



Chestnuts Park

London

ARBORICULTURAL IMPACT ASSESSMENT

July 2023

Biodiverse Consulting

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Arboricultural Impact Assessment

Scope

Biodiverse Consulting have been instructed to carry out a survey at Chestnuts Park and produce a report on the arboricultural impacts in accordance with British Standard BS:5837 Trees in relation to design, demolition and construction – Recommendations.

This is to provide information to accompany a planning application. Findings from field and desktop surveys are described and the effects that granting planning permission would entail for arboriculture within influencing distance of the development.

Survey

The survey was undertaken on 13th June 2023 by Dana Cherlin, all observations were made from ground level by a qualified arboriculturalist. The survey methodology is provided in the appendices of this report (B – Survey Method).

A topographical survey was provided which was used to record the position of trees and vegetation, where trees were not shown their locations were estimated using aerial photography and on site observations.

Specimens on third party land or outside of the application boundary were surveyed insofar as was practicable, some trees were present in inaccessible locations. Whilst reasonable effort has been made to ensure accuracy of the data of these areas, it cannot be guaranteed.

Limitation

Trees are dynamic organisms and therefore due to change, all observations are relevant on the day of inspection.

The information provided within this report relates to the specific development proposals provided and should not be used or interoperated for any other circumstances. This includes but not limited to alternative developments, tree risk management, tree related subsidence or the design of foundations.

This report is valid for a period of 1 year, any alteration in site, any change in the development or of the current circumstances may invalidate this report.

Protections and Designations

Tree Preservation Orders	No	Confirmed with local planning authorities online mapping on 19.06.2023
Conservation Areas	Yes	Confirmed with local planning authorities online mapping on 19.06.2023; Full site covered under a conservation area
Third Party Trees	No	No third party trees within influencing distance of the site
Ancient Woodlands	No	Confirmed with Natural England / DEFRA online mapping on 19.06.2023
Veteran Trees	No	No records with the Woodland Trust online mapping or evidence on site
SSSI Sites	No	Confirmed with Natural England / DEFRA online mapping on 19.06.2023
Community Forests	No	Confirmed with Natural England / DEFRA online mapping on 19.06.2023
Deciduous Woodlands	Yes	Confirmed with Natural England / DEFRA online mapping on 19.06.2023; all trees are noted under deciduous woodland
Traditional Orchards	No	Confirmed with Natural England / DEFRA online mapping on 19.06.2023
Woodland Pasture and Parklands	No	Confirmed with Natural England / DEFRA online mapping on 19.06.2023
Hedgerows	No	No hedgerows on site over 20m in length and 80% native trees
Other	-	

Arboricultural Impact Assessment

Constraints

This drawing presents an overview of the trees within influencing distance of the proposed development.

Site

The site is adjacent to Black Boy Lane. The land is currently in use as recreation area and park. The area of focus is approximately 9600m2 in size. The area is centred on grid reference TQ 32361 88878.

Survey results

39 individual trees (T1 – T39); and 1 tree group (G1); were recorded within influencing distance of the site.

The British standard, BS5837:2012 Trees in relation to design, demolition and construction – recommendations, assigns categories to features depending on their qualities, hedgerows are not categorised.

Categories

A - Trees of high quality, typically with a long remaining life expectancy; and with clear and identified merit as specimens, visually, culturally or for conservation.

B - Trees of moderate quality, typically with at least a medium remaining life expectancy; with remediable defects only; or low quality but with collective merit.

C - Trees of low quality, typically with at least a short remaining life expectancy; unremarkable trees; young or small trees that could be replaced.

U - Trees that cannot realistically be retained in the current land use for 10 years; with serious and irreparable defects, pathogens or decline.

All arboricultural information recorded during the site survey is present in the appendices (A – Data Tables). Feature locations, root protection areas, BS:5837 categories and crown spreads are shown in the drawings opposite.

Trees on site are part of an avenue and deciduous woodland group. Primarily London plane specimens that have been historically pollarded.

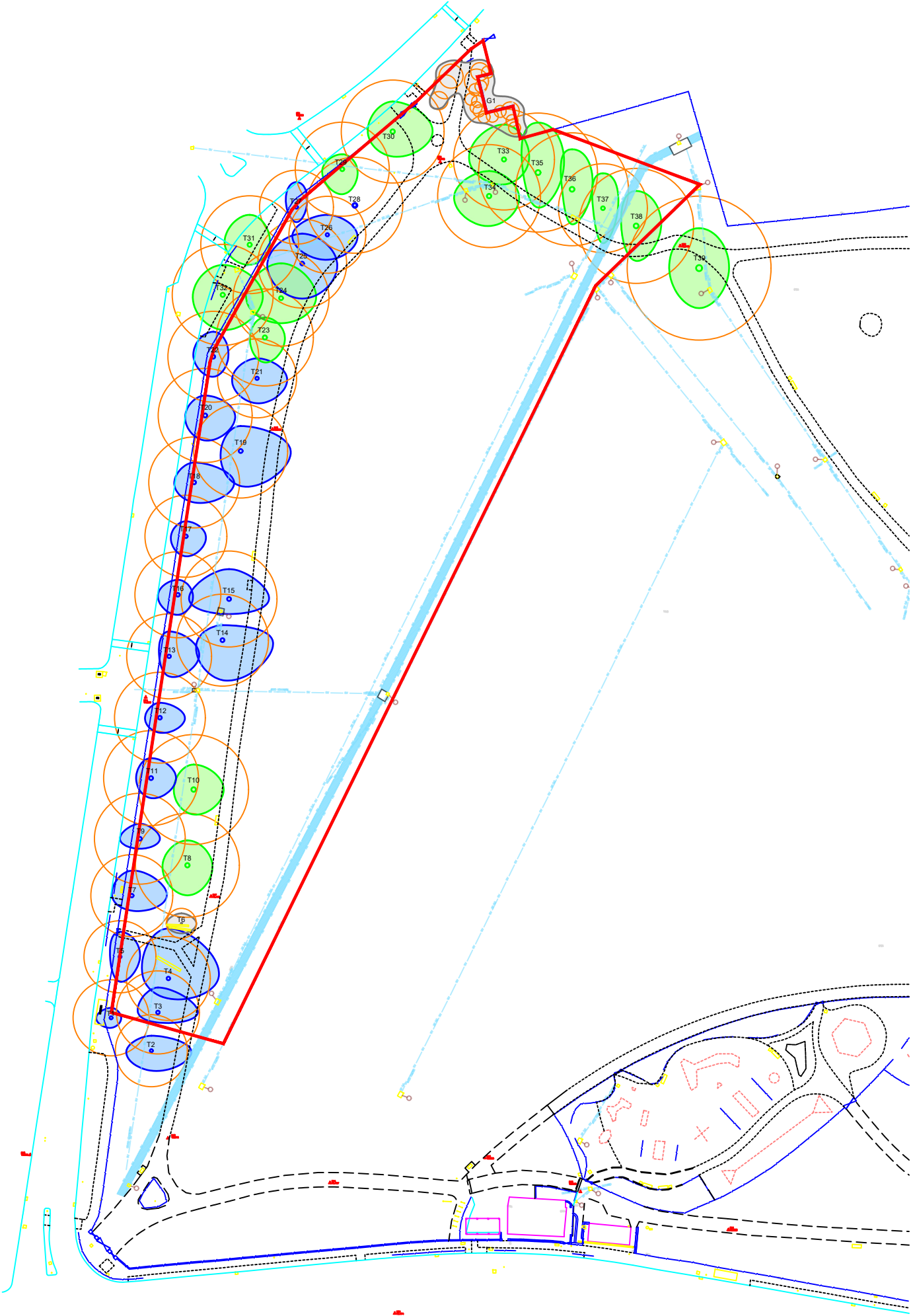
Root Protection Areas (RPA)

A root protection area is the minimum area around each tree, group or woodland that must be retained and undisturbed to ensure survival.

