

## LONGWATER AVENUE STREET LIGHTING, WOKINGHAM BOROUGH COUNCIL Tree Survey and Arboricultural Impact Assessment

1083-DO-001 P00

January 2026

Green Park (Reading) No.1 LLP

**PLACE**  
DESIGN

16 West Barnes Lane, Raynes Park, London SW20 0BU  
T: 020 8944 1940 E: [info@placedesign.uk](mailto:info@placedesign.uk)  
[www.placedesign.uk](http://www.placedesign.uk)

# Contents

Instruction	1.0
Qualifications & Caveats	2.0
Documents Supplied & Used in this Report	3.0
Introduction	4.0
Summary	5.0
Appendices	5.0
Appendix 1	Tree Constraints Plan drawing
Appendix 1A	In drawing text from the Tree Constraints Plan drawing
Appendix 2	Tree Survey Schedule
Appendix 3	Arboricultural Impact Assessment and Tree Protection Plan drawing
Appendix 3A	In drawing text from the Arboricultural Impact Assessment and Tree Protection Plan drawing
Appendix 4	Tree Protection Barrier Sign
Appendix 5	References

## 1.0 Instruction

1.1 MJC Tree Services Limited have been instructed by Mr G. Hopgood, acting on behalf of Place Design, as follows:

***"Re: Development Site Tree Survey & Reports in Accordance With BS5837:2012 at Longwater Avenue (lighting proposal), Green Park, Reading.***

*To visit the above site and carry out the following works:*

- To carry out a ground level and visual survey of trees close to the route of the proposed street lights and their underground power supply in accordance with British Standard 5837:2012 'Trees in Relation to Design, demolition and Construction – Recommendations' (BS5837:2012):*
- To draw up a Tree Constraints Plan and Tree Survey Schedule in respect of trees in Wokingham Borough:*
- To discuss the lighting proposals as necessary and remotely (via telephone, email, Teams/Zoom meetings) with the design team in the light of the identified tree constraints with a view to arriving at a proposed layout and design that is acceptable in arboricultural planning terms:*
- To draw up an Arboricultural Impact Assessment in respect of trees in Wokingham Borough for the lighting proposals, using the tree constraints information for reference and the supplied:*
- To draw up a Tree Protection Plan in respect of trees in Wokingham Borough for the lighting proposals that will provide adequate protection to the retained trees on site. To discuss the content of the Statement as necessary and remotely (via telephone, email, Teams/Zoom meetings) with the design team and/or construction contractors to arrive at a workable solution to the tree protection requirements of the site:*
- To combine these elements into a single report and to supply the completed report in an electronic format as a .pdf file, with the drawings used in the report also available as .dwg (AutoCAD) files."*

## 2.0 Qualifications and Caveats

2.1 The author of this report is a:

- Fellow of the Institute of Chartered Foresters:
- Chartered Arboriculturist:
- Chartered Surveyor:
- Registered Consultant of the Institute of Chartered Foresters.
- Professional Member of the Arboricultural Association:

He also holds the Royal Forestry Society's Professional Diploma in Arboriculture and has over 31 years' experience in UK arboriculture. A full CV and CPD record are available as a .pdf file upon request to the above office.

2.2 The tree survey was preliminary in nature and was carried out from ground level using visual techniques only. No trees were climbed or internally investigated. Should a more detailed inspection be required then this will be recommended in this report.

- 2.3 Trees are living organisms whose health and condition can change rapidly. The health, condition and safety of trees in high use areas should be checked on a regular basis, preferably at least once every eighteen months. The conclusions and recommendations in this report are based only on the observations made by the author during the tree survey.
- 2.4 This report is for the sole use of the above-named client and refers only to those trees identified within. It may not be reproduced in whole or in part, or sold, lent, hired out or divulged to any third party not directly involved in the subject matter, without our consent. Use by any other person(s) in attempting to apply its contents for any purpose other than stated in this report renders the report invalid for that purpose.
- 2.5 This report is supplied subject to our terms and conditions in force at the time of our instruction by the client.

### **3.0 Documents Supplied & Used in this Report**

- 3.1 The following documents have been supplied and are used in this report:
  - Place Design drawing ref. OP40251LSS11394 Longwater Ave.

### **4.0 Introduction**

- 4.1 This report is presented largely in the form of annotated drawings with a tree survey schedule that are intended to be read in the sequence they are presented in the Appendices section of this report, cross referencing as instructed in the in-drawing texts.
  - 4.1.1 The reason for this graphical form of presentation is to make its interpretation easier by the greater design team and the demolition/construction team. These teams work in a graphical environment, and if the arboricultural reports involved in the design and development processes are to be easily interpreted by these teams they must also be presented in a graphical format. To do otherwise would create an unhelpful disconnect between the arboricultural information and the design and development teams. It also allows the report and the proposed development to be assessed on site by officers of the Local Planning Authority (LPA) whilst referencing a small number of single page documents, thereby avoiding the need to keep flicking backwards and forwards through a written report whilst holding open a large site plan.
  - 4.1.2 The layout and order of the drawings and schedule are intended to illustrate a logical progression from the existing site (Tree Survey Plan drawing and Tree Survey Schedule – Appendix 1 and Appendix 2), through the proposed development, to the specific tree protection measures required (Arboricultural Impact Assessment and Tree Protection Plan drawing – Appendix 3).

4.1.3 The in drawing text is designed to be large enough to be easily read when the drawing is viewed or printed off at the correct scale. If it is not possible to view or print off these drawings at the correct scale, it may not be possible to read the in drawing text. In order to address this possibility, the in drawing text for each of the three drawings is reproduced as a separate block of text immediately following the relevant drawing, and these form Appendices 1A and 3A.

4.2 The tree works recommended on the Tree Survey Schedule are based on the current context of the site, **they are not tree works or tree felling required as a result of any proposed development**. This is to comply with section 4.4.1.1 of BS5837:2012 that states "...the tree survey should be completed and made available to designers prior to and/or independently of any specific proposals for the development". **Any and all tree works and tree felling required and proposed as a result of the proposed development are detailed in the Arboricultural Impact Assessment drawing.**

## 5.0 Summary

4.1 It is proposed to carry out maintenance/upgrade works to the existing crossing, and to install lighting columns alongside the pedestrian footpath parallel to the highway, as illustrated in the Arboricultural Impact Assessment and Tree Protection Plan drawing forming Appendix 3 of this report.

