OBJECTIVE
TREE CONSULTANCY

BS5837 TREE SURVEY REPORT & PRELIMINARY CONSTRAINTS ANALYSIS

Site Address: The Leach Pottery, Higher Stennack, St.Ives, Cornwall, TR26 2HE

Client: The Leach Pottery

Commissioning Agent: Down Jones Architects Ltd

Ref: Leach5837.3.22

Dated: 8th March 2022

Prepared by:

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BS5837 TREE SURVEY REPORT

Site Name: The Leach Pottery

CONTENTS

APPENDICES

1.0 Client Instructions

1.1 The Client referred to in this report is “The Leach Pottery” which is the name of the organisation and survey area. The survey area has been identified within this report as “The Leach Pottery”. The Client has instructed that I undertake and provide the following arboricultural consultancy services:

- Tree survey carried out in accordance with BS5837:2012 Trees in relation to design, demolition and construction – Recommendations.
- Reporting on survey findings, observations and project evaluation
- Tree Constraints Plan (above and below ground tree constraints, daylight shading)
- Arboricultural Impact Assessment
- Draft Tree Protection Plan Arboricultural Method Statement – Tree Protective Fencing

1.2 The detailed service offer Ref: Leach5837.Q.1.22 was provided to the commissioning agent to by email on the 6th January 2022. The service offer and quotation was accepted by the commissioning agent in an email exchange on the 10th January 2022.

1.3 This report has been prepared in accordance with the Clients instructions by:-

Oliver Bennett Dip Arb (RFS) M Arbor A
Arboricultural Consultant
Objective tree Consultancy

2.0 Introduction

2.1 Provisional project details have been provided to Objective Tree Consultancy in advance of the BS5837 tree survey being undertaken to define the survey areas and inform the AIA.

2.2 Based on the information provided, it is my understanding that the project aims include the following elements:

- Demolition of 2 x existing structures in southern section of site
- Single storey extension to existing pottery (south side of existing)
- Replacement two storey building incorporating kilns, workshops & office
- Covered walkway on eastern side of existing pottery

2.3 The purpose of the BS5837 tree survey is to identify and record the quantity, quality and contribution of trees within the project area to assist with the design process.

2.4 This report will assist the client with the submission of a planning application to Cornwall Council, who are the Local Planning Authority.

3.0 Desktop Assessment - Findings

3.1 Location

3.1.1 The survey area is located at site Grid Reference: SW508399.

3.2 Soils

3.2.1 The underlying geology has been evaluated using the British Geological Survey "Geology of Britain viewer (Classic)" public access mapping system, available via the following link:

http://mapapps.bgs.ac.uk/geologyofbritain/home.html

3.2.2 The geology is described as:

"*Mylor Slate Formation - Metabasalt. Metamorphic Bedrock formed approximately 359 to 383 million years ago in the Devonian Period. Originally igneous rocks formed by eruptions of silica-poor magma. Later altered by low-grade metamorphism".*

3.2.3 The soils have been evaluated using the Cranfield Soil and Agrifood Institute 'Soilscapes' interactive mapping system available via the following link:

http://www.landis.org.uk/soilscapes/

3.2.4 The soils are described as:

"Freely draining slightly acid but base-rich soils"

3.2.5 This analysis is provisional in nature and relies on third-party data. Further detailed site investigation and soil analysis may be required to assist with detailed designs or structural engineering processes.

3.3 Access

3.3.1 The site is currently accessed from the B3306 which is public highway. This highway route is suitable for construction traffic.

3.4 **Planning Constraints**

3.4.1 Based on a check with the Cornwall Council "Interactive Map" on the 7th March 2022, the survey area is not within a Tree Preservation Order. Link below:

https://map.cornwall.gov.uk/website/ccmap/?zoomlevel=11&xcoord=150824&ycoord=39906&wsName=ccmap&layerName=Tree%20preservation%20order%20areas:Tree%20preservation%20order%20points

3.4.2 A Tree Preservation Order is applicable to tree OST4 which is located in third-party ownership to the south-east of the project area.

3.5.2 Based on a check with the Cornwall Council Interactive Map, the survey area is not within a Conservation Area.

4.0 Survey Method & Report Outcomes

4.1 Surveyor Access

4.1.1 Access was agreed following consultation with the Client. I visited the property on the 21st February 2022 and carried out the required tree survey during an unaccompanied assessment of the project area.

4.1.2 Where access or assessment has been restricted due to the site constraints, this will be set out within the survey data.

4.1.3 Access to third-party property was not secured or agreed prior to undertaking the survey. I did not enter third-party land during the tree survey process and observations are limited to publicly accessible space or vantage points from within the clients property.

4.2 Tree Survey Methodology

4.2.1 The tree survey was undertaken as a ground level, walkover visual assessment of the project area as defined by the site boundaries – see Section 2.1 above. No tissue samples or invasive site investigations were undertaken.