The RPA's have been calculated in accordance with BS5837 using the diameter of each feature at a height of 1.5m, referred to as diameter at breast height (DBH).

Conditions on site that may have influenced root morphology are hard standing and footpaths. These have been taken into consideration and RPAs have been adjusted to try represent the rooting area more accurately.

No assessment of protected species has been carried out during the production of this report. Features that may be of interest that were observed during the tree survey are recorded in Appendix A - Data Tables. If an assessment of protected species is required, it should be carried out by a licenced ecologist.



KEY

- T1/G1/W1 Trees
- Root Protection Area (RPA)
- Site Boundary

Tree Quality Categorisation
(Based on BS 5837:2012 Trees in relation to design, demolition and construction - Recommendations)

- Category A (High quality)
- Category B (Moderate quality)
- Category C (Low quality)
- Category U (Unsuitable for retention)
- Hedgerow (Not categorised)

Please see the Arboricultural Survey Data in the Appendix (A - Data Tables)



Beech, Dissington Hall, Dalton, Newcastle Upon Tyne, NE18 0AD
Telephone: 0191 303 7805 Email: enquiries@biodiverseconsulting.co.uk

Site
Chestnuts Park

Title
Drawing 1: Tree Constraints Plan

Drawing No.
230619.001

Scale
1:1000 @ A3

Date
20/06/2023

Drawn

PCL

Checked

DC

Approved

VM

Arboricultural Impact Assessment

Proposals

This drawing presents the results of an assessment in accordance with BS 5837, including which trees would be removed or pruned in relation to the proposed development.

The proposed development consists of SUDS (Sustainable drainage systems). The proposals were provided in a .DWG format.

Proposed tree works

In total 0 individual trees; and 0 tree groups; will require removal to facilitate the proposed development.

Although 7 individual trees (T19, T21, T23, T28, T34, T35 & T36) may be impacted by the development, due to an area of the RPAs being encroached upon. A root radar survey has not been carried out. Air spading and root pruning is a mitigation option to retain the avenue feature while implimenting the proposed development.

Due to the heavy pollarding of tree T28, root pruning is unlikely to cause instability at such a distance from the stem.

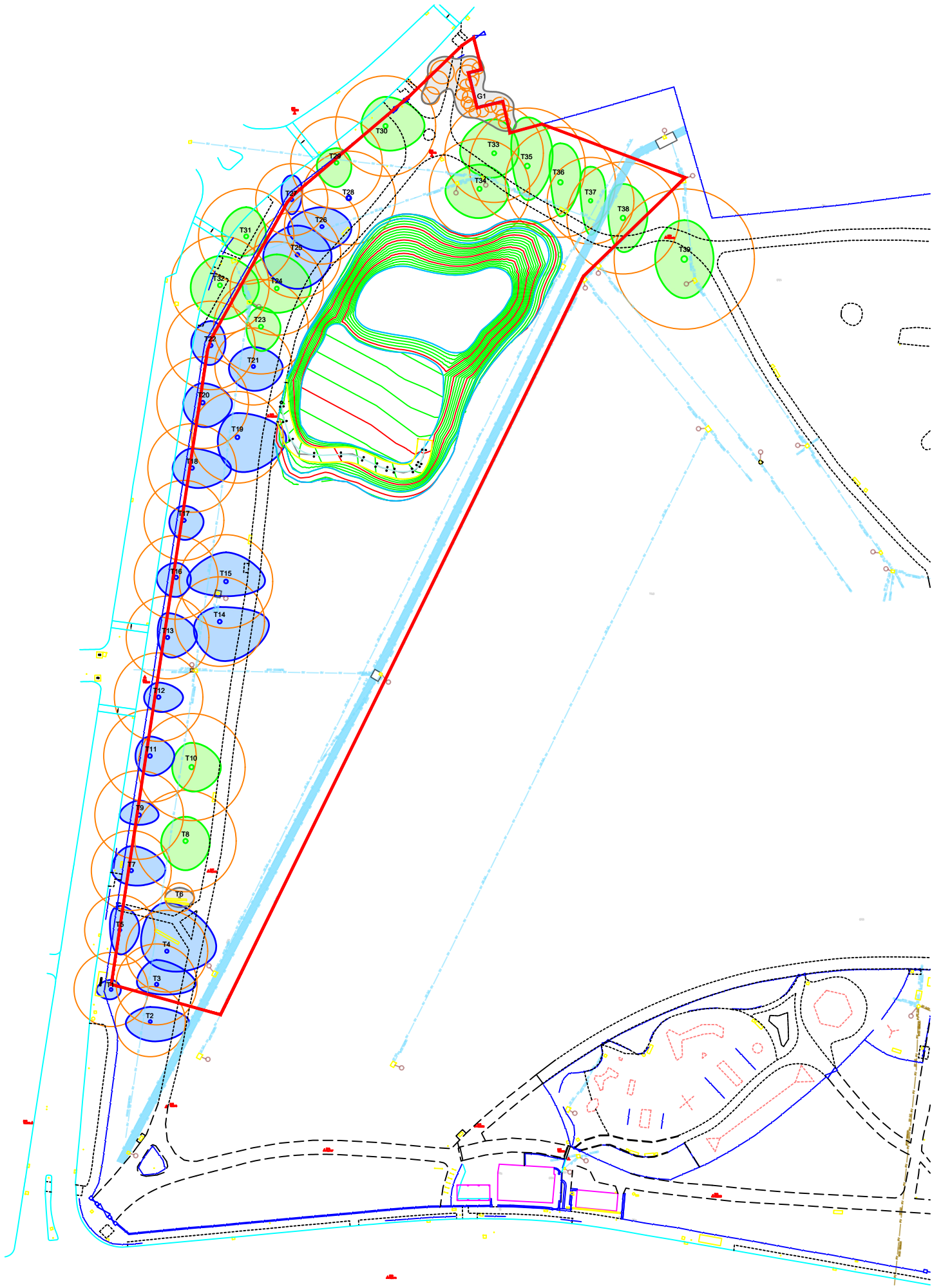
Effects on designated or protected features

Trees are a material consideration and the quality of trees, related planning policies, and the presence of any protected status or designation is likely to be considered by the local planning authority when determining a planning application.