4.2 There are no substantive arboricultural reasons for the Local Planning Authority (LPA) to object to the proposed development, providing the tree protection measures detailed in the Arboricultural Impact Assessment and Tree Protection Plan forming Appendix 3 of this report are carried out. In order to ensure that these measures take place, it is likely that, if the LPA grant planning permission for the proposed development, they will make that permission subject to an appropriately worded planning condition requiring the following:

4.2.1 Compliance with the Tree Protection Plan set out in drawing no. MJC-25-0187A-02 rev:0.

4.3 The use of this condition is reasonable, necessary and commonplace. Therefore, the required use of this condition should not form a legitimate reason for the LPA to object to the proposed development.

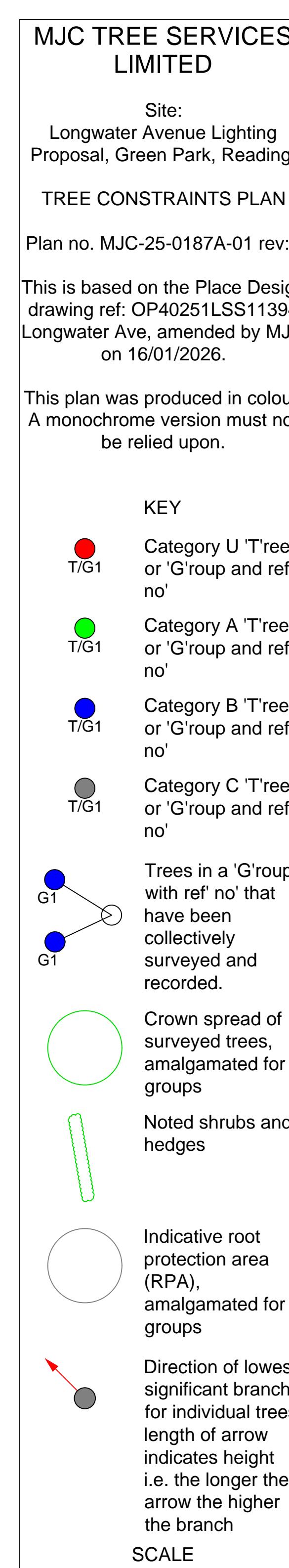
**Mark Carter**

FICFor. MRICS M.Arbor.A Dip.Arb(RFS)

© 2026 MJC Tree Services Limited

## **5.0 Appendices**

**Appendix 1      Tree Constraints Plan drawing**



**2.4.2** The RPA's represent the surface area of the **minimum** soil rooting volume required by the tree if it is to remain viable. The actual root spread of the tree will be much larger than the RPA, but BS5837:2012 implicitly accepts that a tree will tolerate a degree of root loss, in much the same way as a tree would tolerate a degree of crown pruning. The existing soil levels and structure in the RPA of retained trees must be protected from the proposed development, and they should not be excavated, graded, compacted or have underground drains and/or services routed through them.

**2.4.3** Section 4.6.2 of BS5837:2012 states 'Where pre-existing site conditions or other factors indicate that rooting has occurred asymmetrically, a polygon of equivalent area should be produced. Modifications to the shape of the RPA should reflect a soundly based arboricultural assessment of likely root distribution.'

**2.4.4** The surveyed trees had clearly co-existed with the surrounding topography for many years and it is reasonable to conclude that they have adapted fully to the surrounding soil rooting conditions, including the nearby river and the tall bank of made up ground that the road is located on. Therefore, it was not considered likely that the pre-existing site conditions within the RPA of the surveyed trees had not caused any significant asymmetric rooting, and no modification of the RPA has been made.

**2.5** The areas of potentially significant shade constraint for the surveyed trees have not been illustrated in this drawing as shade is not a relevant constraint to the type of proposed development works.

**2.6** The online mapping system provided by the Local Planning Authority (LPA) was consulted on the 9<sup>th</sup> January 2026 in order to check on the protected status of the surveyed trees. This check indicated the following.

**2.6.1** Tree nos. T1, T2, T3 and T4 are protected by Tree Preservation Order no. TPO-0239-1983, therefore no works may be carried out on these trees without first obtaining written permission from the LPA, unless those works fall under a very limited number of exemptions written into the regulations.

**2.6.2** The site is not in a Conservation Area.

**2.7** The online Multi Agency Graphical Information for the Countryside (MAGIC) mapping system provided by DEFRA was consulted on the 9<sup>th</sup> January 2026 in order to check whether any ancient woodlands were present on or close to the site. This check indicated that no ancient woodlands were present on or close to the site.

**2.8** The tree survey has not identified any ancient and/or veteran trees on or close to the site. However, tree nos. T1 and T2 contain several features associated with veteran trees and whilst they have not achieved the generally accepted size criteria to qualify as veteran trees they should be considered locally notable individuals and potential veteran trees of the future.

**2.8.1** The definitions of an ancient and/or veteran tree used in the tree survey are those set down in the current National Planning Policy Framework, current National Planning Guidance 'Ancient woodland, ancient trees and veteran trees: advice for making planning decisions' and 'Ancient and other veteran trees: further guidance on management' published by the Ancient Tree Forum & Woodland Trust in 2013.

**2.8.2** Even if these trees were veterans, this would not create an additional constraint on the proposed development works. The proposed development works consist of maintenance and minor amendments to the existing highway infrastructure as opposed to a completely new construction, and they will not introduce any additional detrimental impacts to these trees.

**2.9** The trees on site seem to be located in a public open space and therefore are not protected by the Forestry Act 1967.

**2.10** Various animal species that use trees and some of their habitats that can be found in trees, including Badgers, Bats, Great Crested Newts, and many bird species, are protected under the Wildlife and Countryside Act 1981 and the Conservation of Habitats and Species Regulations 2010. A qualified ecologist should be engaged to check if these species and or habitats are present in any of the surveyed trees, and their advice followed.

### 3.0 The Site

**3.1** The site comprised an existing highway and crossing, with a group of trees located to the north east on a lower level of ground between the highway and the river.

**3.2** Surrounding land use was entirely highway infrastructure, industrial and business development, and allocated business park land.

