



Fulford-Dobson Associates Ltd
ARBORICULTURAL CONSULTANCY

ARBORICULTURAL REPORT

Camp Mohawk
Highfield Lane
Wargrave
Berkshire
RG10 8PU

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Client	Camp Mohawk
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1.1 Introduction

1.1 Scope and methodology

- 1.1.1 This report relates to trees implicated in a proposal to install an all-weather dome over the existing swimming pool and erection of new changing room facilities at Camp Mohawk just outside Wargrave, Berkshire.
- 1.1.2 Survey methodology is based on guidance set out in British Standard 5837 (2012) *Trees in relation to design, demolition and construction – recommendations*. Trunk diameters were measured with a diameter tape, tree heights and crown spreads were estimated and paced out respectively. The trees were visually inspected from ground level for the purposes of pre-planning only, a hazard assessment was not carried out and no samples were taken for analysis.
- 1.1.3 This is a revised scheme from the previous one drawn up in 2020. My initial tree survey was conducted in June 2020 and I returned in January of this year to carry out an update. Two trees have been removed since 2020, an ash (T2) due to ash dieback and a dead standing goat willow (T10).
- 1.1.4 This revised proposal for the new changing room facilities is shown on the Proposed Site Plan A060 by RJHA Architects. Updated tree plans are based on topographical survey drawing no. SK-ALL Site Survey Levels 15012023, supplied to me by RJHA Architects.

1.2 Limitations

- 1.2.1 The statements made in this report do not take account of the effects of extremes of climate, vandalism or accident, whether physical, chemical or fire. I cannot therefore accept any liability in connection with these factors, nor where prescribed work is not carried out in a correct and professional manner in accordance with current good practice.
- 1.2.2 The authority of this report ceases after one year from the date of the survey or when any site conditions change or pruning or other works unspecified in the report are carried out to, or affecting, the subject tree(s), whichever is the sooner.

1.3 Surveyor's credentials

I am a Fellow and Registered Consultant of the Arboricultural Association and a Chartered Environmentalist with thirty-two years' experience of providing advice on the management of trees and wooded landscapes. I have advised on over 850 projects involving design, demolition and construction around trees, both as a local planning authority officer (2005 – 2009) and as an independent consultant (2009 – to date).

2. Impact assessment

2.1 The significant arboricultural features are the woodlands surrounding the open areas (W17 south east and W18 north of the main driveway) and three additional good quality trees; oak (T1), silver birch (T7) and ash (T14).). These are to be retained and protected. There are many more trees surrounding the survey area but these are not within immediate influencing distance of the proposal, not captured on my survey and as such not considered as part of this report.

2.2 Proposed tree removal: -

Tree no.	Species	Quality category	General condition	Reason for removal	Impact on landscape	Proposed mitigation
T8	Oak	C2	Very asymmetrical crown shape.	To enable access for machinery and space for deliveries & storage of building materials.	Negligible	Replacement planting of two standard silver birch in open glade to the south.
T9	Ash	C2	Poor, severely suppressed – no realistic future.	To enable access for machinery and space for deliveries & storage of building materials.	Negligible	
~~T10~~	~~Goat willow~~	~~U~~	~~Dead standing tree.~~	~~To enable access for machinery and space for deliveries & storage of building materials.~~	~~Negligible~~	
T11	Hazel	C2	Fair condition but small with minimal landscape value.	To enable access for machinery and space for deliveries & storage of building materials.	Very low	
T12	Ash	C2	Fair but semi-mature, with minimal landscape value and close to proposed new changing facilities.	To enable access for machinery and space for deliveries & storage of building materials.	Very low	
T13	Hazel	C2	Fair condition but small with minimal landscape value.	To accommodate new changing facilities.	Very low	
G15	Various	C2	Small self-seeded young oak and ash	To accommodate new changing facilities.	Very low	
G16	Various	C2	Fair	To accommodate new changing facilities.	Very low	

The impact on the landscape will be negligible as a result of this work.

2.4 The theoretical root protection areas (RPAs) for retained trees have been calculated using BS 5837 and are shown on the plans. They have been drawn as perfect circles for convenience – predicting the exact pattern and extent of a trees' root system is guestimation at best. In places where there is a risk of slight encroachment into the RPA these are highlighted as “precautionary areas”, shown as blue shading on the tree protection plan.