The removal of trees, without mitigation, constitutes an adverse effect. Each development or program is encouraged by the government guidance in the National Planning Policy Framework (NPPF) to minimise impacts on and provide net gains for biodiversity.

- Tree preservation orders (TPO) - N/A
- Conservation area (CA) - The proposed development would result in (root) pruning of trees within a conservation area
- Ancient woodland - N/A
- Veteran trees - N/A
- Sites of Special Scientific Interest (SSSI) - N/A
- Community forest - N/A
- Deciduous woodland - The proposed development would result in (root) pruning of trees within a designated deciduous woodland
- Woodland pasture and parkland - N/A
- Traditional orchards - N/A
- Hedgerows - N/A

In consideration to the protections and designations, there are no adverse effects that cannot be mitigated or offset. The local planning authority may determine the level of mitigation required and will evaluate the proposed development, including any proposed mitigation measures, in consideration of all relevant local and national planning policies, guidance and tree laws.



KEY

- T1/G1/W1 Trees
- Root Protection Area (RPA)
- Site Boundary

Trees and hedgerow to be retained

- Category A (High quality)
- Category B (Moderate quality)
- Category C (Low quality)

Trees and hedgerow proposed works

- Trees to be removed (None noted)
- Trees to be pruned (None noted)

Please see the Arboricultural Survey Data in the Appendix (A - Data Tables)



Beech, Dissington Hall, Dalton, Newcastle Upon Tyne, NE18 0AD
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Site
Chestnuts Park

Title
Drawing 2: Tree Works Plan

Drawing No.
230619.002

Scale
1:1000 @ A3

Date
28/07/2023

Drawn
PCL

Checked
DC

Approved
VM

Arboricultural Impact Assessment

Tree Protection & Mitigation

Prior to Starting

The site manager will read, understand and hold responsibility for implementing the protection measures in this document. In addition, a copy of this document will be made available on site for all relevant contractors.

Dana Cherlin can be contacted on 0191 303 7805, if required to assist with the correct interpretation of this document. With request, an inspection of the tree works and tree protection measures can be carried out.

An Arboricultural Contractor will undertake tree works shown in this document in accordance with BS3998:2010 Tree work- recommendations.

Tree protective fencing and ground protection will be implemented as shown in the drawing opposite. The specification for tree protective fencing and ground protection will be as shown in Appendix C.

Ground protection areas may be used by light machinery.

The site manager will inspect and verify the correct installation of tree protective measures and maintain such, keeping a photographic record. The tree protective measures will not be removed or realigned. Access is prohibited within areas of tree protection, this includes but not limited to storage, excavation, level changes and parking unless described in this document or by an Arboricultural Method Statement approved by planning.

Construction Phase

Works will proceed with care and consideration to prevent accidental damage from plant and vehicles.

If major roots (>25mm diameter) are uncovered, works will cease, the roots will be loosely covered with damp hessian, and arboricultural advice will be sought (*please see the contact details above*).

When the drainage works are to commence, tree protective fencing will be adapted to prevent access to trees and ground protection alongside root protection along the alternative entrance will be in place prior to any works commencing.

Following completion of all construction works and the removal of vehicles, plant, compounds and materials, the tree protection measures will be removed.

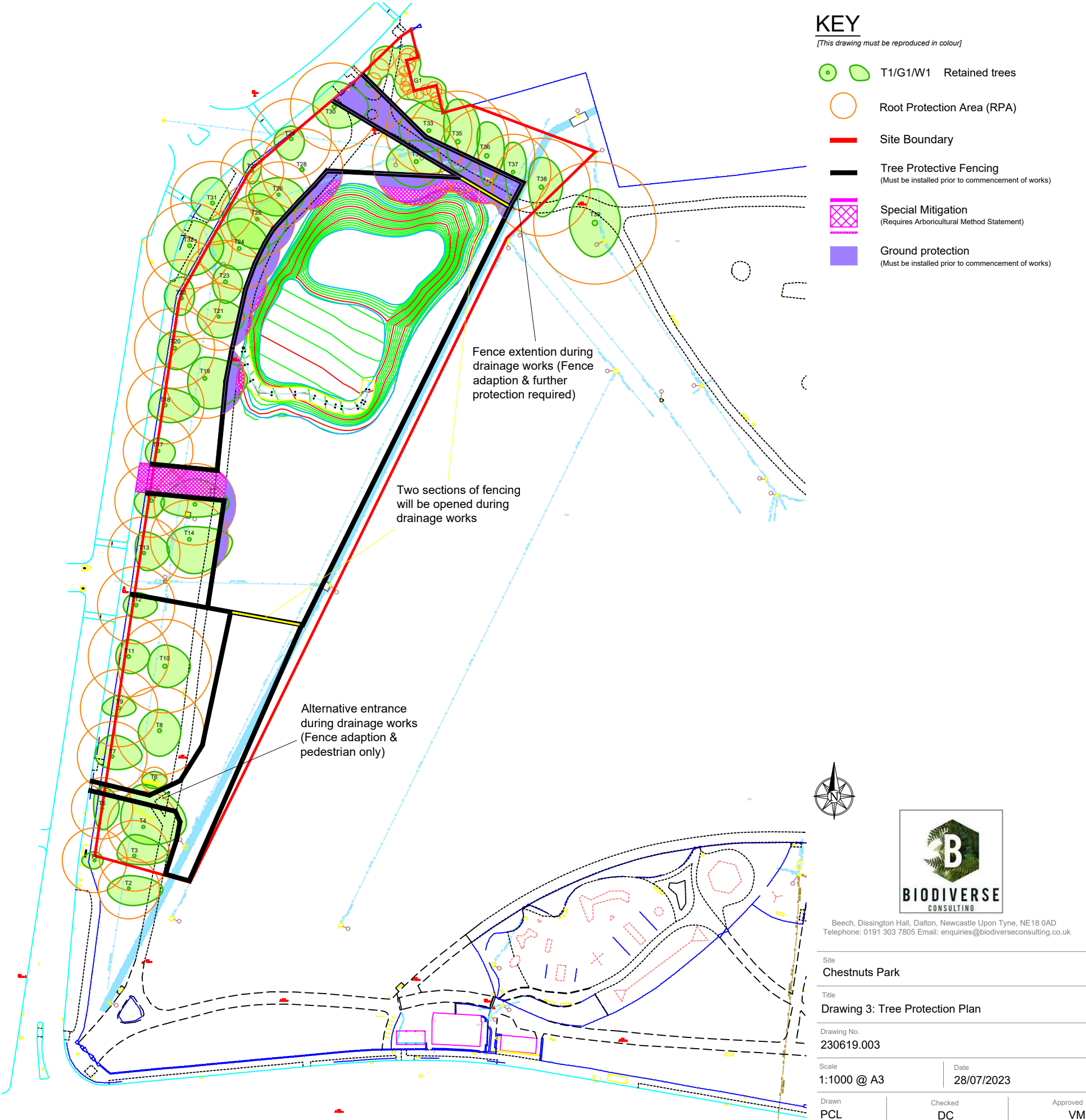
Recommendations

Arboricultural Method Statement (AMS)

Additional tree protective measures and special construction methods to prevent harm to the retained trees in accordance with BS5837:2012 should be produced in an AMS prior to the commencement of works. The areas of works which are liable to harm retained trees without an AMS are highlighted in the drawing opposite under special mitigation.