4.2.2 Tree positions have been obtained with the use of a hand-held Trimble Juno T41 GPS datalogger. A topographic survey of the property was provided and used to plot trees within the survey area. The topographic survey was not georeferenced.

4.2.3 The tree survey has been undertaken in accordance with Section 4.4 of BS5837.

4.2.4 Trees within the survey have been categorised in accordance with Section 5.5 of BS5837 – see Appendix 2 - BS5837 Table 1 cascade chart.

4.2.5 Individual trees are identified with a unique reference number on the site plans.

4.2.6 Groups have been categorised in accordance with BS5837 based on the dominant tree species and age range. Trees within groups are identified with a unique reference number within Section 5.0 of this report and within the accompanying plans.

4.2.7 Trees in third-party ownership are identified with the prefix ‘OS’. Third-party owned trees have been allocated a unique reference number as per section 4.2.5 & 4.2.6 above.

4.2.8 Estimated tree dimensions for trees within third-party ownership are provided to the best of my ability and should be treated as estimates and revised if additional data becomes available.

4.3 Canopy Data

4.3.1 Canopy spread for individual trees has been measured on the four cardinal compass points where required.

4.3.2 Tree canopy extent for groups has been plotted using GPS and cross referenced with a linear tape for accuracy. Survey data in Section 5 of this report will provide average crown spreads for groups.

4.4 Root Protection Areas

4.4.1 Root protection areas will be identified for modification where the ground conditions preclude root growth as stated within the survey schedule.

4.5 Tree Height

4.5.1 Individual trees have been accurately measured with a laser rangefinder where a direct line of sight of the tree is available. Estimated dimensions are provided where required.

4.5.2 Tree attributes for groups are set out within the overall group description with heights provided as an average. Individual tree attributes are recorded and set out in the schedule where required to assist with project planning and delivery.

4.6 Reporting

4.6.1 Tree Constraints Plans have been prepared based on the tree survey data set out in Section 5 of this report.

4.6.2 A Tree Protection Plan has been prepared based on the project proposals. This relates to Appendix 3 of this report and the arboricultural method statement for tree protective fencing.

4.6.3 All plans provided in support of this report are separate 'pdf' copies which are locked to prevent editing. Plans must be reproduced at the stated scale in colour to be correctly interpreted.

4.6.4 Following the Arboricultural Impact Assessment should any arboricultural method statements (other than Tree Protection) be required they will be produced as separate documents outside of this report.

4.6.5 This report contains technical terms which may be unfamiliar to the reader. I have used plain English and simple terms of reference and explanation to assist the reader. My aim is to ensure you have a clear idea of what I am saying and why.

4.6.6 An on-line glossary of technical terms commonly used within my reports is available by clicking the link below:

http://objectivetreeconsultancy.co.uk/information-resource

4.6.7 Objective Tree Consultancy has an Environmental Policy which seeks to reduce unnecessary printing in order to minimise the use of resources. Where possible, links to on-line sources of information will be provided in accordance with that policy.

5.0 BS5837 Tree Survey

Site name: The Leach Pottery

Survey Date: 21st February 2022 | **Weather: Dry, overcast, light winds**

Surveyor: Oliver Bennett, Arboricultural Consultant

Tree ID	Tree species	Age	Height (M)	Lowest significant branch height / Orientation	No of stems	Stem D@1.5m (mm)	Crown Spread				Condition / Comments	Category / Sub-Category		Life Expectancy Years
							N	E	S	W				
T1	Leylandii (X Cupressocyparis leylandii)	Y	8.8		6	190	2	2	3.3	2.3	• Good physiological and structural condition. • Remove for development	C	1;3	10 to 20 yrs
T2	Sakura Cherry (Prunus sp)	N/P	3.5		1	50	1.5	1.5	1	1.5	• Transplant. Position within site to be identified	C	1	20 to 40 yrs
T3	Sycamore (Acer pseudoplatanus)	Y	10.4	3m W	1	280	3.1	1.5	3.5	4.8	• Crown lifted above parking area. • Stem buried approx 300mm, no buttress flare. • Fair structural condition due to suppression, ground level change and pruning. • Good physiological condition	B	2	20 to 40 yrs
T4	Whitebeam (Sorbus aria)	S/M	8.5	1.3m E	1	470	3.5	3.2	2.7	3.6	• Canopy height 2.5m above car park. • Fair structural condition due to pruning works and removal of large diameter branches. • Multiple branches removed on W side.	B	2;3	20 to 40 yrs

