards the west.

Photograph 6 (right). T11, cherry. Viewed looking towards the north-east.



Photograph 7 (right). T12, ash. Viewed looking towards the south-west.



Photograph 8 (below). G13, mixed species. Viewed looking towards the north.





Photograph 9 (above). G14, goat willow.
Viewed looking towards the south-east.



Photograph 10 (left). G16, white willow.
Viewed looking towards the east.



Photograph 11 (above). G17, white willow. Viewed looking towards the east.



Photograph 12. G18, Leyland cypress and field maple. Viewed looking towards the south-east.



Photograph 13 (left). T20, whitebeam.
Viewed looking towards the west.

Photograph 14 (below). G21, ash and sycamore. Viewed looking towards the north-east.





Photograph 15 (left). T24, sycamore.
Viewed looking towards the north-west.



Photograph 16 (below). G25, sycamore.
Viewed looking towards the east.



Photograph 17 (above). G26, Leyland cypress, right, and G29, goat willow and sycamore, left. Viewed looking towards the north-east.



Photograph 18. G30, mixed species. Viewed looking towards the south-west.



Photograph 19 (above). G31, ash and field maple. Viewed looking towards the west.



Photograph 20. G32, maple. Viewed looking towards the north-west.



Photograph 21. G33, mixed species. Viewed looking towards the south-west.

5 TECHNICAL INFORMATION

Statutory protection

- 5.1 Gravesham Borough Council website does not show information for Conservation Areas or Tree Preservation Orders.

Soils and Geology

- 5.2 This information is obtained from The British Geological Survey (online) 'Geology of Britain Viewer' but is provided only as a guideline to assist with assessment of site conditions in relation to rooting habits of trees.
- 5.3 Soil conditions have the potential to affect tree growth, rooting depth and extent, species selection and foundation design and therefore a detailed soil assessment should be carried out by a competent person.
- 5.4 Bedrock geology is described as being Lewes Nodular Chalk Formation, Seaford Chalk Formation and Newhaven Chalk Formation – Chalk. Superficial deposits are shown as being Alluvium – clay, silt, sand and gravel for most of the site, with some of the site being Head – clay, silt, sand and gravel.

Planning policy

- 5.5 The National Planning Policy Framework sets out the government's planning policies for England and how these should be applied. The document replaces all previous documents and came into action in July 2018, and was subsequently updated February 2019 and July 2021.
- 5.6 The NPPF supports and puts a greater focus on sustainable development, which it defines as having three dimensions; social, economic and environmental. It goes on to state that these three dimensions are mutually dependent and, to achieve beautiful sustainable places, they must be sought simultaneously.
- 5.7 Paragraph 131 in the latest update, sets out the important contribution trees make to the character and quality of urban environments. It requires that planning policies and decisions should ensure that new streets are tree-lined and that opportunities are taken to incorporate trees elsewhere in developments.
- 5.8 It also sets out a requirement that appropriate measures are in place to secure the long-term maintenance of newly planted trees and existing trees are retained wherever possible.

- 5.9 Specifically, NPPF paragraph 180 (c) states that “development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists”.
- 5.10 No ancient or veteran trees were identified, within or adjacent to the development, during the survey.

Gravesham Borough Council

6 ARBORICULTURAL APPRAISAL

- 6.1 Dimensions, comments and information gathered for each survey entry are provided in the tree schedule JBA 22 175 TS01 in **Appendix 1**. The location, root protection area, crown spread and BS5837 categorisation is shown on the tree survey drawing JBA 22 175 TCP01 in **Appendix 2**. The red line boundary for this site is subject to change, and any trees not surveyed that are within a future red line boundary will need to be surveyed.
- 6.2 Of the 35 survey entries, one was assessed as being young, 23 were assessed as being semi-mature, and 11 were early mature.
- 6.3 The survey assessed the tree population as consisting predominantly of moderate and low-quality trees. Of the 35 survey entries 12 were of low quality and value (category C), 22 were assessed as being moderate quality and value (category B) and the remaining one was high quality (category A).

Identified impacts

- 6.4 Drawing JBA 22 175 TRP01 in **Appendix 2** shows the proposed layout and tree removals necessary to implement the proposed development.
- 6.5 The arboricultural impacts have been assessed and are deemed to be acceptable. In respect of the proposal the following have been identified as being of most significance:
- Tree removals;
 - Tree protection requirements; and
 - Replacement planting

Tree removals

- 6.6 In order to implement the proposal, it will be necessary to remove a total of **18** trees, or groups, and **3** parts of groups. These removals are specified in the table below:

Tree Number	Species	Work Requirements	Reason(s) for works
G1	Ash Sycamore Cherry	Remove northern part of the group.	Direct conflict with proposed roads.
G2	Mixed species	Remove approximately half of the group on the eastern side.	Direct conflict with proposed roads.