These areas will require air spading, under supervision, where the ground level is changing, to expose tree roots and carry out root pruning if appropriate. Areas where ground levels are not to be impacted will be secured with ground protection where tree protective fencing does not prevent access.

The entrance track through the trees will require either cellular webbing or root bridging, depending on the weight of traffic passing through. The alternative entrance is a pedestrian route only and will utilise the footpath that is already in place.





Appendix A - Data Tables

Surveyor Dana Cherlin
Date 13 th June 2023
Locality London
Site Chestnut Park

Tree / Group / Wood / Hedge	Nr	Species	Height	Stem Dia.	No. of stems/ individuals	Crown Spread North	Crown Spread South	Crown Spread East	Crown Spread West	Height of Lowest Branch	Direction of Lowest Branch	Maturity	Condition	Comments on form, condition, health and significant defects	BS Tree Quality Assess.	Management Recommendations	Estimated Remaining Contribution	Calculated BS5837 RPA Area	Radius of RPA guide circle
T,G,W,H			(m)	(mm)	arising below 1.5m	(m)	(m)	(m)	(m)	(m)		Young, Middle Age, Mature	Good, Fair, Poor, Veteran		A,B,C,U (1,2,3)		Long, Medium, Short, Very Short	(m2)	(m)
T	1	London plane	8	630	1	2	2	2	3	2	SW	Mature	Fair	High canopy; recent pruning wounds noted; historic pollard	B	,1,2	Long	179.55	7.6
T	2	London plane	12	600	1	3	4	8	5	3	E	Mature	Fair	Slight lean; asymmetric form; part of avenue group	B	,1,2	Long	162.86	7.2
T	3	London plane	12	690	1	5	2	8	4	3	NE	Mature	Good	Part of avenue group; asymmetric form; high canopy	B	,1,2	Long	215.38	8.3
T	4	London plane	15	700	1	10	4	10	5	2.5	W	Mature	Fair	Historic pollard; part of avenue group; end weighted branch growth	B	,1,2	Long	221.67	8.4
T	5	London plane	12	600	1	5	5	4	2	2.5	SW	Mature	Good	Trifurcate union, included bark; historic pollard; part of avenue group	B	,1,2	Long	162.86	7.2
T	6	Malus / Pyrus	5	250	1	2	2	3	3	2	S	Middle Age	Fair	Bark damage noted, mower damage on lower stem; crown lifted in the past	C	,1,2	Medium	28.27	3.0
T	7	London plane	12	680	1	5	3	7	4	2.5	S	Mature	Good	Historic pollard; part of avenue group; high canopy	B	,1,2	Long	209.18	8.2
T	8	London plane	15	870	1	5	6	5	5	5	SE	Mature	Good	Good form; part of avenue group	A	,1,2	Long	342.41	10.4
T	9	London plane	12	760	1	3	2	4	4	2.5	E	Mature	Fair	Historic pollard; part of avenue group; high canopy	B	,1,2	Short	261.30	9.1
T	10	London plane	15	920	1	5	5	6	4	3	NE	Mature	Fair	Nest observed in the canopy; historic pollard, nodes and raised areas where regrowth has occurred; slight lean	A	,1,2	Medium	382.90	11.0
T	11	London plane	15	790	1	4	4	5	3	4	SW	Mature	Fair	Historic pollard, nodes and raised areas where regrowth has occurred in the past	B	,1,2	Medium	282.34	9.5
T	12	London plane	12	760	1	3	3	5	3	2.5	N	Mature	Fair	Historic pollard, nodes and raised areas where regrowth has occurred in the past	B	,1,2	Medium	261.30	9.1
T	13	London plane	13	710	1	5	4	6	2	2.5	E	Mature	Fair	Historic pollard, nodes and raised areas where regrowth has occurred in the past	B	,1,2	Medium	228.05	8.5
T	14	London plane	12	770	1	3	8	10	5	2	S	Mature	Fair	Historic pollard, nodes and raised areas where regrowth has occurred in the past	B	,1,2	Medium	268.22	9.2
T	15	London plane	13	800	1	6	3	8	9	2	E	Mature	Good	Good vigour, fair form; part of avenue group	B	,1,2	Long	289.53	9.6
T	16	London plane	12	720	1	3	4	3	4	3	W	Mature	Fair	Historic pollard, nodes and raised areas where regrowth has occurred in the past	B	,1,2	Medium	234.52	8.6
T	17	London plane	10	680	1	3	4	4	3	2	S	Mature	Fair	Historic pollard, nodes and raised areas where regrowth has occurred in the past	B	,1,2	Medium	209.18	8.2
T	18	London plane	12	760	1	4	4	8	4	3	S	Mature	Fair	Historic pollard, nodes and raised areas where regrowth has occurred in the past	B	,1,2	Medium	261.30	9.1
T	19	London plane	14	780	1	5	7	10	4	3.5	W	Mature	Fair	Historic pollard, nodes and raised areas where regrowth has occurred in the past	B	,1,2	Medium	275.23	9.4
T	20	London plane	15	780	1	4	5	6	4	3	SW	Mature	Fair	Nest observed in the canopy; historic pollard, nodes and raised areas where regrowth has occurred	B	,1,2	Medium	275.23	9.4
T	21	London plane	12	660	1	4	5	6	4	4	NW	Mature	Fair	Inonotus hispidus bracket noted at 5m, heart rot fungi	B	,1,2	Medium	197.06	7.9
T	22	London plane	12	760	1	5	3	3	4	2	S	Mature	Fair	Historic pollard, nodes and raised areas where regrowth has occurred in the past	B	,1,2	Medium	261.30	9.1