**3.3** An online check with the British Geological Survey's Geology of Britain Viewer was made on 9<sup>th</sup> January 2026.

**3.3.1** This check indicated that the soils on site were likely to be made up of the following:

#### 3.3.1.1 Bedrock Geology:

**3.3.1.1.1** London Clay Formation-Clay, silt and sand. These sedimentary rocks are marine in origin. They are detrital and comprise coarse- to fine-grained slurries of debris from the continental shelf flowing into a deep-sea environment, forming distinctively graded beds.

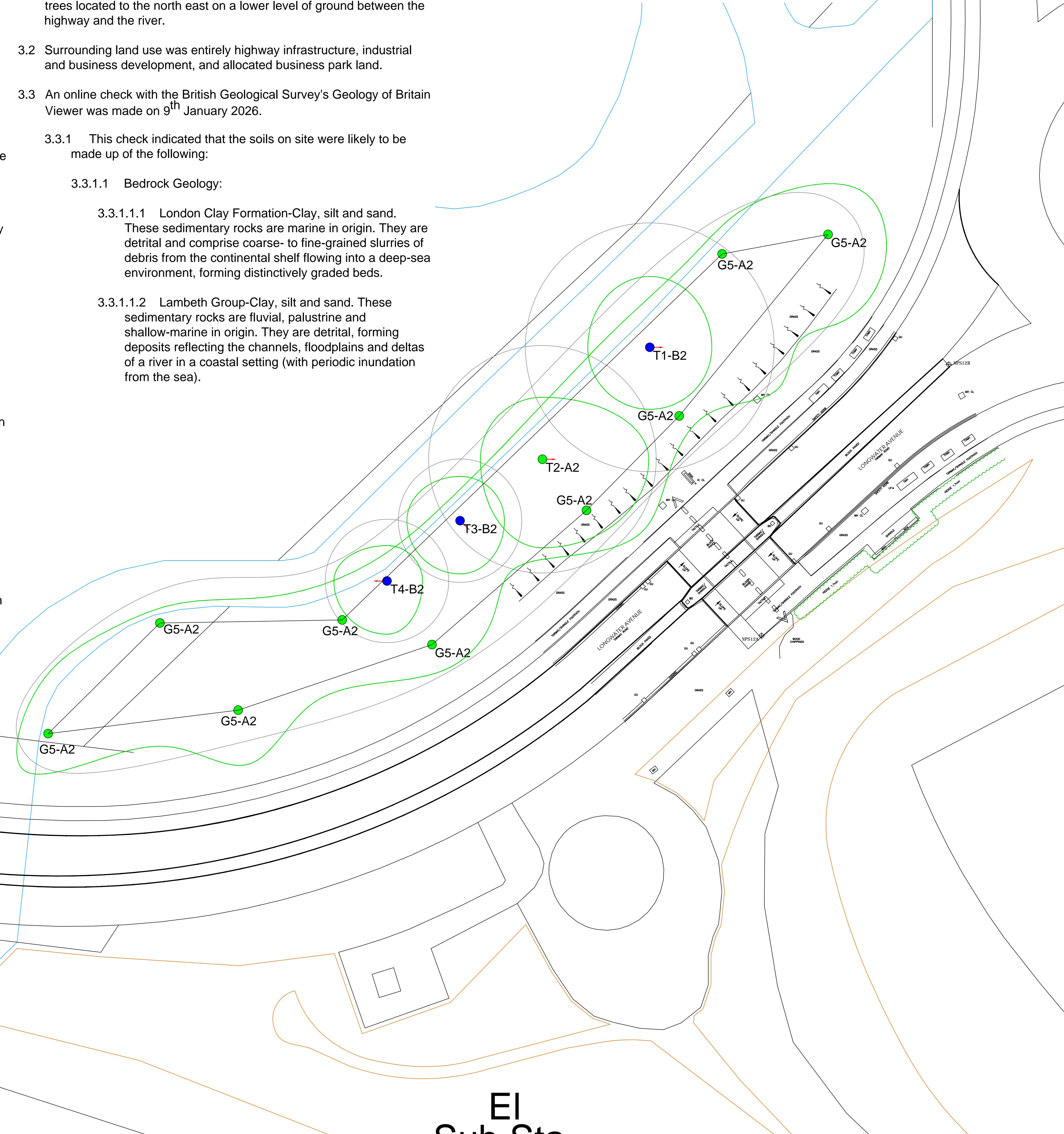
**3.3.1.1.2** Lambeth Group-Clay, silt and sand. These sedimentary rocks are fluvial, palustrine and shallow-marine in origin. They are detrital, forming deposits reflecting the channels, floodplains and deltas of a river in a coastal setting (with periodic inundation from the sea).

### 3.3.1.2 Superficial deposits:

**3.3.1.2.1** River Terrace Deposits, 1-Sand and gravel. These sedimentary deposits are fluvial in origin. They are detrital, ranging from coarse- to fine-grained and form beds and lenses of deposits reflecting the channels, floodplains and levees of a river or estuary (if in a coastal setting).

**3.3.1.2.2** Beenham Grange Gravel Member-Sand and gravel. These sedimentary deposits are fluvial in origin. They are detrital, ranging from coarse- to fine-grained and form beds and lenses of deposits reflecting the channels, floodplains and levees of a river or estuary (if in a coastal setting).

**3.3.2** These types of soils are likely to be subject to significant and persistent volumetric changes in response to moisture content. Therefore, there could be a risk of tree root related subsidence on this site, and this risk must be considered and assessed by a suitably qualified and experienced engineer, and accommodated in any proposed development of the site.