Tree Number	Species	Work Requirements	Reason(s) for works
G3	Silver birch Goat willow Apple	Remove group of trees.	Direct conflict with proposed roads.
G6	Silver birch	Remove group of trees.	Direct conflict with proposed building.
G7	Sycamore Lawson cypress	Remove group of trees.	Direct conflict with proposed building.
G8	Ginkgo Norway maple Tulip tree	Remove group of trees.	Direct conflict with proposed stadium.
T9	Sycamore	Remove tree.	Direct conflict with proposed roads.
G10	Tree of heaven	Remove group of trees.	Direct conflict with proposed roads.
T11	Cherry	Remove tree.	Direct conflict with proposed building.
T12	Ash	Remove tree.	Direct conflict with proposed building.
T15	Goat willow	Remove tree.	Direct conflict with proposed roads.
T19	Ash	Remove tree.	Direct conflict with proposed building.
G22	Mixed species	Remove small northern section of the group.	Direct conflict with proposed road.
G23	Sycamore	Remove group of trees.	Direct conflict with proposed roads.
T24	Sycamore	Remove tree.	Direct conflict with proposed building.
G25	Sycamore	Remove group of trees.	Direct conflict with proposed roads.
G26	Leyland cypress	Remove group of trees.	Direct conflict with proposed building.
T27	Sycamore	Remove tree.	Direct conflict with proposed building.

Tree Number	Species	Work Requirements	Reason(s) for works
G28	Goat willow Sycamore	Remove group of trees.	Direct conflict with proposed building.
G31	Ash Field maple	Remove group of trees.	Direct conflict with proposed roads.
G32	Maple	Remove group of trees.	Direct conflict with proposed roads.

- 6.7 Tree work recommendations, irrespective of development, based on good arboricultural practice are listed in the Tree Management Recommendations column in the Tree Survey Schedule in **Appendix 1**.
- 6.8 Whilst the internal vegetation to be removed is numerous its loss to public amenity is considered to be negligible due to its overall condition, lack of visual presence and the ability to replace with an extensive scheme of high quality planting.

Tree Protection

- 6.9 Drawing JBA 22 175 TPP01 in **Appendix 2** shows the position and extent of tree protection that will be required during construction/demolition.
- 6.10 No specialised construction methods are required and all works are outside the precautionary RPAs of retained trees.
- 6.11 Tree protection will therefore consist of robust fencing secured to a solid framework as recommended within BS5837:2012.

Replacement planting

- 6.12 The development proposals should include a comprehensive landscape strategy which includes significant tree, shrub and hedgerow planting including feature trees and street trees.
- 6.13 A large number of new trees will be planted at key locations throughout the development. These new trees offer the opportunity to replace the low quality, tree population that currently occupies the site and ensures the continuation of visual and green amenity for future generations.
- 6.14 Tree species should be selected that provide a diverse and resilient palette that can thrive in challenging urban environments currently being impacted by climate change.

7 CONCLUSIONS AND RECOMMENDATIONS

- 7.1 The constraints that existing trees and vegetation pose to development have been assessed in accordance with BS5837: 2012 and through ongoing liaison between the design team and James Blake Associates.
- 7.2 This continuing involvement has culminated in a proposal that seeks to improve and enhance the tree scape of the site and the wider area whilst offering a sustainable approach to development.
- 7.3 All trees to be removed are of low quality or moderate quality, and can be replaced with an extensive scheme of high quality planting thereby minimising the impact of development on the local landscape.
- 7.4 A pre-commencement meeting and arboricultural supervision for key stages in the development, that have a potentially detrimental impact on trees, is recommended to ensure that the tree protection, and other methodology, is clearly understood and correctly implemented.
- 7.5 It is recommended that the proposal is approved subject to a planning condition requiring a detailed arboricultural method statement, an extensive scheme of new tree planting and successful tree protection methodology.

8 REFERENCES AND BIBLIOGRAPHY

- British Standards Institute (2010). BS3998:2010 Recommendations for Tree Work. BSI, London
- British Standards Institute (2012). BS5837:2012 Trees in relation to design, demolition and construction – Recommendations. BSI, London
- British Standards Institute (2014). BS8545:2014 Young trees: from nursery to independence in the landscape. BSI, London
- Lonsdale D (1999). Research for Amenity Trees No.7: Principles of Tree Hazard Assessment and Management. The Stationery Office, London
- Mattheck C and Breloer H (1994). Research for Amenity Trees No.4: The Body Language of Trees. The Stationery Office, London
- NHBC Standards (2007). Chapter 4.2 Building near trees. National House-Building Council
- NJUG Vol.4 (2007). Guidelines for the planning, installation and maintenance of utility apparatus in proximity to trees. The National Joint Utilities Group