T	23	London plane	14	810	1	4	5	4	3	3.5	W	Mature	Good	Part of avenue group; historically a pollard	A	,1,2		Long	296.81	9.7
T	24	Hungarian silver lime	16	800	1	7	5	7	7	2.5	E	Mature	Good	Good vigour and form	A	,1,2		Long	289.53	9.6
T	25	London plane	15	740	1	6	7	7	7	2.5	S	Mature	Good	Part of avenue group; historically a pollard	B	,1,2		Long	247.73	8.9
T	26	London plane	14	640	1	4	5	6	7	3	NE	Mature	Good	Part of avenue group; historically a pollard	B	,1,2		Long	185.30	7.7
T	27	London plane	10	620	1	5	3	2	2	2	S	Mature	Fair	Part of avenue group; historically a pollard	B	,1,2		Medium	173.90	7.4
T	28	London plane	4.5	800	1	0.5	0.5	0.5	0.5	3	S	Mature	Poor	Pollarded at 3.5m	B	,2,3		Short	289.53	9.6
T	29	London plane	11	780	1	3	5	3	4	2	NE	Mature	Fair	Historic pollard, nodes and raised areas where regrowth has occurred in the past	A	,1,2		Medium	275.23	9.4
T	30	London plane	12	860	1	6	5	8	5	4	W	Mature	Fair	Historic pollard, nodes and raised areas where regrowth has occurred in the past	A	,1,2		Medium	334.59	10.3
T	31	London plane	12	820	1	6	4	4	5	2	SW	Mature	Fair	Historic pollard, nodes and raised areas where regrowth has occurred in the past	A	,1,2		Medium	304.19	9.8
T	32	London plane	14	840	1	6	7	8	6	3	W	Mature	Good	Historic pollard, nodes and raised areas where regrowth has occurred in the past	A	,1,2		Long	319.21	10.1
T	33	London plane	13	840	1	7	5	5	7	3	W	Mature	Good	Historic pollard, nodes and raised areas where regrowth has occurred in the past	A	,1,2		Long	319.21	10.1
T	34	London plane	15	860	1	5	6	6	7	2	N	Mature	Good	Historic pollard, nodes and raised areas where regrowth has occurred in the past	A	,1,2		Long	334.59	10.3
T	35	London plane	14	990	1	10	7	5	3	2.5	NE	Mature	Good	Historic pollard, nodes and raised areas where regrowth has occurred in the past	A	,1,2		Long	443.39	11.9
T	36	London plane	11	940	1	8	7	4	2	2.5	S	Mature	Fair	Historic pollard, nodes and raised areas where regrowth has occurred in the past	A	,1,2		Medium	399.73	11.3
T	37	London plane	12	740	1	7	7	3	2	2.5	S	Mature	Fair	Historic pollard, nodes and raised areas where regrowth has occurred in the past	A	,1,2		Medium	247.73	8.9
T	38	London plane	13	960	1	7	7	5	3	3.5	SE	Mature	Good	Historic pollard, nodes and raised areas where regrowth has occurred in the past	A	,1,2		Long	416.92	11.5
T	39	London plane	12	1200	1	8	8	6	6	2.5	S	Mature	Fair	Historic pollard, nodes and raised areas where regrowth has occurred in the past	A	,1,2		Medium	651.44	14.4
G	1	Cotoneaster, bay willow, hawthorn	5 to 7	100 to 200	18							Middle Age	Fair	Shrubby group to the Northern area of the site between trees T30 and T33	C	,1,2		Long	n/a	Refer to Drawing



Appendix B - Survey Method

Survey Method

The survey of trees, tree groups, woodlands and hedgerows is conducted from ground level by a qualified arboriculturalist. Trees are dynamic organisms and therefore due to change, all observations are relevant on the day of inspection. The following details may have been recorded in the surveys Data Tables: -

Species – The species of tree/shrub. Typically the common name is given, if further clarification is required a Latin name.

Height – The height of individual tree; range of height of a tree group, woodland or hedgerow; recorded in metres.

Stem Diameter – Measurement is taken at 1.5 metres above ground level; referred to as diameter at breast height (DBH); recorded in millimetres; multi-stemmed features are taken as an average.

Number of Stems – A count of stems occurring below a height of 1.5 metres.

Crown Spread – Recorded in metres; the crown spread in the directions North, South, East and West.

Height of Lowest Branch – The lowest branch location recorded in metres.

Direction of Lowest Branch – The direction of the first significant branch from the point of attachment.

Maturity – Recorded as young (in the early stages of maturity), middle aged (established specimen with potential to continue increasing in size) or mature (a specimen that has reached its ultimate size)

Condition – An assessment of a tree's physiological and structural health and condition; recorded as poor, fair, good or veteran (Veteran are trees are considered irreplaceable habitats, features with great biological, cultural or aesthetic value)

Comments – A brief evaluation and description of the features form, vitality, health, defects or symptoms of ill-health.

BS 5837 Tree Quality Assessment -

Table 1 Cascade chart for tree quality assessment

Category and definition	Criteria (including subcategories where appropriate)			Identification on plan
Trees unsuitable for retention (see Note)				
Category U Those 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	- Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) - Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline - Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality <i>NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.</i>			See Table 2
	1 Mainly arboricultural qualities	2 Mainly landscape qualities	3 Mainly cultural values, including conservation	
Trees to be considered for retention				
Category A Trees of high quality with an estimated remaining life expectancy of at least 40 years	Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)	See Table 2
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality	Trees with material conservation or other cultural value	See Table 2
Category C Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits	Trees with no material conservation or other cultural value	See Table 2

Survey Method

Root Protection Area (RPA) – A root protection area is the minimum area around each tree, group or woodland that must be retained and undisturbed to ensure survival; the RPA's have been calculated in accordance with BS5837 using the diameter of each feature at a height of 1.5m, referred to as diameter at breast height (DBH); the RPA is recorded in metres squared and is typically centred on the tree stem, features affecting root morphology may change this.

Recommendations - Recommendations for arboricultural works taking into consideration defects, the land use, targets and BS3998:2010 Tree work – recommendations, with no bias toward the proposed development.

Estimated Remaining Contribution – The estimated life expectancy as healthy functioning tree suitable for its location, influenced by species and condition at the time of survey; recorded as Long (> 40 years), Medium (20 – 40 years), Short (>20 years), Very Short (>10 Years).

