Arboricultural Assessment

for

Former School at
Page Road
Staple Hill, Bristol

Prepared by
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1.0 Date of survey

1.1 November 2017

2.0 Surveyor

2.1 Tim Pursey

3.0 Instructions

3.1 As a result of a planning application, I am instructed to undertake an arboricultural assessment and to prepare a report assessing the impact that the proposed development will have on trees growing at the site.

3.2 The report includes:

- An indication of the constraints placed on the design by the trees on site
- Site plan detailing the existing trees on site – drawing TP 2306/1711/TCP appended
- A schedule indicating the tree survey results
- A preliminary tree protection plan – drawing TP 2306/1711/TPP appended

4.0 Report limitations

4.1 All inspections were made from ground level, using binoculars where necessary. Should a more detailed inspection, by climbing or by elevated platform, be required then this will be highlighted within the survey recommendations.

4.2 Enquiries made with South Gloucestershire Council reveal that two trees, London Plane T1 and Oak T2 are both the subject of a Tree Preservation Order (TPO). Permission will need to be obtained from the local authority prior to undertaking any works to these trees.

4.3 Trees are living, dynamic organisms. Their health and overall condition changes as the trees grow and can be affected by external conditions. For this reason the condition survey and any recommendations given are valid for a period not exceeding one calendar year from the date of issue of this report.

4.4 The method statement and tree protection plan in this document are provisional and subject to confirmation.

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5.0 Proposals

5.1 It is proposed to remove an existing school building and to construct a new apartment block with associated car parking.

5.2 No trees are proposed to be removed to facilitate works.

6.0 Tree survey

6.1 See schedule of tree survey results.

7.0 Assessment of Impact

7.1 The majority of trees surveyed grow within the existing grounds. London Plane T1 grows outside the property boundary.

7.2 Tree T1 is a large mature specimen which has been subject to some reduction in the past. Given its size, its roots inevitably extend some distance into the subject site. This area is mostly covered in tarmac and formed part of the school playground.

7.3 It is not possible to pinpoint with any certainty the extent and morphology of root growth from this tree so care will be required when removing tarmac to ensure no unnecessary root damage occurs.

7.4 The footprint of the proposed new building occupies part of the root protection area (RPA) of tree T1. This totals around 90m^2 out of a total RPA for the tree of some 707m^2, or approximately 12.5% of the total.

7.5 London Planes are notoriously tough trees hence the reason they are to be found growing in city centres surrounded by underground services, drainage etc. Removal of 12.5% of the total theoretical RPA from this tree is unlikely to significantly affect the tree.

7.6 Existing tarmac playground between the new building and the tree will need to be removed with care should be removed only when absolutely necessary in order that existing tarmac can remain as ground protection whilst works are ongoing.

7.7 Trees T2-T5 at the rear of the property will remain. The RPA of Oak T2 extends some distance into the area proposed for parking. This area is currently tarmacked so use of this space for parking is unlikely to affect the tree significantly.

7.8 In common with above, tarmac in this area should remain to act as ground protection whilst works are ongoing and the final surface installed at the end of the job.

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8.0 Provisional Method Statement to Mitigate Impact

8.1 **Tree Works**
The canopy of Oak T2 will be crown lifted to 3m where its canopy overhangs the new parking spaces. London Plane T1 will be pruned slightly to provide 3m of clearance from the new apartment block. No trees are proposed for removal.

8.2 All tree works will be carried out in accordance with BS3998:2010 and undertaken by persons both experienced and qualified to do so.

8.3 **Protective Fencing**
The retained trees T2-T5 will be protected from the impact of construction by protective fencing to be erected in accordance with BS5837:2012 Trees in Relation to Design, Demolition and Construction – Recommendations.

8.4 This fencing is designed to protect all parts of the trees, both above and below ground. It will be erected using Heras panels erected in a conventional fashion and braced as appropriate to ensure stability. It is particularly important that the fencing be completely rigid and immobile.