APPENDIX 1: TREE SURVEY SCHEDULE

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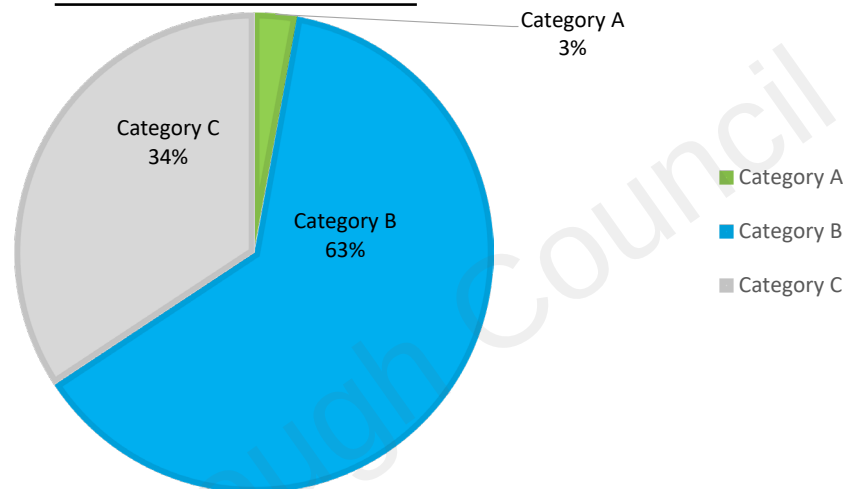
Tree Survey Schedule - Key

Life Stage	Description	Key	Description	BS Category	Description
NP	Newly planted	Stem Ø (mm) at 1.5m	Diameter of stem(s) in millimetres measured at 1.5m above ground level in accordance with BS 5837:2012.	A	Tree(s) of high quality with an estimated remaining life expectancy of at least 40 years.
Y: Young	An establishing tree that could be easily transplanted.	Stems	Trees are single-stemmed unless noted otherwise in schedule.	B	Tree(s) of moderate quality with an estimated remaining life expectancy of at least 20 years.
SM: Semi Mature	An established tree still to reach its ultimate height and spread and with considerable growth potential. Up to 25% of attainable age.	Height of (FSB)	Height of first significant branch above ground level.	C	Tree(s) of low quality and value with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm.
EM: Early Mature	A tree reaching its ultimate height and whose growth is slowing however it will still increase in stem diameter and crown spread. Up to 50% of attainable age.	Crown Spread	Crown spread at the four cardinal points, North, South, East and West.	U	Unsuitable for retention. 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.
M: Mature	A tree with limited potential for further significant increase in size although is likely to have a long safe useful life expectancy. Over 50% of attainable age.	Condition	Assessment of the physiological and structural condition of the tree observed at the time of surveying.	RPA radius (m) Radius of Root Protection Area (RPA) in metres based on relevant calculation in BS5837:2012 section 4.6.	
OM: Over Mature	A senescent or moribund tree with a limited useful life expectancy.	ERC (Years)	Estimated Remaining Contribution in Years (<10, 10+, 20+, 40+)	RPA Area (m2)	A layout design tool indicating the minimum area surrounding the tree that contains sufficient rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority. Size and shape based on calculations and constraints noted in BS5837:2012 section 4.6.
V: Veteran	A tree older than typical for its species and of significant ecological, cultural or aesthetic value.				

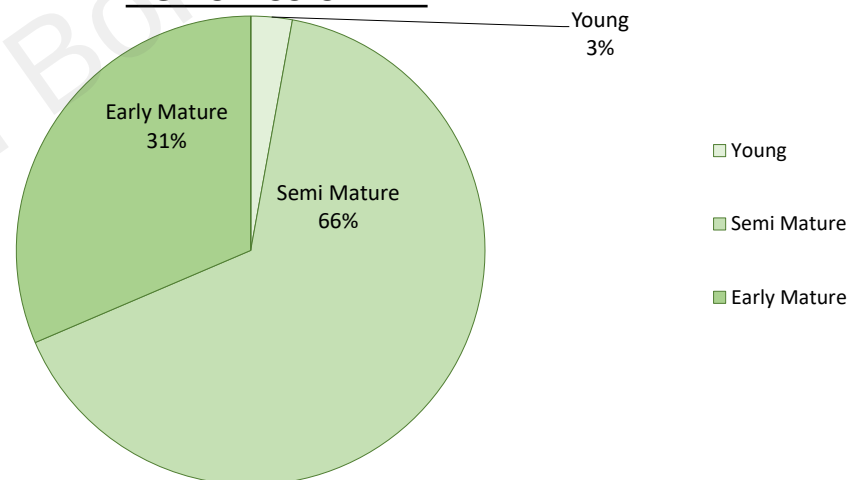
BS Category	Total
Category A	1
Category B	22
Category C	12
Category U	0
	35

Age Class	Total
Newly Planted	0
Young	1
Semi Mature	23
Early Mature	11
Mature	0
Over Mature	0
Veteran	0
Dead	0
	35