T5	Cherry (Prunus sp)	N/P	3		1	40	1.3	50	0.7	1.2	• Transplant. Position within site to be identified	C	1	20 to 40 yrs
T6	Beech (Fagus sylvatica)	Y	9.8	3m NW	2	340, 300	5	5	4.5	4.5	• Ivy restricted inspection. • Good physiological condition. • Crown exhibits even bud distribution. • Sever ivy. • Canopy height 2-2.5m gl+. • Remove for development	B	2;1	20 to 40 yrs
T7	Sycamore (Acer pseudoplatanus)	S/M	11.5	3m N	1	620	7.4	6.8	4.7	5.3	• Good physiological and structural condition. • Canopy height 4m gl+ above car park. • Branch removed on NE side, poor pruning wound placement and size.	B	2;3	20 to 40 yrs
T8	Sweet Gum (Liquidambar styraciflua)	Y	5.2	NW 1.7m	1	170	2.4	2.8	2.2	1.5	• Good physiological and structural condition. • Prune to clear existing structure by 0.5m on N side. • Canopy height 1.9m gl+.	B	1	20 to 40 yrs
T9	Common Ash (Fraxinus excelsior)	S/M	12.6	4m E	1	600	8.6	6	6.4	5.5	• Good physiological and structural condition. • Ivy restricted inspection. • Canopy height 2-3m gl+. • No visible ADB symptoms but limited epicormics on branches. • Roots displacing roadside boundary wall.	B	2;3	20 to 40 yrs
T10	Cherry (Prunus sp)	Y	5.5	1.3m S	1	80	1.4	1.4	2.9	2.7	• Fair structural condition due to asymmetrical crown form. • Good physiological condition.	C	1	20 to 40 yrs

T11	Cherry (Prunus sp)	N/P	3		1	30	0.5	0.4	1	1	• Good structural and physiological condition. • Transplant. Position within site to be identified	C	1	20 to 40 yrs
T12	Sycamore (Acer pseudoplatanus)	S/M	10.6	3.5m S	1	520	4.8	6.5	4.5	3.5	• Ground levels raised on W side. • No buttress flare visible. • Canopy height 6m gl+ on W side, crown lifted. • Good physiological and structural condition.	B	2;3	20 to 40 yrs
OST1	Sycamore (Acer pseudoplatanus)	S/M	10.4		1	350	4.5	4	2.5	3.5	• Canopy height 7m gl+ on W side. • Limited rooting environment. • Estimated dimensions. • Modify RPA to exclude from watercourse	C	2	10 to 20 yrs
OST2	Sycamore (Acer pseudoplatanus)	Y	2.5								• No constraints to project area. • Topped with no remaining branches or regrowth. • Modify RPA to exclude from watercourse			
OST3	Sycamore (Acer pseudoplatanus)	S/M	13.5		2	500, 350	5.5	6	5.5	5.5	• Limited rooting environment. • Canopy height 5m gl+ on W side. • Currently 1.5m clearance above roof. • Modify RPA to exclude from watercourse	C	2;3	10 to 20 yrs
OST4	Macrocarpa (Cupressus macrocarpa)	M	15		1	1300	9.5	9.5	10.2	9	• Good physiological and structural condition. • Canopy height approx 4 - 5m gl+ on W side. • Minor deadwood.	B	2;3	20 to 40 yrs

											• No RPA constraints to W. Modify RPA to exclude from watercourse			
G1	Sycamore, Silver Birch	Y									• See individual attributes	C	2,3	10 to 20 years
G1.1	Silver Birch (Betula pendula)	Y	11.5		1		2.8	3.3	1.5	1.5	• Poor structural condition due to poor pruning. • Large diameter branch removed on E side, 1.4m gl+, 250mm diameter. • Poor suppressed crown form. • Good physiological condition. • Canopy 3m gl+	C	3	10 to 20 yrs
G1.2	Sycamore (Acer pseudoplatanus)	Y	10.8	4.5m E	1	350	2.3	5.5	4.5	4.3	• On Cornish hedge. • Pruned to clear streetlight and structure. • Ivy restricted inspection. • Fair structural condition. • Good physiological condition.	C	2	10 to 20 yrs
G2	Alder, elm, hazel, field maple	Y	4								• Coppice elm at N end of group. • Canopy 1.5-1.8 from railing. • Alder likely to outgrow position – consider removal and replace with native hedge around drainage feature for screening	C	2	10 to 20 yrs
G2.1	Common Alder (Alnus glutinosa)	Y	6.5		1	110								
G2.2	Common Alder (Alnus glutinosa)	Y	7.2		1	130								
G2.3	Common Alder (Alnus glutinosa)	Y	7		1	100								
G2.4	Common Alder (Alnus glutinosa)	Y	8.5		1	220	3	3	2	3	• Modify RPA to exclude from watercourse			