The overall impact on RPAs is low but will be mitigated (as a precautionary measure) by way of temporary fencing barriers and hand digging where practicable.

3. Schedule of work

3.1 Tree work, to be carried out before any ground work or delivery of demolition or construction machinery or materials: -

Tree no.	Species	Specification
T8	Oak	Section fell to ground level and grind out stump.
T9	Ash	Section fell to ground level and grind out stump.
T11	Hazel	Section fell to ground level and grind out stump.
T12	Ash	Section fell to ground level and grind out stump.
T13	Hazel	Section fell to ground level and grind out stump.
G15	Various	Section fell to ground level and grind out stump.
G16	Various	Section fell to ground level and grind out stump.

3.2 Tree planting to be carried out post-construction.

Trees	No	Height at least / Girth / Pot size	Specification
Silver birch	2	2.5m height (10-12cm standard)	Containerised
Exact locations to be agreed, but in principle in the open area to the south of the silver birch T7. New planted trees to be provided with suitable physical protection against rabbit and deer browsing damage to trunk, branches and foliage. E.G. wire or plastic mesh guards to a height of 1.2m.			

4. Tree protection measures

4.1 General principles of tree protection in relation to demolition and construction: -

- Temporary tree/hedge protection measures will be installed BEFORE any site work (including ground work or demolition) and remain in place until completion of the construction and service trenching phases and shall not be altered in any way without the prior written agreement of the project arboriculturist and/or Local Planning Authority.
- The areas that are to be fenced-off will be considered as construction exclusion zones. Any RPA outside the protective fencing where access for working space will be required are referred to as precautionary areas.
- Site huts, toilets etc. can define part of the protective fencing where adequate space allows. Where this is proposed in this manner, the location is to be agreed with the project arboriculturist and/or Local Planning Authority, and agreed in writing by the Local Planning Authority.
- No materials, liquids, chemicals, machinery, vehicles or site huts will be stored within the fenced off areas.
- Damage caused to protective fencing will be reported to the project arboriculturist and/or Local Planning Authority without delay to ensure appropriate repair.
- Any damage to the retained trees or hedges will be reported to the project arboriculturist and/or Local Planning Authority without delay so that appropriate remedial work can be specified, agreed and permitted via the Local Planning Authority.
- No materials that are likely to have an adverse effect on tree health such as oil, bitumen or cement will be stored or discharged within 10 metres of the trunk of any retained trees. In the event of spillage, the area will be secured with sandbags on the line of the tree protection area and measures taken to drain/soak any spillage away from the protected area using an inert absorbent material provided by specialist suppliers such as <http://prospill.co.uk/spill-kits>. The site staff will inform the project arboriculturist and/or Local Planning Authority as soon as possible and any further remedial action required to trees, roots or the rooting area is to be undertaken only following the approval by the Local Planning Authority.
- No fires will be lit within the CEZ or PZ.
- Notice boards, telephone cables or any other signage or services are not to be attached to any part of the retained trees.