BS CATEGORY CHART



AGE CLASS CHART



Tree Survey Schedule

Site name: Gravesham, Northfleet.
Client: Schofield Lothian
Job Number: 22 175

Survey Date: 15/08/2022
Surveyor: Charles Hey

Tree No.	Tree Species	Life Stage	Stem Ø (mm) at 1.5m	Height (crown height) (m)	Height of (FSB)	Crown Spread				Condition	Comments	Tree Management Recommendations	ERC (Years)	BS Cat	RPA Radius (m)	RPA area (m2)
						N	E	S	W							
G1	Ash (<i>Fraxinus excelsior</i>) Sycamore (<i>Acer pseudoplatanus</i>) Cherry (<i>Prunus sp.</i>)	SM	400	14 (0)	-	5.0	5.0	5.0	5.0	Fair	Unable to access, all measurements estimated. Dense ivy to some trees. HV powerlines above. Railway to the south. Some dead trees.	Thorough inspection near buildings and railway. Remove dead trees.	20+	B2	4.8	72
G2	Sycamore Horse chestnut (<i>Aesculus hippocastanum</i>) Buddleia sp. Apple (<i>Malus sp.</i>) Hawthorn (<i>Crataegus monogyna</i>)	SM	300	8.0 (0)	-	5.0	5.0	5.0	5.0	Fair	Unable to access, all measurements estimated. HV powerlines above.	-	10+	C2	3.6	41
G3	Silver birch (<i>Betula pendula</i>) Goat willow (<i>Salix caprea</i>) Buddleia sp. Apple (<i>Malus sp.</i>)	SM	300	5.0 (0)	-	4.5	4.5	4.5	4.5	Fair	Unable to access, stem diameter estimated. Some trees growing through metal fences.	-	10+	C2	3.6	41
T4	Gum (<i>Eucalyptus sp.</i>)	EM	600	14 (1.0)	-	7.0	7.0	7.0	7.0	Good	Unable to access, stem diameter estimated.	-	20+	B1	7.2	163
T5	Leyland cypress (X <i>Cupressocyparis leylandii</i>)	EM	500	10 (0)	-	5.0	5.0	5.0	5.0	Good	Unable to access, all measurements estimated.	-	20+	B1	6.0	113
G6	Silver birch	EM	450	11 (1.0)	-	4.5	4.5	4.5	4.5	Good	Unable to access, all measurements estimated.	-	20+	B2	5.4	92
G7	Sycamore Lawson cypress (<i>Chamaecyparis lawsoniana</i>)	SM	200	7.0 (0)	-	2.5	2.5	2.5	2.5	Fair	Unable to access, all measurements estimated. Very close to a building.	-	10+	C2	2.4	18

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Tree No.	Tree Species	Life Stage	Stem Ø (mm) at 1.5m	Height (crown height) (m)	Height of (FSB)	Crown Spread				Condition	Comments	Tree Management Recommendations	ERC (Years)	BS Cat	RPA Radius (m)	RPA area (m2)
						N	E	S	W							
G8	Maidenhair tree (<i>Ginkgo biloba</i>) Red Norway maple (variety of <i>Acer platanoides</i>) Tulip (<i>Liriodendron tulipifera</i>)	SM	300	9.0 (1.0)	-	4.0	4.0	4.0	4.0	Fair	Unable to access, stem diameter estimated. 4 small trees in Shell forecourt. Some wounds to stems. Some minor deadwood. HV powerlines above.	-	20+	B2	3.6	41
T9	Sycamore	SM	300	12 (0)	-	5.0	5.0	5.0	5.0	Good	Unable to access, all measurements estimated.	-	10+	C1	3.6	41
G10	Tree of heaven (<i>Ailanthus altissima</i>)	SM	200 200 200 150 150 150	10 (1.0)	-	4.0	4.0	4.0	4.0	Good	Unable to access, all measurements estimated. Multi stem. Touching building.	Prune away from building.	20+	C2	5.2	83
T11	Cherry (<i>Prunus sp.</i>)	EM	400	10 (0)	-	5.0	5.0	5.0	5.0	Poor	Unable to access, all measurements estimated. Poor crown. Very dense ivy to the top of the tree. Deadwood.	Reinspect/possibly remove tree. Likely be a Category U tree if it could have been properly inspected.	10+	C1	4.8	72
T12	Ash	SM	200	8.0 (0)	-	2.0	2.0	2.0	2.0	Fair	Unable to access, stem diameter estimated. Very close to the road, has been hit by lorries.	Reinspect/remove if it is too close to the road for lorries to pass safely.	10+	C1	2.4	18
G13	Hawthorn Ash Goat willow Silver birch Elder (<i>Sambucus nigra</i>)	SM	400	12 (0)	-	5.0	5.0	5.0	5.0	Fair	Unable to access, all measurements estimated. Dense ivy to some trees. HV powerlines above.	-	20+	B2	4.8	72
G14	Goat willow	SM	300	8.0 (0)	-	4.0	4.0	4.0	4.0	Good	Unable to access, all measurements estimated. Appears to be goat willow, seen from a distance. Touching building. HV powerlines above.	Prune away from building.	20+	B2	3.6	41
T15	Goat willow	SM	300	8.0 (0)	-	4.0	4.0	4.0	4.0	Good	Unable to access, all measurements estimated. HV powerlines above.	-	20+	B1	3.6	41
G16	White willow (<i>Salix alba</i>)	SM	350	14 (0)	-	6.0	6.0	6.0	6.0	Good	Unable to access, all measurements estimated.	-	20+	B2	4.2	55