6.0 Photos

Fig 1. T1 in existing garden

Fig 2. T2 Sakura Cherry

Fig 3. T3 right & T4 left of image

Fig 4. T3 by existing geogrid pathway

Fig 5. T5 newly planted Cherry

Fig 6. G1 with light suppressed form

Fig 7. T7 on boundary hedge

Fig 8. T8 by existing pottery entrance

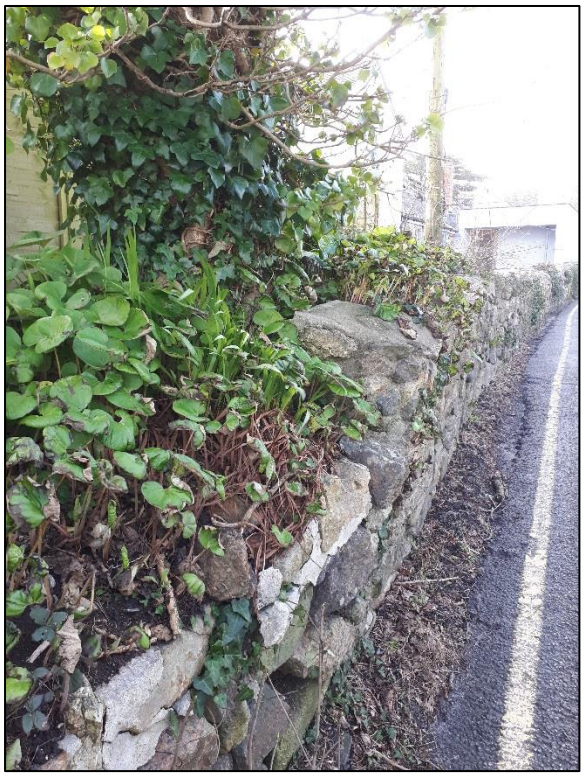


Fig 9. T9 direct damage to boundary wall

Fig 10. T9 on site boundary

Fig 11. G4 by drainage infrastructure

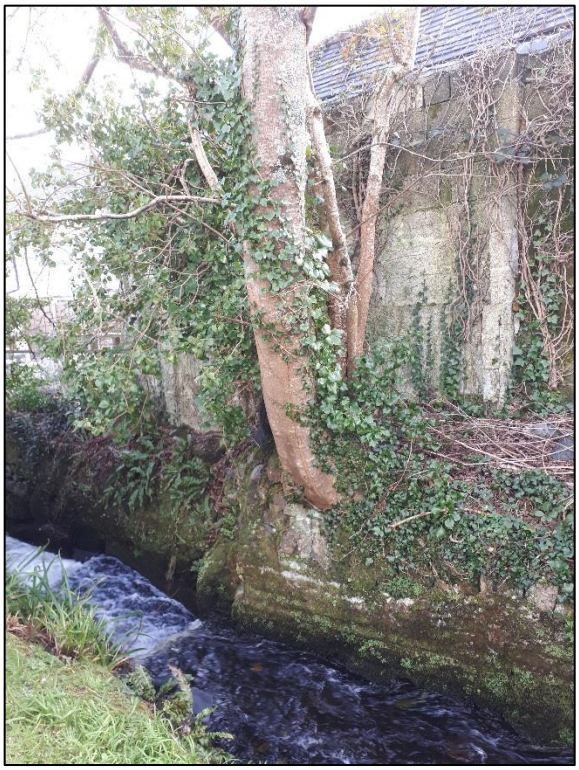


Fig 12. OST1 by watercourse

Fig 13. T12 on pottery side of watercourse

Fig 14. OST4 relationship to pottery

Fig 15. Survey area viewed from south-west (T1

7.0 Findings

7.1 Observations

7.1.1 T1 is located within close proximity to the existing dwelling. The root protection areas should be modified to exclude roots from beneath the structure.

7.1.2 Lightweight structures (permanent) are located within the theoretical root protection areas of T3, T4, T6 & G1. Foundation depths are unknown and root protection areas have not been modified.

7.1.3 A geogrid infilled with gravel is present in part of the root protection areas of T3 & T4. The depth of the grid is unclear. Geogrids are not suitable for load displacement. The area is not obviously in use for vehicle parking.

7.1.4 An area of gravel surfacing is in use for parking within the root protection areas of G1 & T7. The depth of surface treatment is unknow but could remain porous where not compacted by vehicle access..

7.1.4 T2, T5 & T10 are newly planted or recently established cherry trees which have been donated to the Leach Pottery. The trees should be regarded as being important and efforts made to successfully transplant he trees elsewhere on site.

7.1.5 T9 does not exhibits any obvious symptoms of Ash Dieback (Hymenoscyphus fraxineus), but I accept that the identification of symptoms in the winter months is difficult in the early stages of infection. T9 is causing direct damage (root expansion) to the boundary wall below the stem base. Stones have been displaced from this structure.

7.1.6 G2 includes large ‘forest’ type trees (Common alder) which are planted in close proximity to the flood defence infrastructure. The spatial relationship of the trees to structures is less than ideal and some of the trees in the group are not performing as well as I would expect.