8.5 The fence will be erected in the positions shown on the attached plan, TP 2306/1711/TPP and will be erected before <u>any</u> demolition work commences. The protective fencing will remain in situ until all demolition and construction works are completed.

8.6 The protective fencing will be clearly marked indicating its purpose to all persons on site. Signs will be minimum A3 in size and will clearly state that the protective fencing will not be moved under any circumstances. The protected area inside the fencing will be considered sacrosanct and no entry into this area will be permitted for *any* reason except to maintain the protective fencing. No excavation is permitted, no changes in ground level, no plant will track across this area at any time, and no storage of any materials within this area will be permitted.

8.7 **Service Installation**
Any services will be installed so as to avoid the need for excavation within the rooting area of any retained tree.

8.8 **Ground Levels**
Ground levels within the rooting area of any retained tree will remain unaltered unless otherwise specified by the project arboriculturist.

8.9 **General**
No storage or mixing of cement/concrete will be permitted anywhere within 10 metres of any retained tree. Account will be taken of any slopes in order to avoid the possibility of cement washings running into the rooting areas of retained trees.

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8.10 Oil, bitumen or other material likely to be injurious to a tree should not be stacked or discharged within 10 metres of the trunk. Materials generally should not be stacked or discharged within 5 metres of the trunks.

8.11 **Arboricultural Supervision**
A pre-commencement meeting will be held between the project arboriculturist, site manager and possibly the local tree officer. The purpose of such a meeting will be to finalise protective measures, to ensure that protective fencing is adequate and has been erected in the correct positions and to ensure contractors are fully aware of the need to comply with the contents of this document.

8.12 It is particularly important that this meeting take place prior to works commencing on site.

20 November 2017
Tim Pursey
Chartered Arboriculturist

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Tree Survey

Key:

Height:	Estimated in metres.
Stem diameter:	Measured at 1.5m above ground level.
Branch spread:	Estimated in metres at four cardinal points.
Height of crown Clearance:	Height in metres (estimated) above adjacent ground level to inform on ground clearance, crown stem ratio and shading.
Age class:	**Y**oung tree in first third of its life expectancy **Mid**dle age tree **Mat**ure trees **O**ver **Mat**ure **Vet**eran
Category grading:	**A/B/C/U** – In accordance with 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 – trees for removal All surveys and inspections made from ground level unless otherwise stated.

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Tree No.	Species	Height (m)	Stem Dia.(mm)	Crown Radius (m)				Crown Ht. (m)	Age Class	Remaining Contribution	Structural and Physiological Condition	Preliminary Management Recommendations	Retention Category
				N	E	S	W						
T1	London Plane	16	1300	7.5		5	6.5	4	Mat	20-40	Large tree. Previously reduced in size. Subject to TPO. Normal leaf size, colour and density. Normal	None	B2
T2	Oak	11	710	8.5	6.5	6.5	6.5	2.5	Mat	40+	Normal. Subject to TPO	None	B1 B2
T3	Prunus sp	7	250	3	3	3	3	2	Mat	10-20	Normal	None	C1
T4	Prunus sp	5	310	4	4	4	4	2	Mat	10-20	Normal	None	C1
T5	Oak	2.2	75	1	1	1	1	1	Y	10-20	Likely self-sown tree. Normal	None	C1

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Bibliography

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British Standard 3998:2010 Recommendations for Tree Work
British Standard 4428:1989 Code of Practice for General Landscaping Operations
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Tree Preservation Orders: A Guide to The Law and Good Practice 2000

Subsidence of Low-Rise Buildings 2000 Institution of Structural Engineers
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APN12 Through the Trees to Development Patch, D.
ARIN 130/95/ARB Tree Root Systems Dobson, M.