Tree No.	Tree Species	Life Stage	Stem Ø (mm) at 1.5m	Height (crown height) (m)	Height of (FSB)	Crown Spread				Condition	Comments	Tree Management Recommendations	ERC (Years)	BS Cat	RPA Radius (m)	RPA area (m ²)
						N	E	S	W							
G17	White willow	SM	500	14 (0)	-	4.0	4.0	4.0	4.0	Good	Unable to access, stem diameter estimated. One tree within the group has minor deadwood at the tips.	-	20+	B2	6.0	113
G18	Field maple (<i>Acer campestre</i>) Leyland cypress	SM	350	11 (0)	-	4.5	4.5	4.5	4.5	Fair	Unable to access, stem diameter estimated. One dead field maple.	Remove dead tree.	10+	C2	4.2	55
T19	Ash	EM	500	12 (1.5)	-	6.0	6.0	6.0	6.0	Fair	Unable to access, stem diameter estimated. Touching building. Slightly sparse crown. Wasp nest at the base.	Prune away from building.	20+	B1	6.0	113
T20	Whitebeam (<i>Sorbus aria</i>)	SM	250	10 (1.0)	-	4.0	4.0	4.0	4.0	Good	Unable to access, stem diameter estimated. Touching building.	Prune away from building.	20+	B1	3.0	28
G21	Ash Sycamore	EM	500	18 (0)	-	7.0	7.0	7.0	7.0	Good	Unable to access, all measurements estimated. Group contains larger trees.	-	40+	B2	6.0	113
G22	Sycamore Hawthorn Hornbeam (<i>Carpinus betulus</i>) <i>Buddleia sp.</i>	EM	300	10 (0)	-	4.0	4.0	4.0	4.0	Fair	Unable to access, stem diameter estimated. One dead tree. Ivy to 10+m on some trees.	Crown lift over the road. Remove dead tree.	20+	C2	3.6	41
G23	Sycamore	SM	250	10 (0)	-	3.0	3.0	3.0	3.0	Good	Unable to access, all measurements estimated. Appear to be sycamore from a distance. Appear to be very close to buildings.	-	10+	C2	3.0	28
T24	Sycamore	SM	150	7.0 (0)	-	2.0	2.0	2.0	2.0	Good	-	-	10+	C1	1.8	10
G25	Sycamore	EM	450	15 (0)	-	6.0	6.0	6.0	6.0	Good	Unable to access, stem diameter estimated.	-	20+	B2	5.4	92
G26	Leyland cypress	EM	400	18 (0)	-	6.0	6.0	6.0	6.0	Good	Unable to access, all measurements estimated.	-	20+	B2	4.8	72

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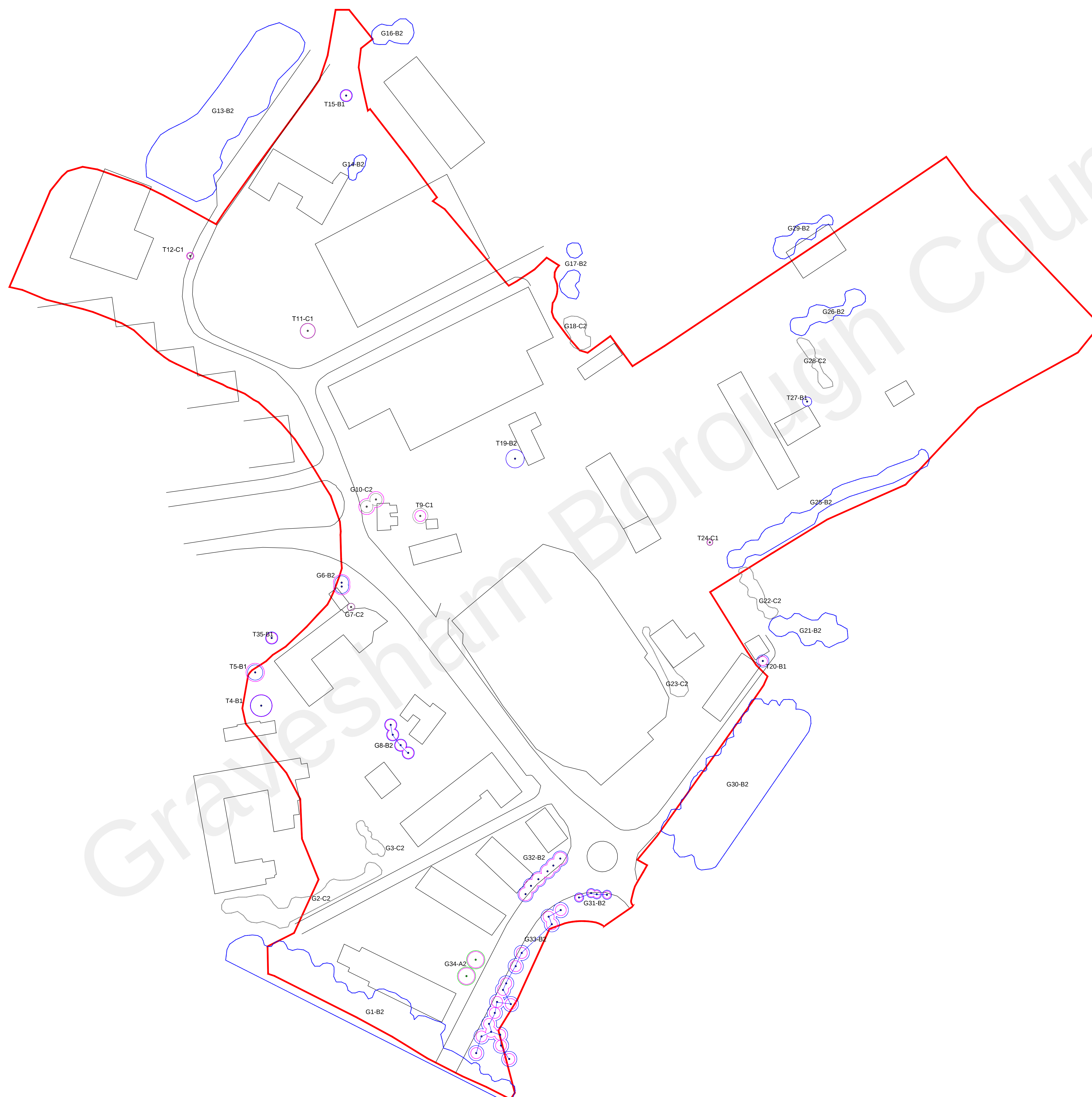
Registration no. 08169866 VAT no. 512 4127 91