7.1.7 T12 is growing on the bank to the north-west of the watercourse channel. The root protection area should be modified to exclude it from the permanently waterlogged channel, but it cannot be modified due to the presence of the existing building.

7.1.8 The root protection area of T12 is covered in part by an existing concrete pathway which provides a stable means of pedestrian access to the eastern side of the building.

7.2 Amenity & Contribution

7.2.1 T1 is a non-native conifer which is clearly visible from the immediate area within the street scene, but is not significant in terms of height or mass. T1 is more noticeable during the winter months due to its evergreen colouration. In my view, its contribution is locally notable but not significant.

7.2.2 T6, T7 & G1 are also UK native or naturalised species, with G1.1 being locally native. These trees are clearly visible within the street scene and make a positive contribution to The Stennack.

7.2.3 T6 & T7 are functioning as individual trees, but G1 is younger and reliant on its neighbour for companion shelter. Currently , the trees are locally notable and have a more significant visual impact due to their size and combined mass, T7 being the largest of the trees.

7.2.4 T2, T5, T10 & T11 are of internal importance and currently make no wider contribution.

7.2.5 T4 & T5 are largely of internal importance and help to fragment and soften the built environment in which they are growing. The trees are locally notable but do not make a significant amenity contribution due to their size and position.

7.2.6 T8 is currently of internal value and is within a designed landscape. Due to its size, its wider contribution is limited but it has potential for future growth and provision of amenity.

7.2.7 T9 is prominently positioned within the street scene and makes a locally notable contribution to The Stennack on the approach from the north. The future contribution is questionable, pending further monitoring for Ash Dieback. Currently, T9 makes a positive contribution to the local area.

7.2.8 Trees within G4 make a modest contribution to the local area. The common alder are likely to make a limited future contribution due to their proximity to an engineered drainage feature.

7.2.9 T12 makes a limited wider contribution being screened from view by structures within and on third-party land around the survey area.

7.2.10 Off-site trees OST1 – OST4 remain outside of the project area and are unaffected by any of the proposals. The contribution of the trees is not considered relevant to this report or the project outcomes.

8.0 Arboricultural Impact Assessment

*Note: this assessment is provisional in the absence of elevations or overlaid electronic versions of designs

Table 1. Plans provided to Objective Tree Consultancy

Drawing Title	Date	Drawing No	Revision	Format
Proposed Layout	14.2.22	488/SK/004	C	
Proposed Layout Ground Floor	14.2.22	488/SK/010	C	PDF

Table 2. Arboricultural Impact Assessment & Mitigation

Proposed Activity	Impact Type	Mitigation
Daylight shading	• Limited impacts to the new extension to the south of the existing pottery	• Fenestration details to maximise available daylight • Use of roof lights to be considered
Removal of Trees (required for proposed development)	• T1 – loss of evergreen tree from street scene. Limited local impacts to amenity provision. • T6 – loss of beech tree from street scene. Limited local impacts to amenity provision. • T2 & T5 – no wider impacts as trees of internal value.	• T1 & T6 - No viable mitigation within existing site provision due to limited soft landscape areas • Potential for off-site contribution subject to agreement with third-party landowners • T2 & T5 transplanted within site boundary to viable planting positions.
Demolition / Construction Access	• Risk of mechanical damage or compaction to root protection areas from temporary demolition and construction access	• Demolition and construction process to avoid access into project area via existing car park or limited to pedestrian access only

		• Draft Tree Protection Plan provided (may be subject to review as part of Construction Management Process)
Contractor Parking	• Risk of mechanical damage or compaction to root protection areas from contractor parking	• Contractor parking to be defined within curtilage of property within existing parking turning areas as which do not include root protection areas • Tree protective fencing set out as per Draft Tree Protection Plan and in accordance with Appendix 3. • Provision of off-site car parking for contractors
Demolition of structures	• Risks of damage above and below ground to T3, T4 & G1	• Arboricultural method statement required for works to include methodology for access, machine operation, temporary ground protection and arboricultural watching brief.
Underground services	• No service routes identified at this stage	• Connect to existing service runs where practicable • Contractors to liaise with and agree any method of trenching / ground protection with the project arboriculturist for any underground service installation or upgrading of existing services within a root protection area • Arboricultural method statements provided as required • As a minimum standard, contractors to adhere to NJUG Volume 4 “Guidelines for the Planning, Installation and Maintenance of