4.2 Site-specific and sequential measures: -

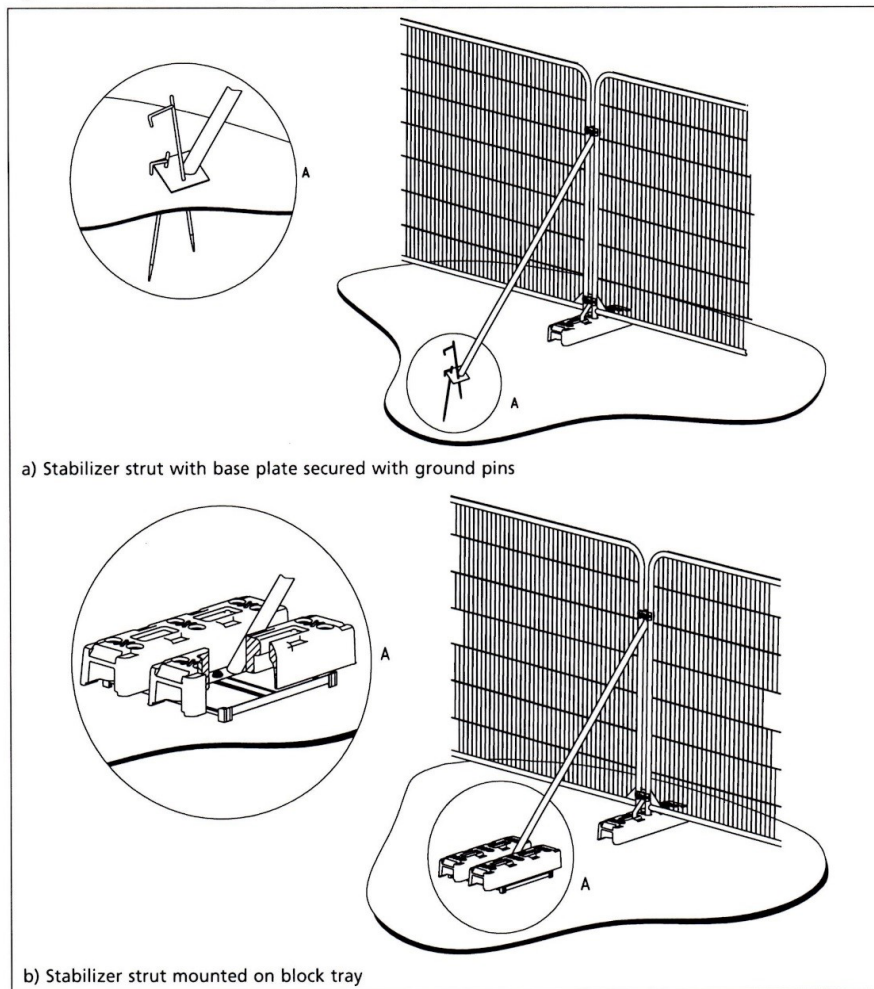
Order	Activity	Specification/detail	Further precautions	Responsible person(s)	Supervision/monitoring required by project arboriculturist?
1	Tree work	As per section 3.1	All work will be carried out by competent and suitably insured contracting arborists in accordance with BS 3998 Tree work – recommendations.	Appointed arborists	No
2	Parking, deliveries and storage.	Access to the working area will be enabled by removing a section of the post and rail fence between G15 and T9.		Site staff	No
3	Erection of tree protection fencing barriers	An example of tree protection fencing is provided in section 4.3 of this report. Protective fencing will be erected on the locations shown in the TPP.	No further project-related demolition or construction activity within the rooting area of trees.	Site staff	Yes (check and sign-off)
4	Demolition and construction phase	New structures to be built in accordance with specifications in the approved plans and documents.	Temporary ground protection and tree protection fencing will remain in situ throughout.	Appointed construction contractors.	No
5	Completion	Remove excess materials and plant from site. Remove tree protection fencing. Check trees for any obvious damage.	*If any damage to trees has occurred, the project arboriculturist will be consulted to advise and prepare remedial work proposals as necessary.	Appointed construction contractors and site staff	No (*yes)
6	Tree planting	In accordance with the specifications in section 3.2 of this report.	No heavy machinery or diggers will be used and no excavation will be carried out within the RPA of retained trees.	Appointed arborist or site staff	No

4.3 Temporary tree protection fencing barriers and signage: -

BRITISH STANDARD

BS 5837:2012

Figure 3 Examples of above-ground stabilizing systems



Reproduced by permission of BS 5837:2012 (figure 3)



These (or similar) all-weather signs will be placed on the temporary fencing barriers at regular intervals.

APPENDIX I

Photographs



Figure 1. The pool and existing old buildings (looking north)



Figure 2. Close-up of step up to existing buildings



Figure 3. Main drive (looking west). Trunks of T1 right and T2 left.



Figure 4. Pedestrian footpath leading down to the pool area (looking south west). T3 on the left.



Figures 5. T8 and T9 (looking north).



Figure 6. Rear of existing pool buildings. Trees (from right to left): - T14, T11, T12 and G15.