## Appendix 1A      In drawing text from the Tree Constraints Plan drawing

### Tree Constraints Plan Notes

#### 1.0    *Introduction*

- 1.1    *The tree survey was carried out on the 7<sup>th</sup> January 2026.*
- 1.2    *The survey was carried out in accordance with British Standard 5837:2012 'Trees in relation to design, demolition and construction - Recommendations' (BS5837:2012).*
- 1.3    *The tree survey was preliminary in nature and was carried out from ground level using visual techniques only. No trees were climbed or internally investigated. Should a more detailed inspection be required then this will be highlighted in the recommendations section of the Tree Survey Schedule.*
- 1.4    *The tree works recommended on the enclosed Tree Survey Schedule are based on the current context of the site, **they are not tree works or tree felling required as a result of any proposed development**. This is to comply with section 4.4.1.1 of BS5837:2012 that states 'the tree survey should be completed and made available to designers prior to and/or independently of any specific proposals for the development'. **Any and all tree works and tree felling required and proposed as a result of the proposed development will be detailed in the Arboricultural Impact Assessment drawing.***

#### 2.0    *The Trees*

- 2.1    *The details of the individual tree survey are provided in the following Tree Survey Schedule.*

2.1.1 *Individual trees are pre-fixed with the letter 'T'.*

2.1.2 *Trees that form cohesive groups are recorded collectively and are pre-fixed with the letter 'G'.*

- 2.2    *The tree constraints have been calculated and are illustrated in accordance with BS5837:2012, see the key for details.*

#### 2.4    *Root Protection Areas (RPA)*

2.4.1 *The indicative and circular RPA of the surveyed trees are based on the trunk diameters recorded in the Tree Survey Schedule, and have been derived using the calculation provided at section 4.6.1 of BS5837:2012.*

2.4.2.1 For individual trees, the indicative RPA is illustrated by a grey circle in this drawing.

2.4.2.2 For groups of trees, the outermost extent of the RPA of the individual trees making up the group are illustrated in this drawing as an amalgamated polygon in grey outline. In this way, the group is illustrated with a single and amalgamated RPA, but this is based on the overlapping and circular RPA for the individual trees making up the group or woodland.

2.4.2 The RPA's represent the surface area of the **minimum** soil rooting volume required by the tree if it is to remain viable. The actual root spread of the tree will be much larger than the RPA, but BS5837:2012 implicitly accepts that a tree will tolerate a degree of root loss, in much the same way as a tree would tolerate a degree of crown pruning. The existing soil levels and structure in the RPA of retained trees must be protected from the proposed development, and they should not be excavated, graded, compacted or have underground drains and/or services routed through them.

2.4.3 Section 4.6.2 of BS5837:2012 states 'Where pre-existing site conditions or other factors indicate that rooting has occurred asymmetrically, a polygon of equivalent area should be produced. Modifications to the shape of the RPA should reflect a soundly based arboricultural assessment of likely root distribution.'

2.4.4 The surveyed trees had clearly co-existed with the surrounding topography for many years and it is reasonable to conclude that they have adapted fully to the surrounding soil rooting conditions, including the nearby river and the tall bank of made up ground that the road is located on. Therefore, it was not considered likely that the pre-existing site conditions within the RPA of the surveyed trees had not caused any significant asymmetric rooting, and no modification of the RPA has been made.

2.5 The areas of potentially significant shade constraint for the surveyed trees have not been illustrated in this drawing as shade is not a relevant constraint to the type of proposed development works.

2.6 The online mapping system provided by the Local Planning Authority (LPA) was consulted on the 9<sup>th</sup> January 2026 in order to check on the protected status of the surveyed trees. This check indicated the following.

2.6.1 Tree nos. T1, T2, T3 and T4 are protected by Tree Preservation Order no. TPO-0239-1983, therefore no works may be carried out on these trees without first obtaining written permission from the LPA, unless those works fall under a very limited number of exemptions written into the regulations.

2.6.2 The site is not in a Conservation Area.

2.7 *The online Multi Agency Graphical Information for the Countryside (MAGIC) mapping system provided by DEFRA was consulted on the 9<sup>th</sup> January 2026 in order to check whether any ancient woodlands were present on or close to the site. This check indicated that no ancient woodlands were present on or close to the site.*

2.8 *The tree survey has not identified any ancient and/or veteran trees on or close to the site. However, tree nos. T1 and T2 contain several features associated with veteran trees and whilst they have not achieved the generally accepted size criteria to qualify as veteran trees they should be considered locally notable individuals and potential veteran trees of the future.*

2.8.1 *The definitions of an ancient and/or veteran tree used in the tree survey are those set down in the current National Planning Policy Framework, current National Planning Guidance 'Ancient woodland, ancient trees and veteran trees: advice for making planning decisions' and 'Ancient and other veteran trees: further guidance on management' published by the Ancient Tree Forum & Woodland Trust in 2013.*

2.8.2 *Even if these trees were veterans, this would not create an additional constraint on the proposed development works. The proposed development works consist of maintenance and minor amendments to the existing highway infrastructure as opposed to a completely new construction, and they will not introduce any additional detrimental impacts to these trees.*

2.9 *The trees on site seem to be located in a public open space and therefore are not protected by the Forestry Act 1967.*

2.10 *Various animal species that use trees and some of their habitats that can be found in trees, including Badgers, Bats, Great Crested Newts, and many bird species, are protected under the Wildlife and Countryside Act 1981 and the Conservation of Habitats and Species Regulations 2010. A qualified ecologist should be engaged to check if these species and or habitats are present in any of the surveyed trees, and their advice followed.*

3.0 *The Site*

3.1 *The site comprised an existing highway and crossing, with a group of trees located to the north east on a lower level of ground between the highway and the river.*

3.2 *Surrounding land use was entirely highway infrastructure, industrial and business development, and allocated business park land.*

3.3 *An online check with the British Geological Survey's Geology of Britain Viewer was made on 9<sup>th</sup> January 2026.*

3.3.1 *This check indicated that the soils on site were likely to be made up of the following:*

3.3.1.1 *Bedrock Geology:*

3.3.1.1.1 *London Clay Formation-Clay, silt and sand. These sedimentary rocks are marine in origin. They are detrital and comprise coarse- to fine-grained slurries of debris from the continental shelf flowing into a deep-sea environment, forming distinctively graded beds.*

3.3.1.1.2 *Lambeth Group-Clay, silt and sand. These sedimentary rocks are fluvial, palustrine and shallow-marine in origin. They are detrital, forming deposits reflecting the channels, floodplains and deltas of a river in a coastal setting (with periodic inundation from the sea).*

3.3.1.2 *Superficial deposits:*

3.3.1.2.1 *River Terrace Deposits, 1-Sand and gravel. These sedimentary deposits are fluvial in origin. They are detrital, ranging from coarse- to fine-grained and form beds and lenses of deposits reflecting the channels, floodplains and levees of a river or estuary (if in a coastal setting).*