		Utility Apparatus in Proximity to Trees" (NJUG)
Construction Process	• North elevation (new mixed-use building on south section of site) – potential conflicts with external access to new build and canopy of T3 & G1	• Site setting out (ground floor plan) to include arboricultural advice on any access facilitation pruning
Surface treatments	• Potential conflicts with root protection areas of T3, T4 & G1	• No ground level changes within root protection area unless supported by a arboricultural method statement. • Any proposed changes shall use porous, load spreading materials or suspended walkways to ensure the soil rooting environment remains viable
Tree Protection	• Failure to install in correct positions, prior to commencement or to correct specification • Damage to retained trees	• Draft Tree Protection Plan to be provided to appointed contractor • Arboricultural watching brief with pre-commencement sign off of tree protection by Project Arboriculturist • Bi-monthly monitoring of site with record of compliance to be maintained by Project Arboriculturist and submitted to LPA on project completion for discharge of planning conditions

9.0 Recommendations

9.1 Trees to be removed (based on proposed designs)

9.1.1 T1 – T6 (permanent loss)

9.1.2 T2 & T5 (removed via transplanting)

9.2 Trees requiring management works

9.2.1 T8, T9, G2

9.3 Trees to be retained

9.3.1 T3, T4, T7, T8, T9, T10, T11, T12, G1, G2.

9.3.2 Trees in third-party are outside of the project area and the control of the client.

9.4 Temporary Tree Protection

9.4.1 Temporary tree protection has been specified within the Arboricultural Method Statement in Appendix 3 of this report. This specification relates to the fencing positions indicated on the Draft Tree Protection Plan map filename: TPPV1 . Any subsequent revisions to this plan will be identified subject to advice from the project arboriculturist.

9.4.2 Trees which are retained must be enclosed within tree protective fencing to form a construction exclusion zone. Within the construction exclusion zone, no development or activity associated with the development is permitted unless it is informed and supported by an arboricultural method statement.

9.5 Arboricultural Method Statements

9.5 An arboricultural method statement will be required for the following:

- Demolition access requirements
- Temporary tree and ground protection – demolition
- Construction access requirements
- Access facilitation pruning
- Special surfaces within root protection areas

9.6 Tree Work Operations & Protected Species

9.6.1 Pruning and transplanting operations are host tree specific and works must be planned, taking into account natural processes and tree specific phenology as appropriate. Season specific tree work will be specified against numbered trees within Section 5 of this report where necessary.

9.6.2 All tree works must be carried out in accordance with good arboricultural practice and follow the principles of BS3998:2010 ‘Tree Work – Recommendations’.

9.6.3 Tree transplanting shall follow the principles of British Standard BS4043:1989 “Recommendations for transplanting root-balled trees”.

9.6.4 Care must be taken during any works to trees, to avoid damage or disturbance to birds during the nesting season. In Cornwall the bird nesting season is typically from March and may extend to September, with many species producing second to third broods in appropriate habitat. Under the terms of the Wildlife and Countryside Act 1981 (As Amended in 1986 and 1991) Part 1 (1), it is an offence intentionally to take, damage or destroy any wild birds or its nest while being built or in use, or to take or destroy its eggs or chicks. A pre-commencement site assessment to check for the presence of nesting birds or protected species should be undertaken within 48 hours of works commencing.

9.7 Tree Work Contractors

9.7.1 The project will require the use of competent arboriculturists due to the complexity / proximity of the site features. Arboricultural Association Approved Contractors and additional advice on choosing your arborist are provided in the links below:

https://www.trees.org.uk/ARB-Approved-Contractor-Directory

https://www.trees.org.uk/Help-Advice/Public/Choose-your-Tree-Surgeon

10 Conclusions

10.1 The redevelopment of The Leach Pottery will have a localised impact on the limited tree asset within the site boundary. In arboricultural terms, there are no wider landscape impacts from the project.

10.2 The most significant impact is the permanent loss of T6 which is a moderate category common beech. T6 is locally notable and visible within the street scene, but is not distinct as an individual tree when viewed against the backdrop of G1 and T7. In arboricultural terms the impact of removing T6 is broadly acceptable provided the retained trees are retained without further future pressure from the development and usage of the site.

10.3 Trees T2 & T5 are shown as removed but these can be transplanted elsewhere within the property. Opportunities to relocate the trees in the north of the site within existing soft landscaped areas will become available, with the management of G2 and the coppicing of the common alder.

10.4 Trees T3, T4, T7 & G1 may be subject to pressure during the demolition and construction phase, which can be mitigated for by tree protection measures and collaborative working between the design team, arboriculturist and the appointed construction contractor.

10.5 Retained trees in the north of the site are not subject to any pressure from development and are retained with limited management.

10.6 In my professional opinion, the project is broadly acceptable in arboricultural terms, subject to the provision of tree protection and any additional arboricultural method statements specified in the recommendations (Section 9.5) of this report.