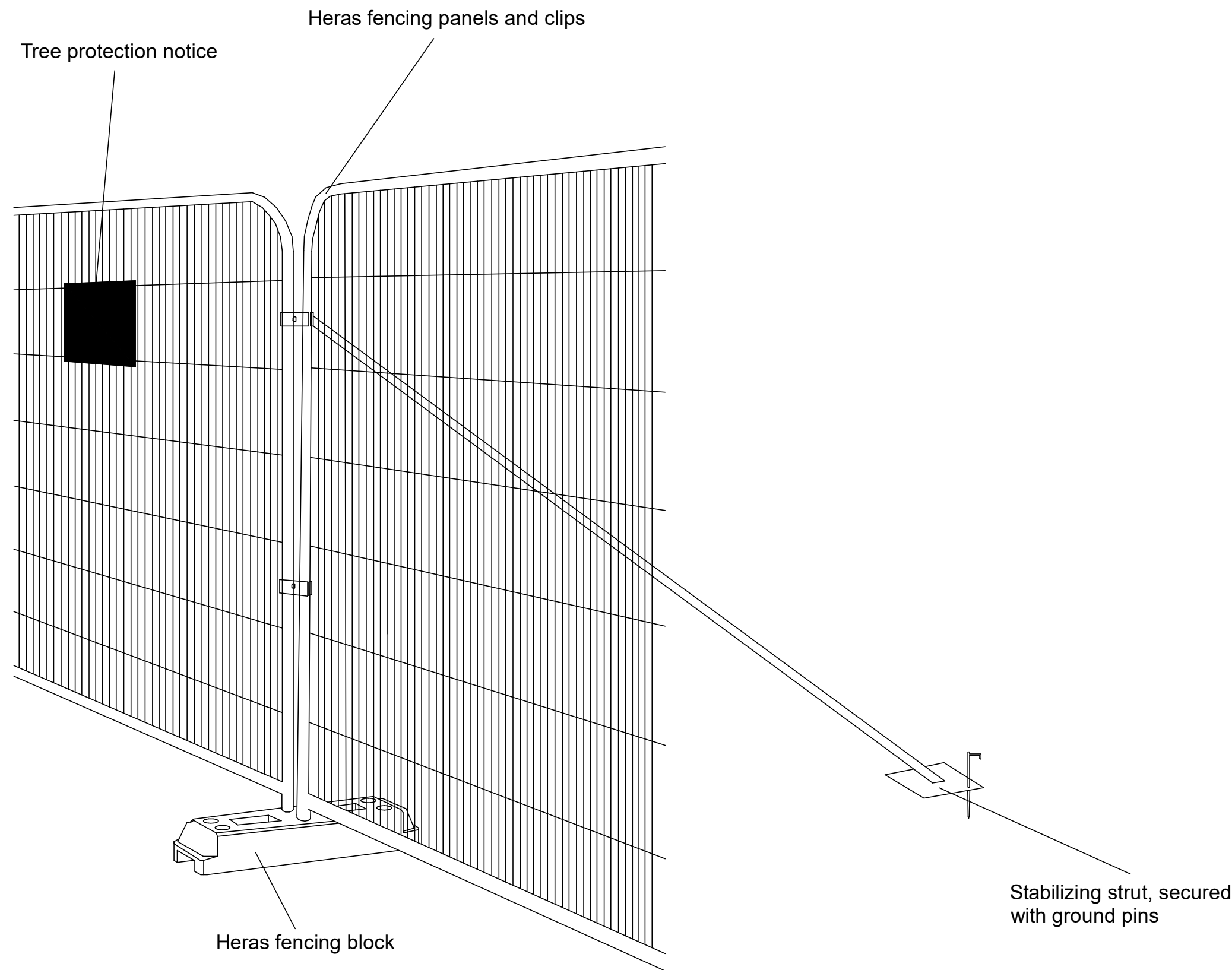
NOTES:

- Soil assessments were not carried out for the purposes of this survey.
- All young trees are assessed as quality category 'C' this does not pre-determine their retention within a development.



Appendix C - Specification Drawings

Representative Tree Protective Fencing



Fencing Specification

The purpose of tree protective fencing is to demarcate the construction exclusion zone (CEZ). No materials will be stored within and no vehicles or machinery will be allowed access to the CEZ unless a suitable Arboricultural Method Statement (AMS) is in place. This will prevent damage being caused to retained trees.

For every three Heras fencing panels (10.5m total length; 2m x 3.5m per panel) there will be a tree protection notice fitted in a visible location. The panels will be held together using security Heras fencing clips (12).

The base of the Heras fencing will be stabilized using blocks. Where blocks are not suitable a vertical scaffold pole, driven into the ground, can be used.

Stabilizing struts will be implemented every third panel. The struts will be held down using ground pins (soft ground) or blocks (hard standing).

Title		
Tree Protective Fencing Detail		
Drawing No.		
TPF.RPA.211029		
Scale	Date	
Not to scale @ A3	29/10/2021	
Drawn	Checked	Approved
PCL	JEK	PCL



ATTENTION

**TREE PROTECTION AREA
KEEP OUT!**



**YOU MAY NOT ENTER THIS AREA OR
USE IT FOR STORAGE**

**YOU MUST NOT MOVE OR DAMAGE THIS
PROTECTIVE FENCING**

**IF YOU REQUIRE ACCESS WITHIN THE
TREE PROTECTION AREA PLEASE ASK
THE SITE MANAGER TO CONTACT A
QUALIFIED ARBORICULTURAL
CONSULTANT**

Ground Protection Specification

This method statement outlines the parameters within which the application of ground protection will be undertaken in regards to trees.

General Terms

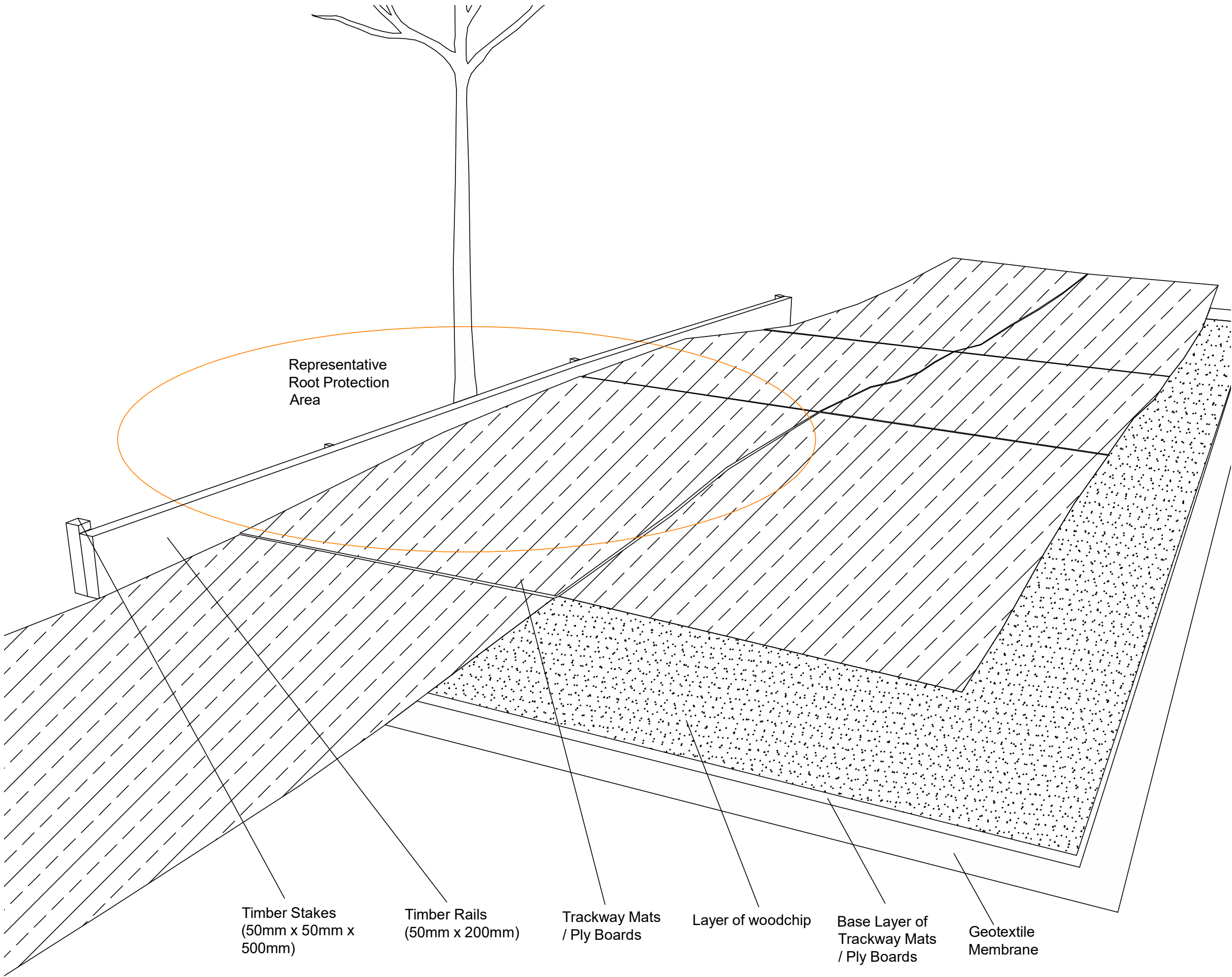
- A. This document will be produced in colour in a A3 format.
- B. The site manager will read and understand this document. It will be the responsibility of the site manager to ensure compliance.
- C. A copy of this document will be made available on site.
- D. Ground protection will be installed prior to any machinery or materials being brought on site.