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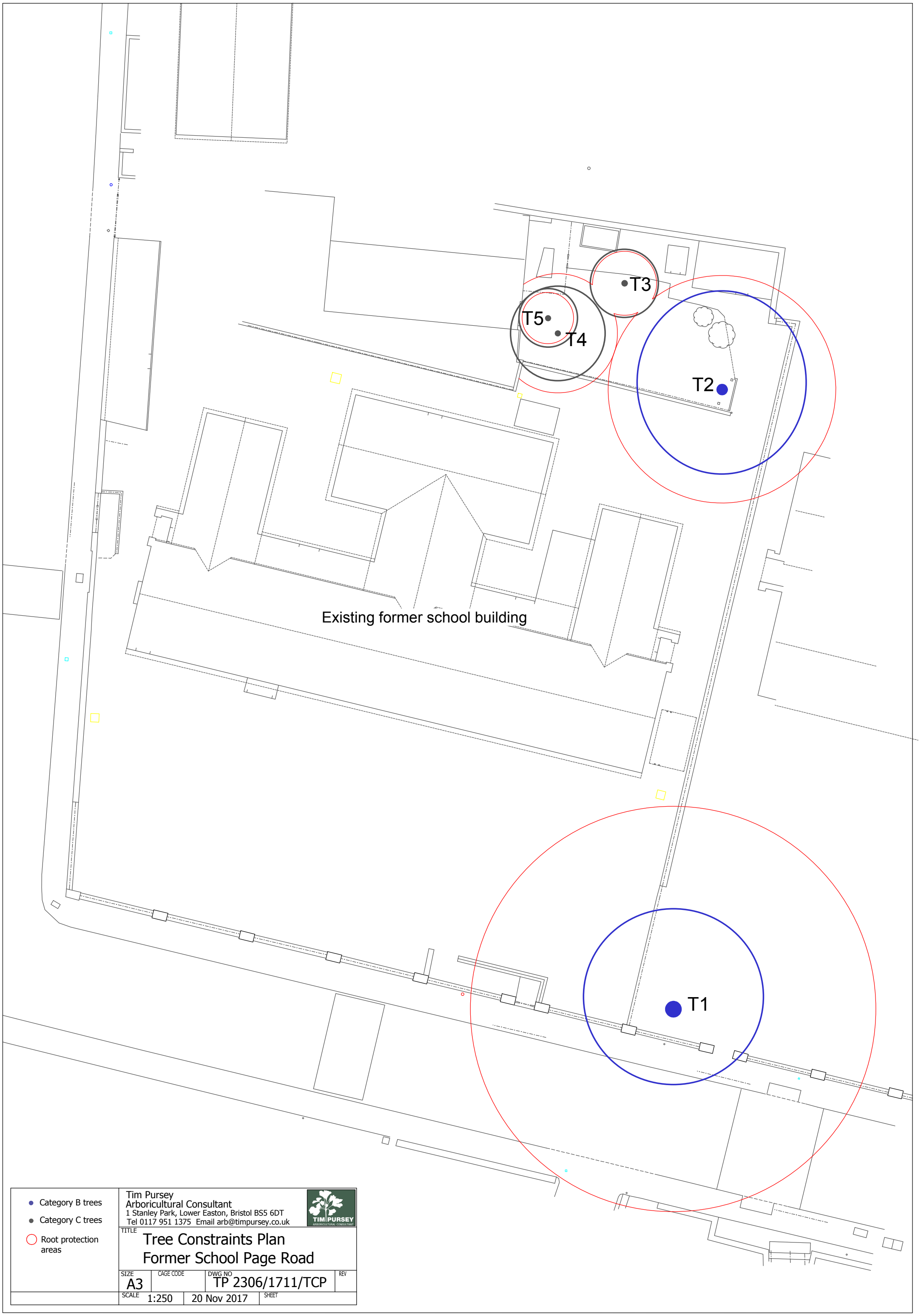
T3
T5
T4
T2
Existing former school building
T1
Category B trees
Category C trees
Root protection areas
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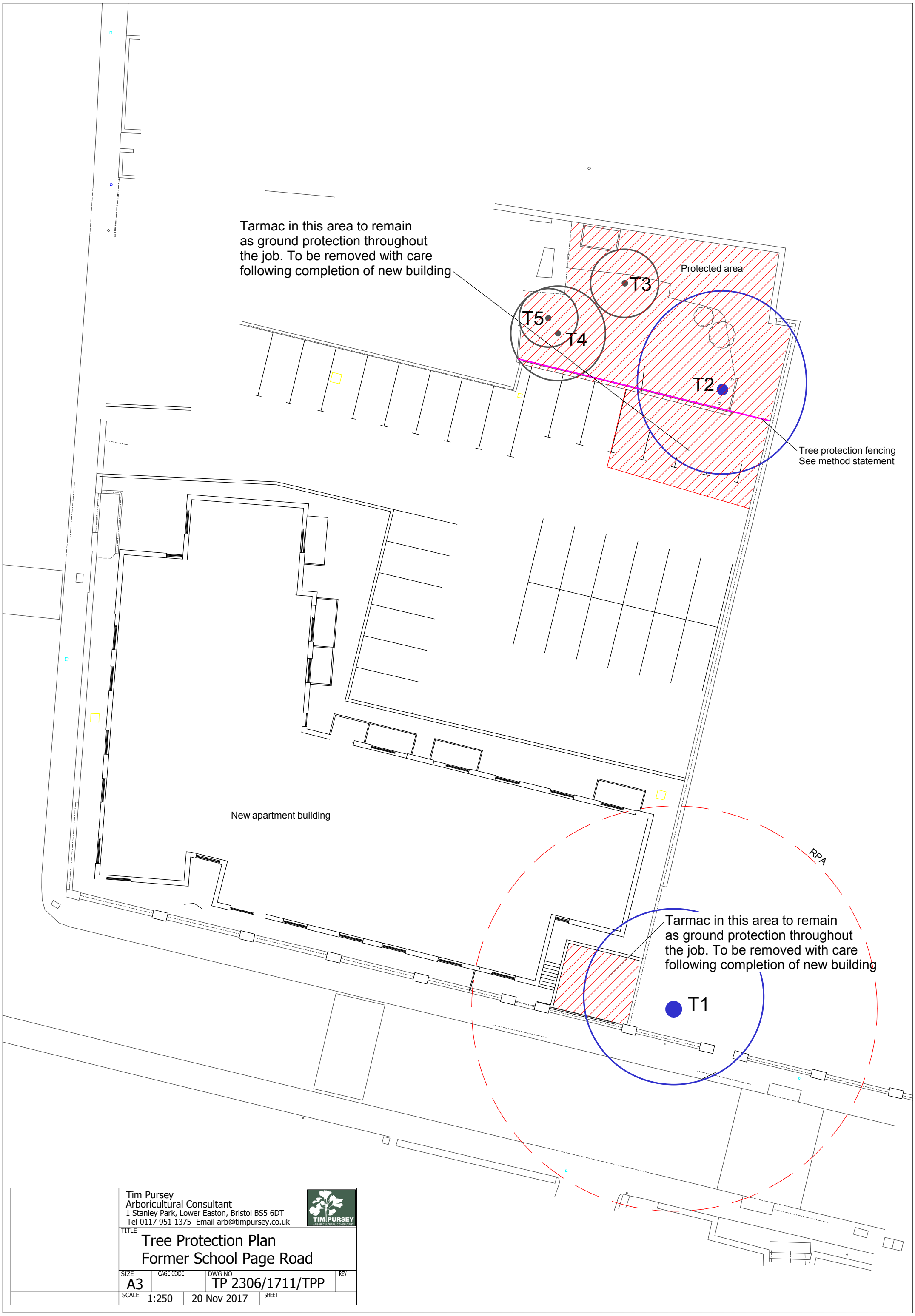
TIM PURSEY
ARBORICULTURAL CONSULTANT
TITLE
Tree Constraints Plan
Former School Page Road
SIZE
A3
CAGE CODE
DWG NO
TP 2306/1711/TCP
REV
SCALE
1:250
20 Nov 2017
SHEET



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TITLE
Tree Protection Plan
Former School Page Road

SIZE	CAGE CODE	DWG NO	REV
A3		TP 2306/1711/TPP	

SCALE		SHEET
1:250	20 Nov 2017	