Report Ends

Appendix 1

Report Limitations

- *The content, conclusions and recommendations in this report are valid for a period of one year from the date of survey. Trees are both living organisms and dynamic structures subject to change; the validity period may be reduced should changes in condition occur to the subject(s) of the report or surrounding area e.g. fire, flood, chemical spill, mechanical damage etc.*

- *All recommendations are given in the context of the site's current usage and condition; any change in use or activity therein would dictate a re-survey and updated assessment which may invalidate this report.*

- *Should the client knowingly withhold information which is essential to the tree survey process or has a material bearing on the outcomes of any recommendations therein, this may affect the validity of the report.*

- *This report does not constitute a 'safety' inspection and has not considered issues of tree risk or hazard management*

- *Access to third-party land was not agreed prior to the tree survey being undertaken. Any trees identified on third-party property have been assessed within the limitations of publicly accessible vantage points and estimated positions within any site plans*

- *Assumed values and estimated dimensions have been provided to the best of the surveyors' abilities.*

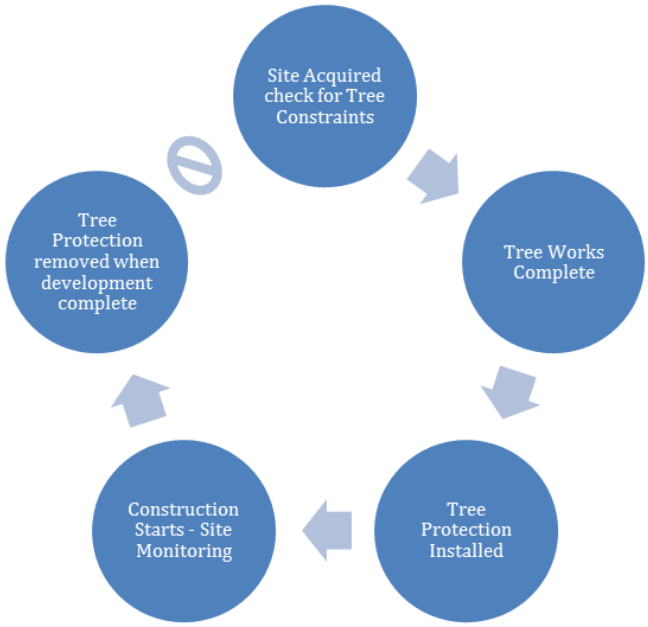
- *This report remains the intellectual property of Objective Tree Consultancy unless otherwise stated.*

Appendix 2
BS5837 Table 1.

TREES UNSUITABLE FOR RETENTION				
Category and Definition	**Criteria**			**Identification on Plan**
<u>Category U</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 (eg, 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. *NOTE: Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.*			
TREES TO BE CONSIDERED FOR RETENTION				
Category and Definition	**Criteria**			**Identification on Plan**
	1. Mainly arboricultural qualities	2. Mainly landscape qualities	3. Mainly cultural values, including conservation	
<u>Category A</u> 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 (eg, 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, veteran trees or wood-pasture).	
<u>Category B</u> 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 (eg, 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.	
<u>Category C</u> Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm.	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.	

Appendix 3

Arboricultural Method Statement
Tree Protective Fencing – BS5837 Fig 2 & Fig 3



The site manager shall be aware of the Tree Protection Plan and its requirements before the site becomes operational. This is critical to work planning and site management.

Tree Work Contractors & other contractors, subcontractors and any other persons entering and operating within the site shall be made aware of any tree constraint areas and the limitations they place on the workspace. Site inductions shall include a component on any tree protection issues.

All trees that are being retained on site must be protected by barriers (see Fig 2 & 3 below) and/or ground protection prior to:

- *invasive ground site investigations, boreholes, trial pits etc*
- *materials or machinery are brought onto the site*
- *soil stripping, service installation, infrastructure works, demolition or construction works*

Should the Tree Protection Plan refer to the protection of hedges, structural planting or future soft landscape areas, these must also be protected before the site becomes operational.

All tree protective fencing must be fit for purpose and maintained in good order for the duration of the development.