3.3.1.2.2 *Beenham Grange Gravel Member-Sand and gravel. These sedimentary deposits are fluvial in origin. They are detrital, ranging from coarse- to fine-grained and form beds and lenses of deposits reflecting the channels, floodplains and levees of a river or estuary (if in a coastal setting).*

3.3.2 *These types of soils are likely to be subject to significant and persistent volumetric changes in response to moisture content. Therefore, there could be a risk of tree root related subsidence on this site, and this risk must be considered and assessed by a suitably qualified and experienced engineer, and accommodated in any proposed development of the site.*

## **Appendix 2**

## **Tree Survey Schedule**

## TREE SURVEY SCHEDULE

### Key:

- **Ht** = Height estimated in metres.
- **Stem Diam** = Stem or trunk diameter, measured and calculated in accordance with Annex C and section 4.6 of BS5837:2012.
  - **oi** = Measurement taken over ivy, which is likely to produce an exaggerated figure;
  - **cmb** = combined stem diameter value for multi stem trees.
- **Crown Spread** = Crown spread to the cardinal points in metres, measured by pacing.
- **1<sup>st</sup> significant branch ht' & direction** = First significant branch height in metres and direction of growth e.g. N = North.
- **Crown base ht'** = Minimum distance between surrounding ground level at the trunk base and the base of the main crown, estimated by eye in metres.
- **Life stage** is chosen from the four following categories;
  - Y = Young;
  - SM = Semi mature;
  - EM = Early mature;
  - M = Mature;
  - OM = Over Mature.
- **General observations** = Particularly of structural and/or physiological condition, significant features and defects, and the effect these may have on the health, stability and safe retention of the tree.
- **Preliminary management recommendations** = any significant works identified as necessary in the current context, irrespective of any proposed development of the site.
- **Rem' cont'** = an estimate, in years, of the remaining period over which the tree can be retained at an acceptable level of risk whilst still providing significant amenity benefits with no significant management intervention.
- **Reten' Cat'** = Desirability for retention category. Refers to BS5837:2012 which categorises trees on development sites into one of four categories – A, B, C or U, A being very good and U meaning that felling is appropriate regardless of any proposals. The suffix 1, 2 or 3 refers to a subcategory relating to tree, landscape or cultural/ecological values respectively.
- **agl** = Above ground level
- **#** = Estimated dimension.
- **typ** = Typical dimension where several are present.
- **n/a** = Not applicable.
- **n/k** = Not known.

Ref no	Species	Ht (m)	Stem diam (mm)	No. of stems	Crown spread (m)		1 <sup>st</sup> sig' branch ht' (m)	Direction of 1 <sup>st</sup> sig branch	Crown base ht' (m)	Life stage	General observations	Preliminary management recommendations	Rem' cont' (years)	Reten' Cat		
					N	E	S	W								
T1	Common Oak	14	1170	1	8#	7	7	7	2	E	0	M	<ul style="list-style-type: none"> <li>• This tree is protected by Tree Preservation Order no. TPO-0239-1983, and is part of group no. G2 listed in that Order.</li> <li>• The tree was carrying the numbered metal tag 1521.</li> <li>• The tree had been crown reduced in the past and had only put on limited regrowth and retrenchment epicormic growth following this reduction, indicating a generally reduced level of overall vitality.</li> <li>• The trunk base was extensively decayed with clear access to a large basal cavity through the inter buttal openings.</li> </ul> <p>(Contd)</p>	<ul style="list-style-type: none"> <li>• Monitor and assess condition at 18-monthly intervals especially the extent of basal decay and crown vitality..</li> <li>• RPA: radius = 14.0 metres; area = 619 square metres.</li> </ul>	20+	B2

Ref no	Species	Ht (m)	Stem diam (mm)	No. of stems	Crown spread (m)		1 <sup>st</sup> sig' branch ht' (m)	Direction of 1 <sup>st</sup> sig branch	Crown base ht' (m)	Life stage	General observations	Preliminary management recommendations	Rem' cont' (years)	Reten' Cat
					N	E	S	W						
T1	Common Oak (Contd)										(Contd)			

Ref no	Species	Ht (m)	Stem diam (mm)	No. of stems	Crown spread (m)				1 <sup>st</sup> sig' branch ht' (m)	Direction of 1 <sup>st</sup> sig branch	Crown base ht' (m)	Life stage	General observations	Preliminary management recommendations	Rem' cont' (years)	Reten' Cat
					N	E	S	W								
T2	Common Oak	18	1070	1	7#	12	10	7	3	E	3	M	<ul style="list-style-type: none"> <li>This tree is protected by Tree Preservation Order no. TPO-0239-1983, and is part of group no. G2 listed in that Order.</li> <li>The crown had been reduced in the past and had regrown more strongly following this work than was the case with tree no. T1.</li> <li>Minor basal trunk decay was visible through the inter buttural spaces and several fungal fruiting bodies of what seemed to be <i>Pseudoinonotus dryadeus</i> were present on the basal trunk bark surface.</li> <li>The root buttresses were slightly enlarged indicating that the tree has responded to any weakness caused by this basal decay by laying down additional reinforcing wood.</li> <li>The tree was a potential veteran of the future, however, it had not currently achieved the requisite size to be considered a veteran tree, but it should be considered a locally notable tree.</li> </ul>	<ul style="list-style-type: none"> <li>No works currently identified.</li> <li>RPA: radius = 12.8 metres; area = 518 square metres.</li> </ul>	40+	A2