APPENDIX II

Tree survey schedule

Camp Mohawk - pre-planning tree survey

Date: 19.06.20

Re-checked on 25.01.23

Tree no.	Species	Height (m)	Stem diameter (mm)	Crown spread (m) north east south west	Height (m) and direction of first main branch	Height clearance above ground level to canopy (m)	Age class	Physiological condition	Structural condition	General observations	Remaining contribution in years	Tree quality category	RPA radius of nominal circle (m)	RPA area of polygon m2
T1	English oak (<i>Quercus robur</i>)	15m	540	N3.5m E4m S6m W7m	5m	5m	Mature	Fair	Fair		40+	A2	6.5m	131.9m ²
T2	Common ash (<i>Fraxinus excelsior</i>)	13m	300	N2.5m E6m S6m W3.5m	5m	5m	Early mature			Felled between 2020 and 2023 due to ash dieback.				
T3	Leyland cypress (<i>X Cuprocyparis leylandii</i>)	20m	580	N5m E4m S3m W4m	4m	4m	Mature	Fair	Fair		10+	C2	7.0m	152.2m ²
T4	Common ash (<i>Fraxinus excelsior</i>)	20m	650	N0m E4m S6m W4m	15m	15m	Mature	Good	Poor	Recently reduced for risk management reasons.	10+	C2	7.8m	191.1m ²
T5	Leyland cypress (<i>X Cuprocyparis leylandii</i>)	10m	535	0m	-	-	Mature	Dead	Fair	Standing monolith	-	U		
T6	Leyland cypress (<i>X Cuprocyparis leylandii</i>)	13m	270	N2m E3m S3m W0.5m	2.5m	2.5m	Early mature	Fair	Fair		10+	C2	3.2m	33.0m ²
T7	Silver birch (<i>Betula pendula</i>)	14m	295	N2.5m E2.5m S3m W2.5m	4m	4m	Mature	Fair	Fair		20+	B1	3.5m	39.4m ²
T8	English oak (<i>Quercus robur</i>)	13m	375	E1.5m S7.5m W4.5m	2.5m	2.5m	Early mature	Fair	Poor	Very asymmetrical crown shape and ivy growing up trunk and into crown.	10+	C2	4.5m	63.6m ²