Tree No.	Tree Species	Life Stage	Stem Ø (mm) at 1.5m	Height (crown height) (m)	Height of (FSB)	Crown Spread				Condition	Comments	Tree Management Recommendations	ERC (Years)	BS Cat	RPA Radius (m)	RPA area (m2)
						N	E	S	W							
T27	Sycamore	SM	250	10 (0)	-	3.0	3.0	3.0	3.0	Good	Unable to access, all measurements estimated.	-	20+	B1	3.0	28
G28	<i>Buddleia sp.</i> Goat willow Sycamore	Y	150	5.0 (0)	-	2.0	2.0	2.0	2.0	Good	Unable to access, all measurements estimated. Possibly under threshold size.	-	10+	C2	1.8	10
G29	<i>Buddleia sp.</i> Goat willow Sycamore	SM	300	12 (0)	-	5.0	5.0	5.0	5.0	Good	Unable to access, all measurements estimated.	-	20+	B2	3.6	41
G30	<i>Buddleia sp.</i> Elm (<i>Ulmus sp.</i>) Black locust (<i>Robinia pseudoacacia</i>) chestnut Sycamore	EM	500	18 (0)	-	5.0	5.0	5.0	5.0	Good	Unable to access, all measurements estimated. Some dead trees. Ivy to the top of some trees. Over footpath and road. One tall horse chestnut in poor condition.	Sever ivy and thoroughly inspect. Crown lift over the road and footpath.	20+	B2	6.0	113
G31	Ash Field maple	SM	200	7.0 (0)	-	3.0	3.0	3.0	3.0	Good	-	Crown lift over the footpath.	20+	B2	2.4	18
G32	Maple (<i>Acer sp.</i>)	SM	350	11 (0)	-	5.0	5.0	5.0	5.0	Good	Unable to access, stem diameter estimated.	Crown lift over the footpath.	20+	B2	4.2	55
G33	Maple (<i>Acer sp.</i>) Lime (<i>Tilia sp.</i>) Turkish hazel (<i>Corylus colurna</i>) Scots pine (<i>Pinus sylvestris</i>)	SM	300	10 (1.0)	-	5.0	5.0	5.0	5.0	Good	-	Crown lift over the footpath.	20+	B2	3.6	41
G34	London plane (<i>Platanus x hispanica</i>)	EM	450	12 (2.0)	-	6.0	6.0	6.0	6.0	Good	Unable to access, all measurements estimated.	-	40+	A2	5.4	92
T35	Pissard plum (<i>Prunus cerasifera</i>)	SM	300	8.0 (0)	-	4.0	4.0	4.0	4.0	Good	Unable to access, all measurements estimated.	-	20+	B1	5.4	92

APPENDIX 2: JBA DRAWINGS

Gravesham Borough Council

	Green - Category A tree of high quality and value.
	Blue - Category B tree of moderate quality and value.
	Grey - Category C tree of low quality and value.
	Blue - Cat B Groups/hedges of moderate quality and value.
	Grey - Cat C Groups/hedges of low quality and value.
	Root Protection Area as calculated in accordance with BS 5837:2012
	Site Boundary.



GENERAL NOTE:
-ALL DIMENSIONS
-DO NOT SCALE
-ALL DIMENSIONS
(C) JAMES BLACK

REV	DATE	DETAILS	
CLIENT	Sofistikation		INVO. TITLE Two Creatives Rtr
SITE Northwest Highlands			
PURPOSE OF ISSUE			
ISSUED BY	CHECKED BY	AUTH'D BY	SCALE
CR	JSA	JSA	1:2500(AN)
DATE		DWG NO.	
August 2002		JSA-22 175 T09'91	