Ref no	Species	Ht (m)	Stem diam (mm)	No. of stems	Crown spread (m)				1 <sup>st</sup> sig' branch ht' (m)	Direction of 1 <sup>st</sup> sig branch	Crown base ht' (m)	Life stage	General observations	Preliminary management recommendations	Rem' cont' (years)	Reten' Cat
					N	E	S	W								
T3	Common Oak	13	580#	1	5#	5	6	6#	2.5	SE	1	EM	<ul style="list-style-type: none"> <li>This tree is protected by Tree Preservation Order no. TPO-0239-1983, and is part of group no. G2 listed in that Order.</li> <li>The tree carried the numbered metal tag no. 1525.</li> <li>The tree was growing out of the riverbank and the trunk leant out over the water, therefore the trunk diameter measurement has been estimated, as it was inaccessible.</li> <li>The crown was asymmetric as a result of competition for light and space with nearby trees.</li> <li>The trunk base and structural root plate was clearly being eroded and made visible by the abutting river and it was considered very likely that this would curtail the ultimate life expectancy of the tree, therefore the very longterm retention of this tree was not anticipated.</li> </ul>	<ul style="list-style-type: none"> <li>Monitor and assess structural stability of the root plate at 18-monthly intervals.</li> <li>RPA: radius = 7.0 metres; area = 152 square metres.</li> </ul>	20+	B2
T4	Common Oak	11	580	1	4#	4	6	6#	2	W	0	EM	<ul style="list-style-type: none"> <li>This tree is protected by Tree Preservation Order no. TPO-0239-1983, and is part of group no. G2 listed in that Order.</li> <li>The crown was asymmetric as a result of competition for light and space with nearby trees.</li> <li>The trunk base and structurally root plate was being eroded and exposed by the abutting river, and this was considered likely to curtail the ultimate life expectancy of the tree.</li> </ul>	<ul style="list-style-type: none"> <li>Monitor and assess structural stability of the root plate at 18-monthly intervals.</li> <li>RPA: radius = 7.0 metres; area = 152 square metres.</li> </ul>	20+	B2

Ref no	Species	Ht (m)	Stem diam (mm)	No. of stems	Crown spread (m)				1 <sup>st</sup> sig' branch ht' (m)	Direction of 1 <sup>st</sup> sig branch	Crown base ht' (m)	Life stage	General observations	Preliminary management recommendations	Rem' cont' (years)	Reten' Cat
					N	E	S	W								
G5	Crack Willow Other Native Willows Field Maple Hawthorn Ash Elderberry Common Oak Occasional Poplar	11 typical	300 typical for road-side edge tree	Various	As per plan	As per plan	As per plan	As per plan	N/A	N/A	1 typical	SM – M	<ul style="list-style-type: none"> <li>The group made a significant contribution to the verdant street scene and was therefore of significant collective public visual amenity value.</li> <li>It was considered likely that the Crack and other Native Willow trees present will ultimately succumb to the weak branch attachment and root plate stability that this genus has in maturity but there were sufficient other trees of other species that would take the place of these lost trees, such that the group collectively would be sustained in the longterm.</li> </ul>	<ul style="list-style-type: none"> <li>No works currently identified.</li> <li>RPA: radius per individual = 3.6 metres; area = 41 square metres.</li> </ul>	40+	A2

### **Appendix 3**

### **Arboricultural Impact Assessment and Tree Protection Plan drawing**

## Arboricultural Impact Assessment and Tree Protection Plan

## 1.0 Introduction

1.1 It is proposed to carry out maintenance/upgrade works to the existing crossing, and to install lighting columns alongside the pedestrian footpath parallel to the highway.

1.2 In this drawing, the proposed development layout is illustrated in black and colour.

1.3 In order to provide context with the existing site, and to highlight the proposed development relative to the existing site layout, the existing site layout drawing is also illustrated in pale grey in this drawing.

1.4 The trees, their constraints, and the specific tree protection measures are required, are illustrated in accordance with the key.

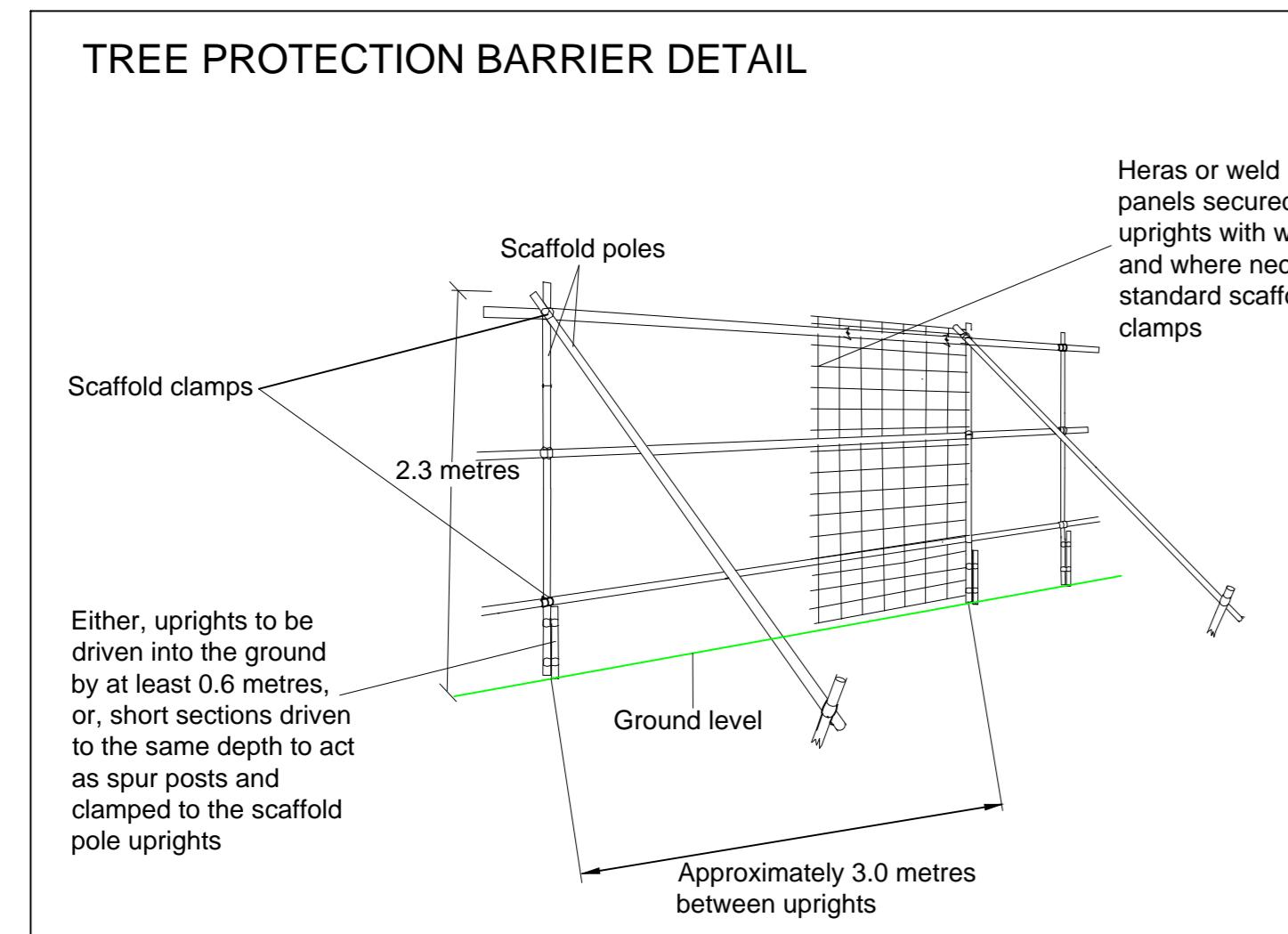
## 2.0 Tree Works.