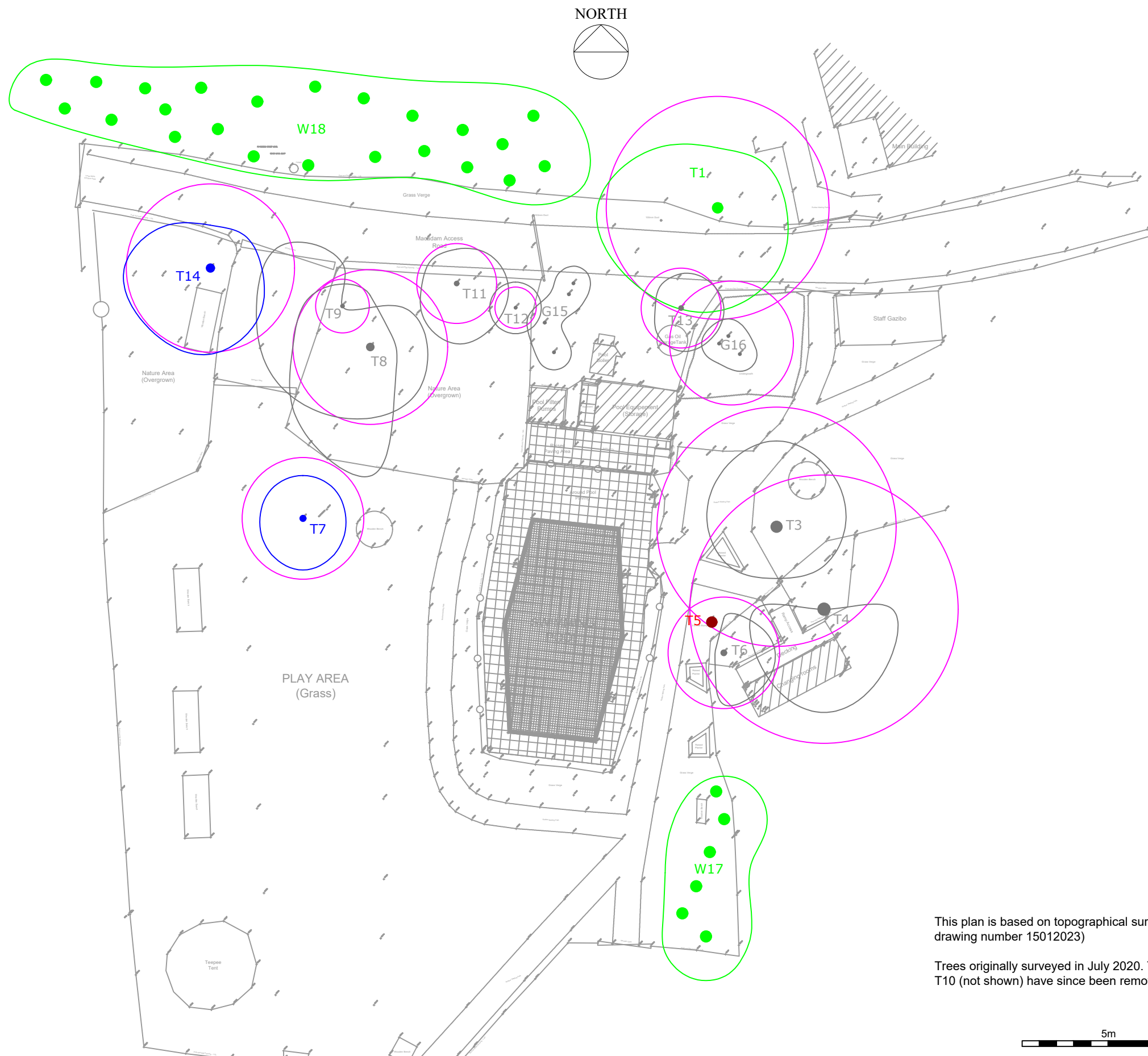
Camp Mohawk - pre-planning tree survey

Date: 19.06.20
Re-checked on 25.01.23

T9	Common ash (<i>Fraxinus excelsior</i>)	8.5m	130	S6.5m W5m	3m	3m	Semi- mature	Fair	Poor	Severely suppressed - no future.	10+	C2	1.6m	7.6m ²
T10	Goat willow (<i>Salix caprea</i>)	13m	275	N2m E2.5m S3m W4m	-	-	Mature			Felled between 2020 and 2023 (dead standing tree).				
T11	Common Hazel (<i>Corylus avellana</i>)	4.5m	50	N2m E3m S3.5m W2m	-	-	Mature	Fair	Fair		10+	C2	2.3m	17.0m ²
T12	Common ash (<i>Fraxinus excelsior</i>)	10.5m	100	1.5m	5m	5m	Semi- mature	Fair	Fair		10+	C2	1.2m	4.5m ²
T13	Common Hazel (<i>Corylus avellana</i>)	4.5m	50	N2m E2.5m S2.5m W1.5m	-	-	Mature	Fair	Fair		10+	C2	2.3m	17.0m ²
T14	Common ash (<i>Fraxinus excelsior</i>)	15m	210	N2.5m E3m S5m W5m	9.5m	9.5m	Early mature	Fair	Fair		20+	B2	4.9m	75.4m ²
G15	Various (<i>Various</i>)	6.5m	75	2m	-	-	Semi- mature	Fair	Fair	Small self-seeded ash and oak	10+	C2	0.9m	2.5m ²
G16	Various (<i>Various</i>)	9.5m	110	N2m E1m S2.5m W2.5m	-	-	Semi- mature	Fair	Fair	Small oak & ash with early-mature hazel.	10+	C2	1.3m	5.5m ²
W17	Various (<i>Various</i>)	20m	350	W2.5m	-	-	Early mature	Fair	Fair	Red oak, Scots pine, ash, English oak, western hemlock. Maturing and closely spaced.	40+	A2	4.2m	55.4m ²
W18	Various (<i>Various</i>)	17m	375	3m south	-	-	Early mature	Fair	Fair	English oak, Lawson cypress, Norway maple and hazel.	40+	A2	4.5m	63.6m ²

APPENDIX III

Tree constraints plan (existing)