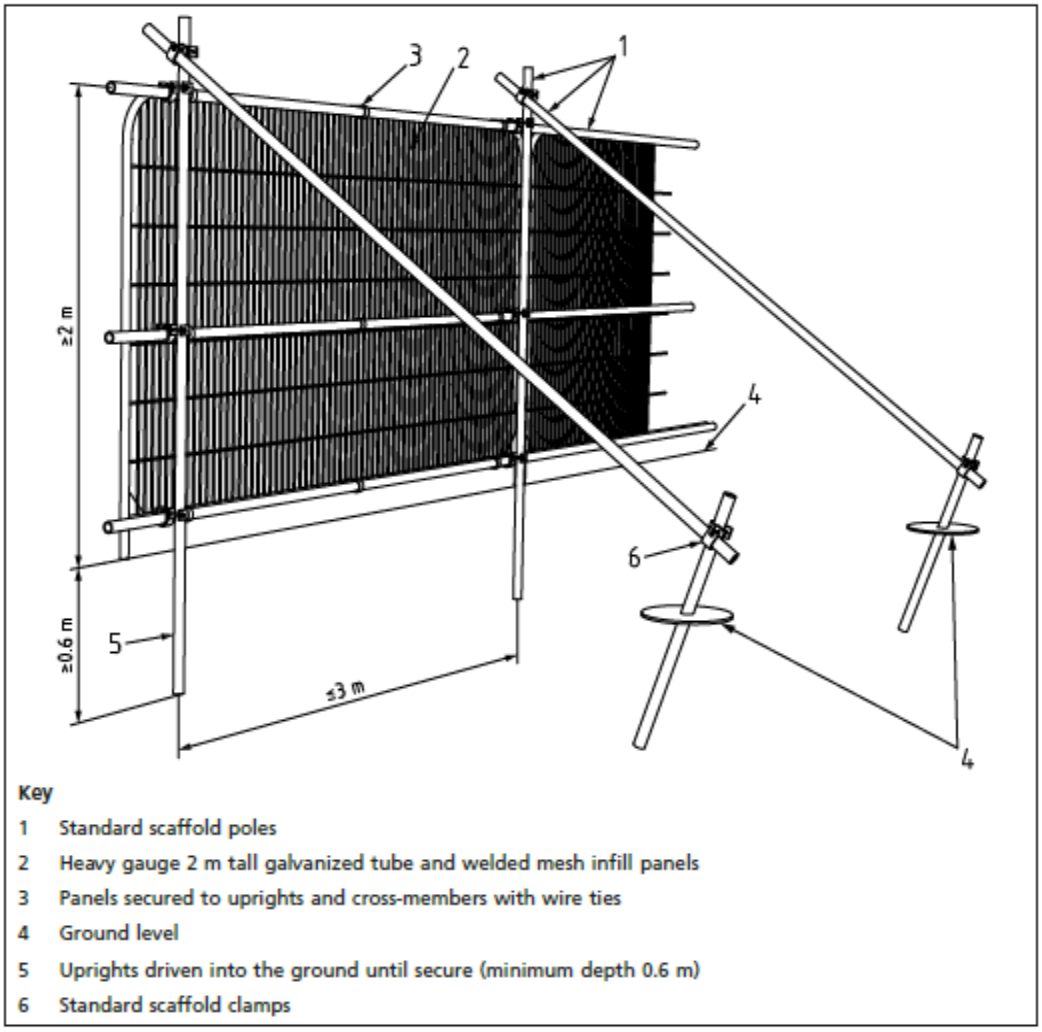
The ground within the protected area shall not be used for any activity in relation to the development including:

- *Excavations*
- *Raised or lowered levels*
- *the provision of services*
- *storage of any materials, tools or vehicles*
- *vehicular traffic or parking / turning*

Site Management

Retained trees must be separated from the operational area of the site by protective barriers. The default specification for tree protective fencing is set out below:

Figure 2 **Default specification for protective barrier**



Key

1 Standard scaffold poles
2 Heavy gauge 2 m tall galvanized tube and welded mesh infill panels
3 Panels secured to uprights and cross-members with wire ties
4 Ground level
5 Uprights driven into the ground until secure (minimum depth 0.6 m)
6 Standard scaffold clamps

Tree protective fencing shall be identified as a constraint to site operations by suitably worded signage. An example sign can be found on my website :

http://objectivetreeconsultancy.co.uk/information-resource

Appendix 4

Terms of Reference

Key to Tree Survey Schedule (Abbreviations)

Age

Age Class	
Newly Planted *(within 5 years of planting)*	*NP*
Young *(first third of life expectancy)*	*Y*
Semi-mature *(second third of life expectancy)*	*SM*
Early-mature *(life stage between semi-maturity and maturity – stem wood growth stage, reduced branch extension growth)*	*EM*
Mature *(within final third of life useful life-expectancy retaining vitality*	*M*
Over-mature *(symptoms of declining vitality and impaired condition)*	*OM*
Veteran *(containing features of biodiversity interest related to age)*	*V*

Abbreviations

ADB – Ash Dieback

gl – ground level

gl+ - above ground level

Compass Points

N (North)	*S (South)*
NNE (north-north-east)	*SSW (South-south-west)*
NE (North-east)	*SW (South-west)*
ENE (East-north-east)	*WSW (West-south-west)*
E (East)	*W (West)*
ESE (East-south-east)	*WNW (West-north-west)*
SE (South-east)	*NW (North-west)*
SSE South-south-east	*NNW*

Tree Attributes

Ivy – an evergreen plant which can provide many wildlife habitat benefits but may create unseasonal crown weight in trees during the winter months. This can affect trees, in particular smaller hedgerow trees, once established. Tree inspections (visual) can be impeded by this plant, and where an inspection cannot be carried out for this reason, severance will be recommended.

Bats – Potential Roost Features (Bat PRF) – features which may provide potential roosting features for bats (transient or in regular use). All species of bats are protected in law.

Appendices End