2.1 The proposed development does not require the felling or pruning of any trees.

## 3.0 Root Protection Areas (RPA).

3.1 The proposed development footprint and the necessary working margins around that footprint has avoided the RPA of all the retained trees. Therefore, the proposed development does not have any direct impact on the RPA of the retained trees. However, construction access has the potential to encroach over the RPA of some retained trees and the following measures will need to be taken.

3.1.1 Tree protection barriers will need to be erected at the outset of the demolition/construction stage. See the Tree Protection Plan below for details of these barriers.



## 4.0 Tree Protection Plan

4.1 Before any construction works commence, and before any construction vehicles, equipment and materials, other than only those necessary for the erection of the tree protection barriers, are delivered to site, the tree protection barriers will be erected at the positions illustrated in this drawing.

4.2 This barrier will comply with the recommendations in BS5837:2012 i.e. as a first choice the barrier design illustrated in this drawing will be used. Where this design of barrier is not feasible the barrier will comply with the following specification.

4.2.1 The barrier will comprise a minimum 2m tall welded mesh fence panels on rubber or concrete feet secured with ground pins.

4.2.2 The fence panels should be joined together using a minimum of two anti-tamper couplers, installed so that they can only be removed from inside the fence.

4.2.3 The distance between the fence couplers should be at least 1m and should be uniform throughout the fence.

4.2.4 The panels should be supported on the inner side by stabilizer struts, which should normally be attached to a base plate secured with ground pins.

4.2.5 Where the fencing is to be erected on retained hard surfacing or it is otherwise unfeasible to use ground pins, e.g. due to the presence of underground services, the stabilizer struts should be mounted on a block tray.

4.3 The barrier will have an A3 size informative/warning notice attached on the construction site side, at approximately 1.6 metres above ground level, and at no more than 6 metre intervals. An example of a suitable notice follows this drawing.

4.4 No construction access whatsoever will be permitted in the construction exclusion zones formed by the tree protection barriers.

4.5 The tree protection barriers will be retained in place and intact until all construction activities have been completed and all construction materials, equipment and vehicles have been removed from the site.

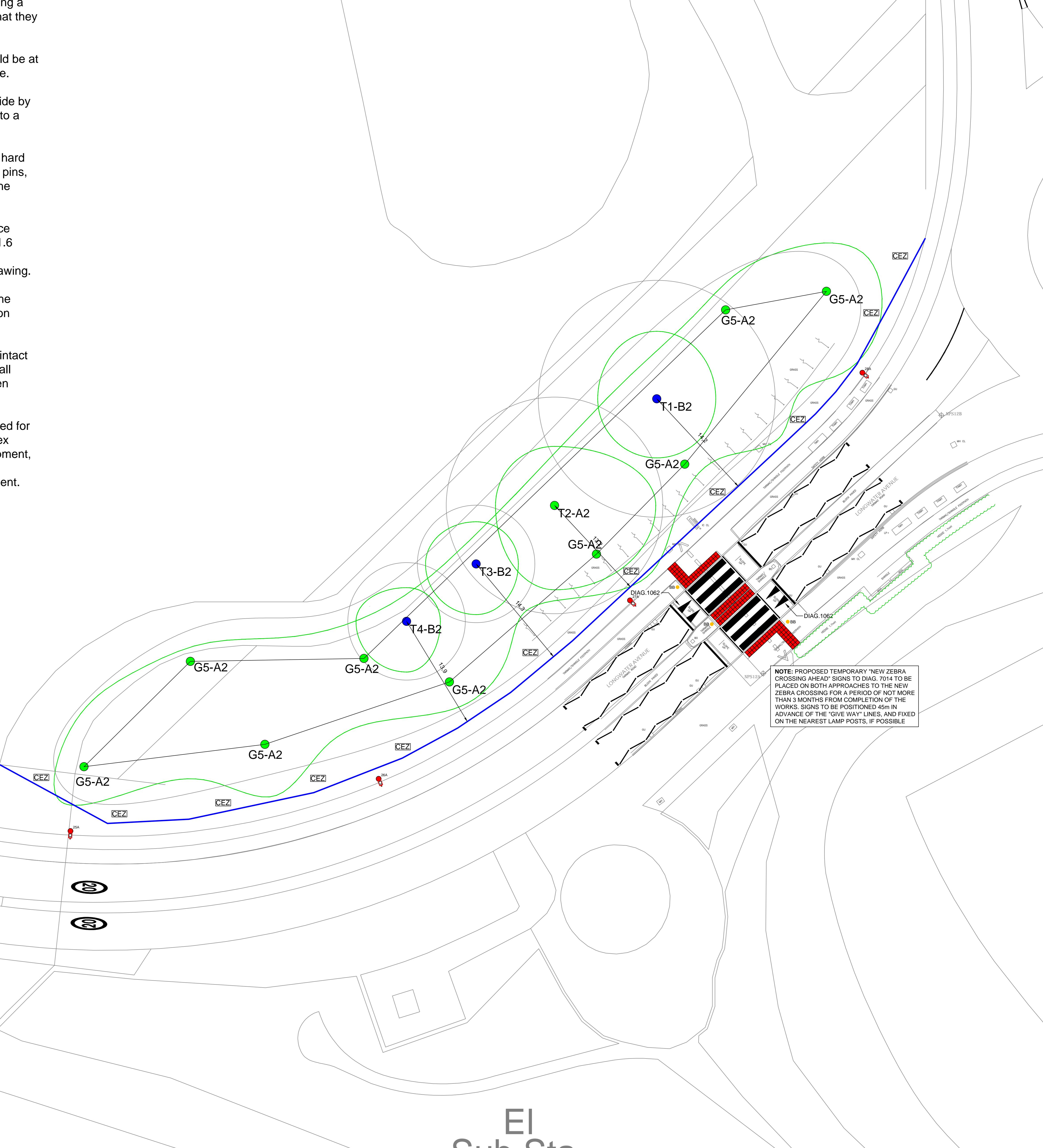
4.6 A separate Arboricultural Method Statement is not required for the proposed development works as there are no complex interactions between the trees and the proposed development, and the Tree Protection Plan above will pride all the tree protection measures required by the proposed development.