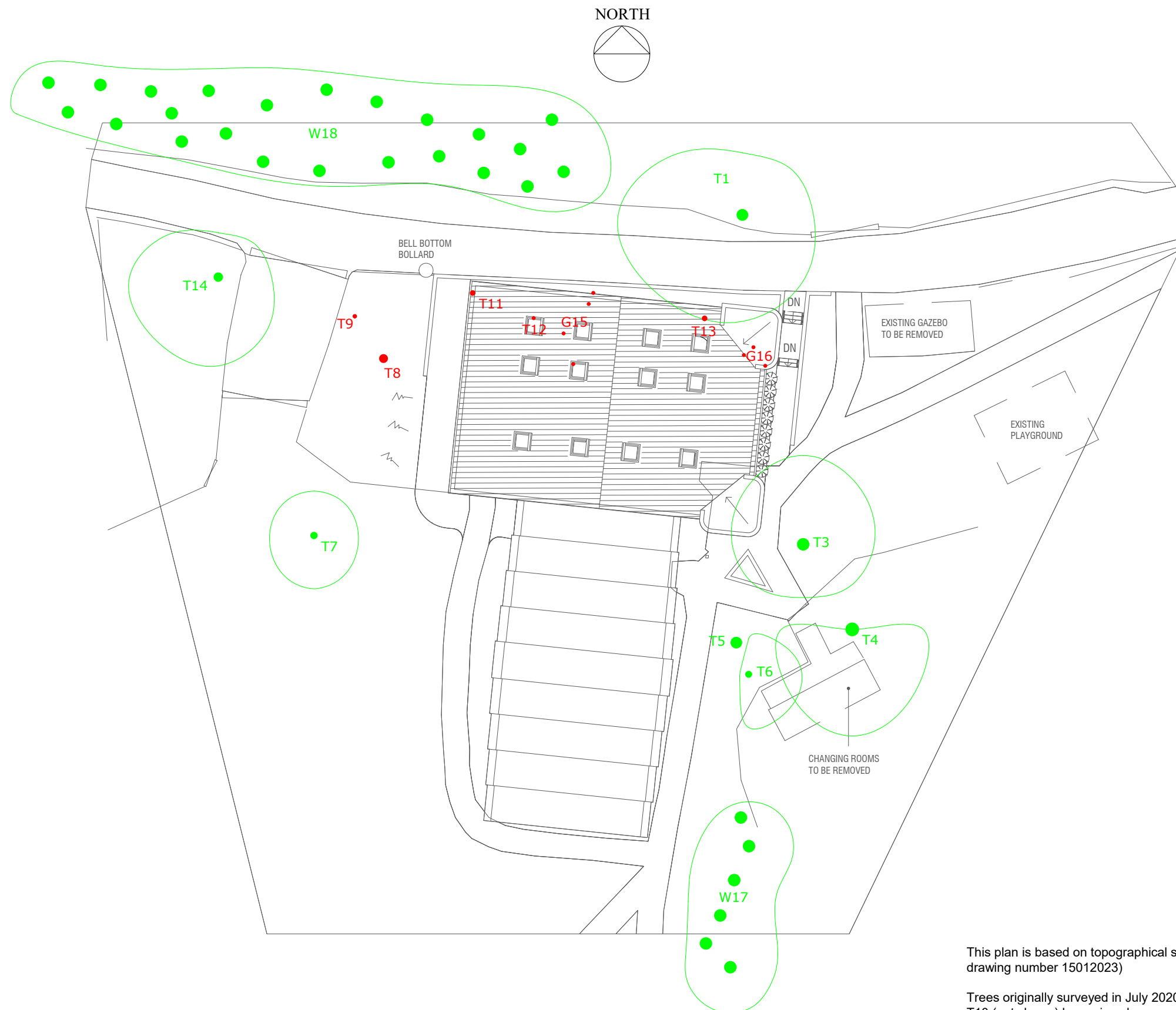
This plan is based on topographical survey drawing number 15012023)

Trees originally surveyed in July 2020. T2 & T10 (not shown) have since been removed

Key:	
T/G/W	Tree/group/woodland (number)
	Root protection Area
	High quality tree
	Moderate quality tree
	Low quality tree
	Unsuitable for retention
Project: Camp Mohawk Pool Improvement Work	
Title: Tree Constraints Plan (existing)	
Drawing no. FDA0933_01_TCP	
Drawn by: JFD	Date: 16.03.23
Scale: 1-250@A3	
Fulford-Dobson Associates Ltd Room 4, 1 Market Place Mews Henley-on-Thames Oxfordshire RG9 2AH Tel: 01491 571716 Email: office@fulford-dobson.com	

APPENDIX IV

Tree retention and removal plan (proposed)



This plan is based on topographical survey drawing number 15012023)

Trees originally surveyed in July 2020. T2 & T10 (not shown) have since been removed

Key:

T/G/W Tree/group/woodland (number)

Retained tree

Removed tree

Project: Camp Mohawk Pool Improvement Work

Title: Tree Retention/Removal Plan (existing)

Drawing no. FDA0933_02_TRRP

Drawn by: JFD Date: 16.03.23

Scale: 1-250@A3

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APPENDIX V

Tree protection plan (proposed)