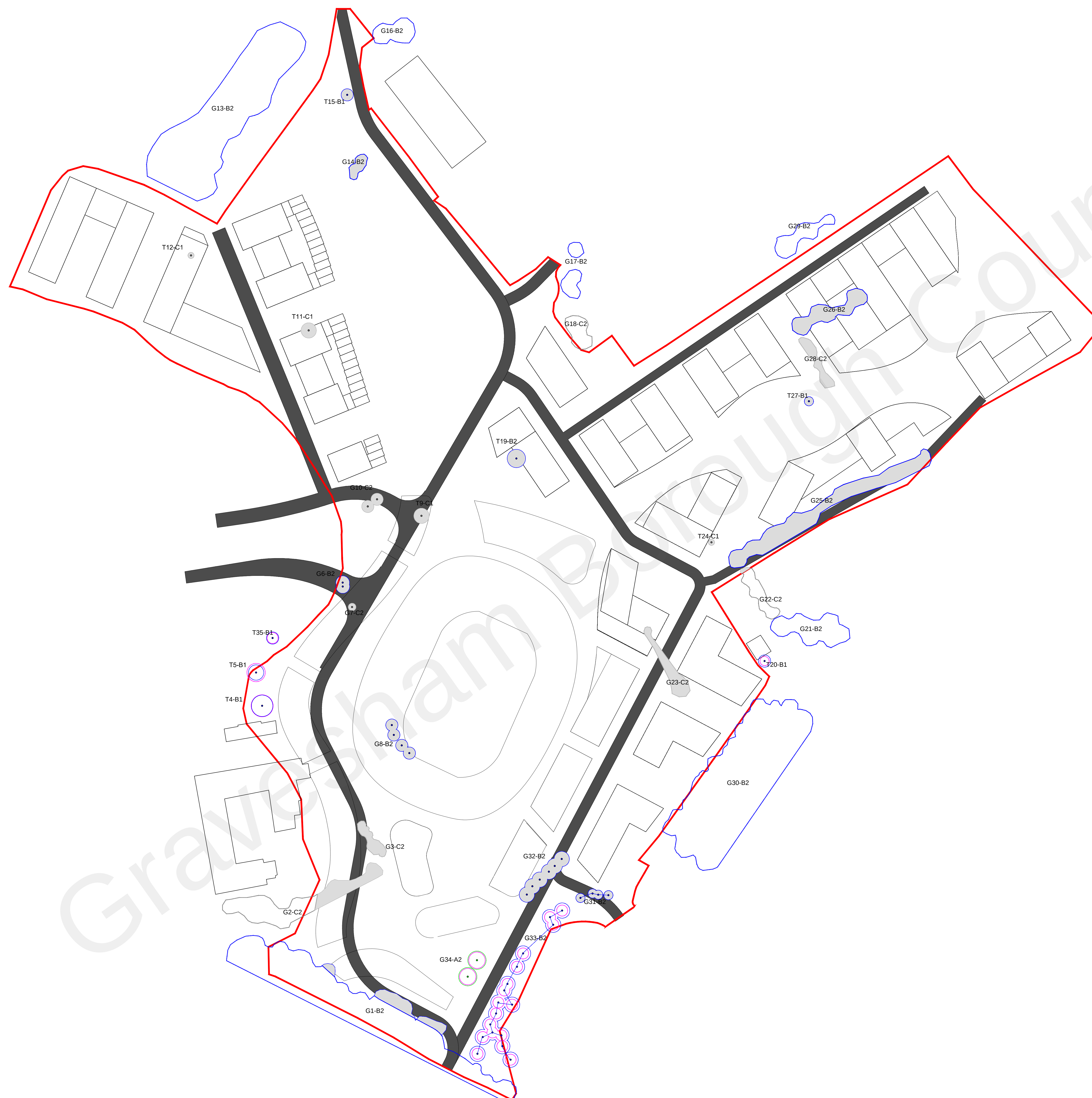
JAMES BLAKE

ARCHITECTS

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jamesblake@jamesblake.com.au www.jb-jamesblake.com

KEY

- | | |
|---|--|
|  | Green - Category A tree of high quality and value. |
|  | Blue - Category B tree of moderate quality and value. |
|  | Grey - Category C tree of low quality and value. |
|  | Blue - Cat B Groups/hedges of moderate quality and value. |
|  | Grey - Cat C Groups/hedges of low quality and value. |
|  | Shaded grey - Trees and groups to be removed. |
|  | Root Protection Area as calculated in accordance with BS 5837:2012 |
|  | Site Boundary. |