Preparation

- 1. Cut surface vegetation.
- 2. Mark out the perimeter edge.

Installing ground protection

- 3. Using a layer of geotextile material, cover the entirety of the root protection areas.
- 4. Install the timber edge rails (50 x 200mm), using stakes (50 x 50 x 500mm) at 1.5m spacings.
- 5. Place a base layer of trackway mats or ply board on top of the membrane.
- 6. Cover the base layer of mats with 150mm of woodchip.
- 7. Install the upper layer of trackway mats or ply boards on top of the woodchip.



Title		
Ground Protection For Tree Roots		
Drawing No.		
GP1.RPA.220710		
Scale	Date	
Not to scale @ A3	10/07/2022	
Drawn	Checked	Approved
PCL	JEK	PCL

Arboricultural Method Statement (AMS)

This AMS outlines the parameters within which the application of cellular webbing will be undertaken in regards to trees.

General Terms

- A. This document will be produced in colour in a A3 format.
- B. The site manager will read and understand this document. It will be the responsibility of the site manager to ensure compliance.
- C. A copy of this document will be made available on site.
- D. If major roots (>25mm diameter) are uncovered, works will cease, the roots will be loosely covered with damp hessian, and arboricultural advice will be sought.

Preparation

- 1. Remove surface vegetation.
- 2. A maximum of 30mm of top soil can be removed, unless surface roots are present.
- 3. Backfill any holes and uneven areas discovered with clean angular stone 4/40mm (BS EN 13242 and 12620).
- 4. Mark out the perimeter edge.

Applying membrane and cells

- 5. Place the base membrane over the works area, overlap sections with a minimum of 250mm. The membrane should be secured by pins roughly every 500mm along the edging.
- 6. Apply the cellular webbing, clipped together, on top of the base membrane.
- 7. If required some cells may require cut to shape, to suit the edge.

Backfilling

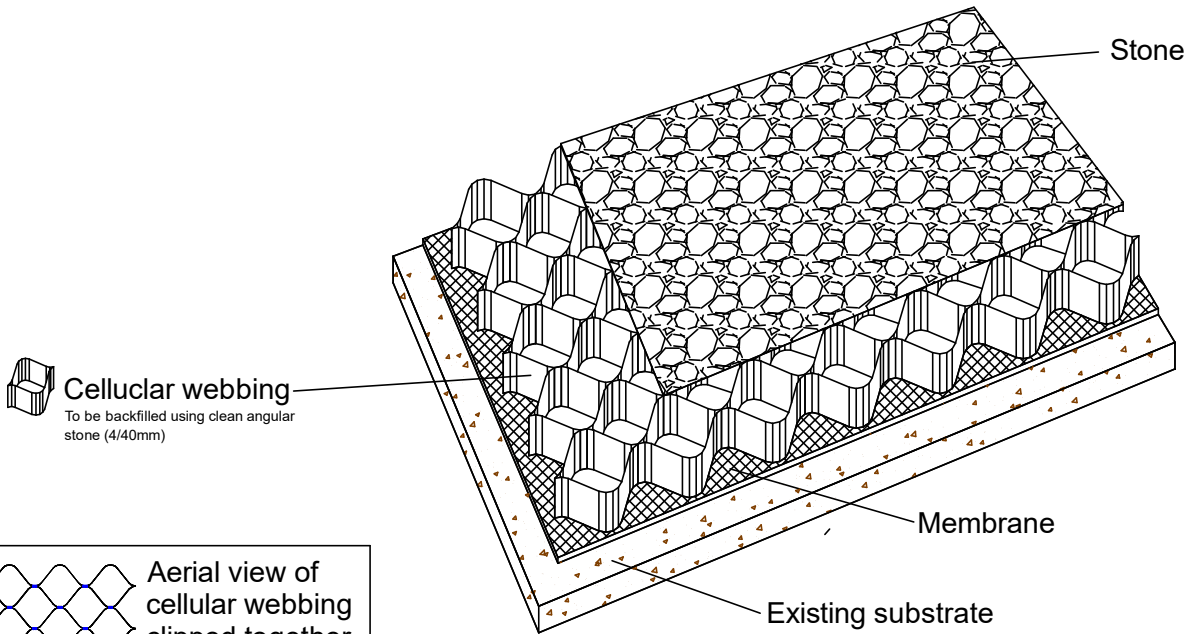
- 8. Using clean angular stone (BS EN 13242 and 12620) 4/40mm, backfill the cells progressively.
- 9. Overfill by 25mm approximately to allow the stone to settle in the cells.
- 10. If using a vehicle, limit the drop height below 1m to avoid cells collapsing during the backfilling process.

The surface

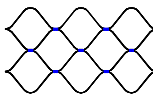
- 11. Apply light vibrating compaction to help the stone settle in the cells.
- 12. Re-apply clean angular stone (BS EN 13242 and 12620) 4/40mm if required.

Cross Section

(Refer to manufacturers specifications for size and depth of cellular web for weight requirements)



Cellular webbing
To be backfilled using clean angular stone (4/40mm)



Aerial view of cellular webbing clipped together

Gradient soil

Membrane

Cellular webbing

Stone

Existing substrate

Representative Root Protection Area

(Refer to data tables and drawings for the RPA measurements)