## 5.0 Summary.

5.1 There are no substantive arboricultural reasons for the Local Planning Authority (LPA) to object to the proposed development, providing the tree protection measures detailed above are carried out. In order to ensure that these measures take place, it is likely that, if the LPA grant planning permission for the proposed development, they will make that permission subject to an appropriately worded planning condition requiring the following:

5.1.1 Compliance with the Tree Protection Plan set out in drawing no. MJC-25-0187A-02 rev:0.

5.2 The use of this condition is reasonable, necessary and commonplace. Therefore, the required use of this condition should not form a legitimate reason for the LPA to object to the proposed development.



## Appendix 3A      **In drawing text from the Arboricultural Impact Assessment and Tree Protection Plan drawing**

### Arboricultural Impact Assessment and Tree Protection Plan

#### 1.0    *Introduction*

- 1.1    *It is proposed to carry out maintenance/upgrade works to the existing crossing, and to install lighting columns alongside the pedestrian footpath parallel to the highway.*
- 1.2    *In this drawing, the proposed development layout is illustrated in black and colour.*
- 1.3    *In order to provide context with the existing site, and to highlight the proposed development relative to the existing site layout, the existing site layout drawing is also illustrated in pale grey in this drawing.*
- 1.4    *The trees, their constraints, and the specific tree protection measures are required, are illustrated in accordance with the key.*

#### 2.0    *Tree Works.*

- 2.1    *The proposed development does not require the felling or pruning of any trees.*

#### 3.0    *Root Protection Areas (RPA).*

- 3.1    *The proposed development footprint and the necessary working margins around that footprint has avoided the RPA of all the retained trees. Therefore, the proposed development does not have any direct impact on the RPA of the retained trees. However, construction access has the potential to encroach over the RPA of some retained trees and the following measures will need to be taken.*
  - 3.1.1    *Tree protection barriers will need to be erected at the outset of the demolition/construction stage. See the Tree Protection Plan below for details of these barriers.*

#### 4.0    *Tree Protection Plan*

- 4.1    *Before any construction works commence, and before any construction vehicles, equipment and materials, other than only those necessary for the erection of the tree protection barriers, are delivered to site, the tree protection barriers will be erected at the positions illustrated in this drawing.*

4.2 *This barrier will comply with the recommendations in BS5837:2012 i.e. as a first choice the barrier design illustrated in this drawing will be used. Where this design of barrier is not feasible the barrier will comply with the following specification.*

4.2.1 *The barrier will comprise a minimum 2m tall welded mesh fence panels on rubber or concrete feet secured with ground pins.*

4.2.2 *The fence panels should be joined together using a minimum of two anti-tamper couplers, installed so that they can only be removed from inside the fence.*

4.2.3 *The distance between the fence couplers should be at least 1m and should be uniform throughout the fence.*

4.2.4 *The panels should be supported on the inner side by stabilizer struts, which should normally be attached to a base plate secured with ground pins.*

4.2.5 *Where the fencing is to be erected on retained hard surfacing or it is otherwise unfeasible to use ground pins, e.g. due to the presence of underground services, the stabilizer struts should be mounted on a block tray.*

4.3 *The barrier will have an A3 size informative/warning notice attached on the construction site side, at approximately 1.6 metres above ground level, and at no more than 6 metre intervals. An example of a suitable notice follows this drawing.*

4.4 *No construction access whatsoever will be permitted in the construction exclusion zones formed by the tree protection barriers.*

4.5 *The tree protection barriers will be retained in place and intact until all construction activities have been completed and all construction materials, equipment and vehicles have been removed from the site.*

4.6 *A separate Arboricultural Method Statement is not required for the proposed development works as there are no complex interactions between the trees and the proposed development, and the Tree Protection Plan above will pride all the tree protection measures required by the proposed development.*

## 5.0 Summary.

- 5.1 *There are no substantive arboricultural reasons for the Local Planning Authority (LPA) to object to the proposed development, providing the tree protection measures detailed above are carried out. In order to ensure that these measures take place, it is likely that, if the LPA grant planning permission for the proposed development, they will make that permission subject to an appropriately worded planning condition requiring the following:*
  - 5.1.1 *Compliance with the Tree Protection Plan set out in drawing no. MJC-25-0187A-02 rev:0.*
- 5.2 *The use of this condition is reasonable, necessary and commonplace. Therefore, the required use of this condition should not form a legitimate reason for the LPA to object to the proposed development.*

## Appendix 4

### Tree Protection Barrier Sign

(used with the kind permission of Christopher Skellern –  
<https://www.axcandscape.com/>)



**PROTECTIVE FENCING. THIS  
FENCING MUST BE  
MAINTAINED IN ACCORDANCE  
WITH THE APPROVED PLANS  
AND DRAWINGS FOR THIS  
DEVELOPMENT.**



**TREE PROTECTION AREA  
KEEP OUT !**

**(TOWN & COUNTRY PLANNING ACT 1990)**

**TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY  
PLANNING CONDITIONS AND/OR ARE THE SUBJECTS OF A  
TREE PRESERVATION ORDER.  
CONTRAVICTION OF A TREE PRESERVATION ORDER MAY  
LEAD TO CRIMINAL PROSECUTION**

**ANY INCURSION INTO THE PROTECTED AREA MUST BE  
WITH THE WRITTEN PERMISSION OF THE LOCAL  
PLANNING AUTHORITY**

## **Appendix 5      References**

BS5837:2012      =      British Standard 5837:2012 'Trees in relation to design, demolition and construction – Recommendations'.

BS3998:2010      =      British Standard 3998:2010 'Tree work – Recommendations'.