GENERAL NOTES

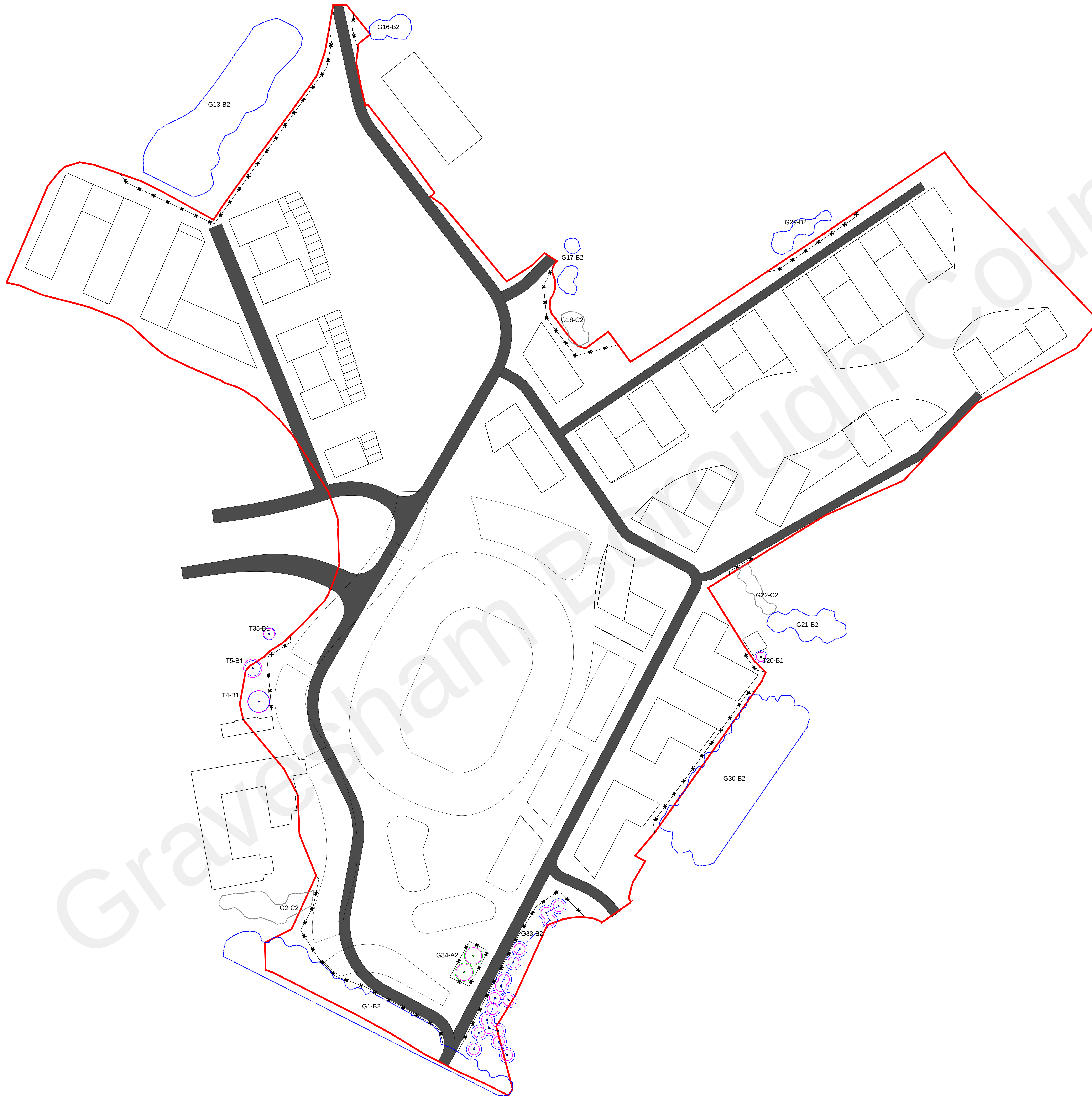
- ALL DIMENSIONS IN MILLIMETRES
- DO NOT SCALE OFF THIS DRAWING
- ALL DIMENSIONS TO BE CHECKED ON SITE

(C)JAMES BLAKE ASSOCIATES LTD 2022

REV	REV	REV	REV
CLIENT	SING. TITLE		
Sofistikation		Two Terminal Plan	
SITE			
NorthEast Karlsruhe			
PURPOSE OF ISSUE			
DRG BY	CHECKED	AUTH'D	SCALE
CH	BSA	BSA	1:2500(AS)
DATE		DWG NO.	
JUN 2001		JUN 21 175 789(1)	

JAMES BLAKE ASSOCIATES

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 jblake@jblakeassoc.com www.jblakeassoc.com
 JAMES BLAKE ASSOCIATES, INC. 4200 COUNTRY TRAIL, SUITE 500, FORT LAUDERDALE, FL 33309



KEY

- Green - Category A tree of high quality and value.
- Blue - Category B tree of moderate quality and value.
- Grey - Category C tree of low quality and value.
- Blue - Cat B Groups/hedges of moderate quality and value.
- Grey - Cat C Groups/hedges of low quality and value.
- Root Protection Area as calculated in accordance with BS 5837:2012
- Approximate line of protective fencing to be erected in accordance with BS 5837 and insert, to be maintained throughout demolition and construction works.
- Site Boundary.



GENERAL NOTES
ALL DIMENSIONS IN MILLIMETRES
DO NOT SCALE OFF THIS DRAWING
ALL DIMENSIONS TO BE CHECKED ON SITE
JAMES BLAKE ASSOCIATES LTD 2022

REV	DATE	BY	CHKD	DESC	DWG TITLE
1	22/04/2022	JB	JB	Issue for construction	The Project Site
PURPOSE OF ISSUE					
DWG BY	CHECKED	AUTHOR	SCALE	DATE	DWG NO.
JB	JB	JB	1:2000	April 2022	JB 21/01/1991
REV					
JAMES BLAKE ASSOCIATES LTD 2022					
LANDSCAPE ARCHITECTURE • ARBORICULTURE • ECOLOGY					