Title
Cellular Webbing for Track

Drawing No.
CW2.RPA.220831

Scale
Not to scale @ A3

Date
31/08/2022

Drawn

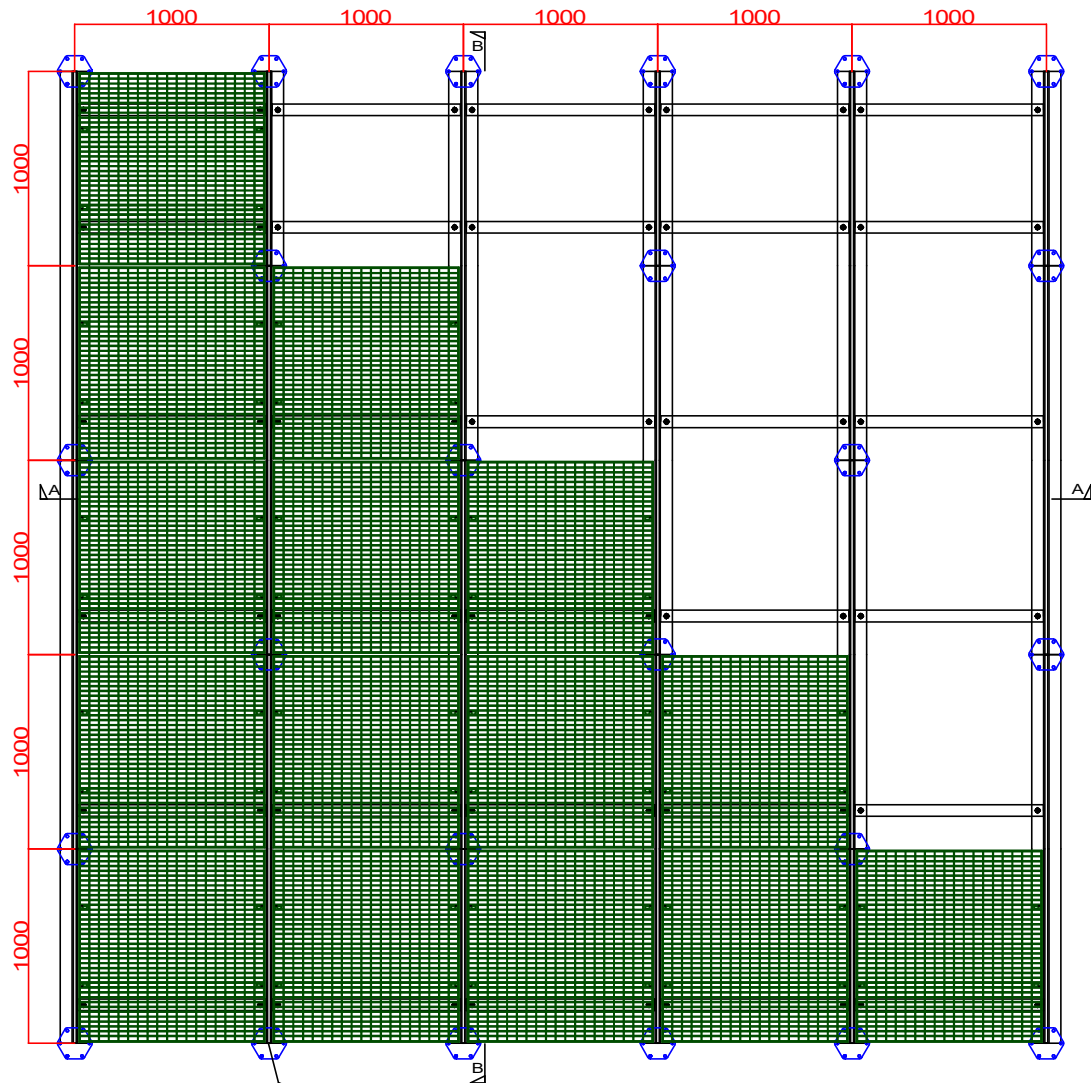
PCL

Checked

PR

Approved

PR

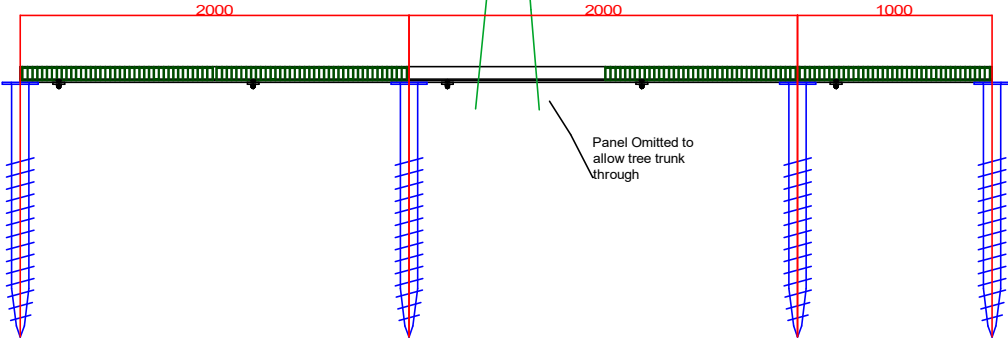


Grids Omitted In This Section For Clarity

Structural tee sections to be max 2000mm lengths, continuous over intermediate pile

PLAN OF TYPICAL ROOTBRIDGE PLATFORM LAYOUT

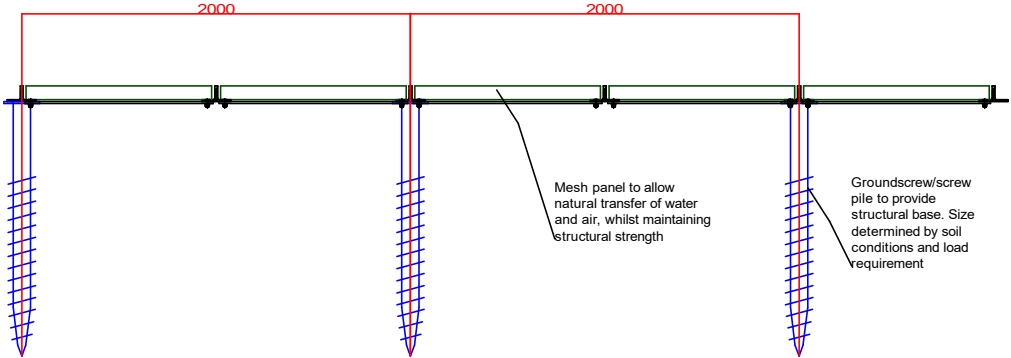
Scale 1:40



Panel Omitted to allow tree trunk through

SECTION B-B

Scale 1:40



Mesh panel to allow natural transfer of water and air, whilst maintaining structural strength

Groundscrew/screw pile to provide structural base. Size determined by soil conditions and load requirement

SECTION A-A

Scale 1:40

Notes:

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2. WORK TO FIGURED DIMENSIONS ONLY.
3. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECT'S, SERVICE ENGINEER'S AND GREEN GRID SYSTEMS DRAWINGS AND SPECIFICATIONS.

C	-	-	-
B	-	-	-
A	INITIAL DRAWING	-	-
REV	DESCRIPTION	BY	DATE

STATUS: CONSTRUCTION ISSUE

C:\Users\Lewis H\Pictures\GGSsystems\GGS GW lrg.jpg

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www.greengridsystems.com

CLIENT:	-
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ARCHITECT:	-
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SITE:	-
	-

TITLE: ROOTBRIDGE SYSTEM LIGHT
DUTY 15kN PLAN, SECTIONS

SCALE AT A3: AS SHOWN	DATE: 05/09/16	DRAWN: LH	CHECKED: LH
PROJECT NO: -	DRAWING NO: GGS-17221	REVISION: A	

