



A3 SERVICES NORTHBOUND
LIPHOOK
HAMPSHIRE

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CONTENTS

Arboricultural Report and Arboricultural Implications Assessment

1.0	Introduction	3
2.0	Site Visit	3
3.0	Site Description	3
4.0	Tree Survey Data	3
5.0	Tree Quality Assessment	9
6.0	Root Protection Areas	9
7.0	Legal Constraints	9
8.0	Arboricultural Implications Assessment	9
9.0	Conclusions	11
	<i>Important notes and Inspection caveats</i>	12

Arboricultural Method Statement

1.0	Contact details	13
2.0	Introduction	14
3.0	Phasing of Development	14
4.0	General Arboricultural Considerations	16
5.0	Supervision and Monitoring	16
	<i>Authors Credentials</i>	17

Appendix 1	Tree Quality Assessment Plan
Appendix 2	Root Protection Area Plan
Appendix 3	Tree Protection Plan
Appendix 4	Extract from BS5837:2012 – Figure 2 Default Specification for Protective Fencing
Appendix 5	Extract from BS5837:2012 – Figure 3 Examples of Above-Ground Stabilizing Systems.

1.0 INTRODUCTION

- 1.1 This report was instructed by Mr. Williams of PNH Ltd with regard to the proposed development on land at A3 Services North. The report details all trees over 75mm at 1.5m above ground level that are relevant to the siting of the proposed development. The position of the trees on the site is illustrated at **Appendix 1** on the plan.
- 1.2 The existing tree stock has been identified and graded in line with the current British Standard BS 5837 2012: Trees in relation to design, demolition and construction – Recommendations to enable informed decisions to be made regarding tree retention. The report also details methods of construction to be implemented to safeguard the retained trees.
- 1.3 This report details the constraints placed on the proposed development from the rooting area of the trees below ground and above ground by their size and position.
- 1.4 This report will therefore inform the planning process for the proposed development to minimise any negative impact on the existing tree stock and ensure that retained trees shall be in harmony with the proposed development enabling their long-term retention.

2.0 SITE VISIT

- 2.1 The site visit was undertaken on 28th September 2020. The trees were surveyed visually, externally and from ground level only. No samples or internal decay detection readings were taken for further analysis. All dimensions have been measured unless stated otherwise. Weather conditions at the time of the survey were dry, sunny and still.

3.0 SITE DESCRIPTION

- 3.1 The site is located on the northbound carriageway of the A3 from Portsmouth to London near Liphook. There is currently a Shell petrol station on site and a Starbucks. There is an old hotel and associated parking.

4.0 TREE SURVEY DATA

In accordance with BS 5837 2012: Trees in relation to design, demolition and construction – Recommendations, the characteristics of single-stemmed trees over 75mm stem diameter measured at 1.5m above ground level have been recorded and they have been categorised in accordance with Table 1 of BS5837: 2012. The following tree data tables should be read in conjunction with the annotated site plan shown at **Appendix 1** and the legend on the page following the tables.

Tree Number and Species	Height (m)	DBH (mm)	Branch Spread (m)				Existing Height Above Ground Level of Canopy and 1 st Significant Branch (m)	Age Class	Estimated Remaining Contribution (Years) & Physiological Condition	Comments	BS Category & Tree Work Necessary for Development	RPA (m ²)	RPA (m)
			N	S	E	W							
T1 Silver Birch <i>Betula pendula</i>	22	400 x 4	3	4	6	7.5	0.5 3 Northwest	M	20 Good	Four main stems from 0.2m. Large buttress roots east. West stem bifurcates at 1m. Wounds on other stems, good occlusion. Adventitious growth from old pruning cuts. Three snapped branches. Birds nest in crown.	B2 Retain & protect. Crown clean. Crown raise to 2.4m.	707	15
T2 Cherry <i>Prunus sp.</i>	11*	200	3	1	5	2	1 4 North	SM	10-20 Fair	Suppressed by T1 and T3. Kink in stem at 3.5m. Asymmetric crown. Squirrel damage. Possible Verticillium wilt	C2 Retain & protect.	18	2.4
T3 Oak <i>Quercus sp.</i>	14	720	6	8	6	6	0.5 2 Northeast	M	40 + Good	Sound base and lower stem. Water sprouts on main stem and scaffold limbs. Minor past management, good wound occlusion. Dead wood. Squirrel damage. Form typical of species.	A2 Retain & protect. Raise crown to 2.4m removing material 50mm diameter or less. Crown clean.	238	8.7

Tree Number and Species	Height (m)	DBH (mm)	Branch Spread (m)				Existing Height Above Ground Level of Canopy and 1 st Significant Branch (m)	Age Class	Estimated Remaining Contribution (Years) & Physiological Condition	Comments	BS Category & Tree Work Necessary for Development	RPA (m ²)	RPA (m)
			N	S	E	W							
T4 Silver Birch <i>Betula pendula</i>	16	550	4.5	4.5	3.5	6.5	2.5 3.5 Northwest	M	20 Good	Buttress and surface roots. Sound base and lower stem. Form typical of species. Minor dead wood. Broken branch hanging in top of crown.	B2 Remove. Plant replacement once development complete	137	6.6
T5 Silver Birch <i>Betula pendula</i>	13	280	1	4	2	2	6 5 Northeast	M	20 Fair	Sound base. Lean forty five degrees. Minor historic root plate movement, no evidence of recent movement.	C2 Retain and protect	34	3.3
T6 Oak <i>Quercus</i> sp.	15	750	10	8	10	4	1.5 5 East	M	40+ Good	On adjacent land, subject of a TPO. Limited inspection as no access. Sound base and lower stem. Minor dead wood. Minor past management. Form typical of species.	A2 Retain and protect. Raise crown to 2.4m removing material 50mm diameter or less.	255	9

Tree Number and Species	Height (m)	DBH (mm)	Branch Spread (m)				Existing Height Above Ground Level of Canopy and 1 st Significant Branch (m)	Age Class	Estimated Remaining Contribution (Years) & Physiological Condition	Comments	BS Category & Tree Work Necessary for Development	RPA (m ²)	RPA (m)
			N	S	E	W							
TG1 Common Alder, Holly, Birch and Crab <i>Alnus glutinosa</i> , <i>Ilex aquifolium</i> , <i>Betula pendula</i> and <i>Malus sylvestris</i>	Up to 14	Max. 380	17		15	0.5 2 West	EM M	< 10 20 Poor Fair	Silver Birch is dead. Two Alders leaning up to twenty degrees, no evidence of root plate movement.	C2 Remove Silver Birch. Retain & protect.	64	4.5	
TG2 Oak <i>Quercus</i> sp.	Up to 16	Max. 720	13		30	1 5 North	M	40+ Fair Good	On adjacent land, subject of a TPO. Limited inspection as no access. Middle tree has significant dieback and major dead wood. Two east most trees lean twenty degrees from approximately 5m, adjacent tree to the west removed recently.	B2 Retain & protect. Crown clean all three trees. Raise crown of west most tree to 2.4m removing material 50mm diameter or less.	238	8.7	

Tree Number and Species	Height (m)	DBH (mm)	Branch Spread (m)				Existing Height Above Ground Level of Canopy and 1 st Significant Branch (m)	Age Class	Estimated Remaining Contribution (Years) & Physiological Condition	Comments	BS Category & Tree Work Necessary for Development	RPA (m ²)	RPA (m)
			N	S	E	W							
TG3 Oak <i>Quercus</i> sp.	Up to 16	Max. 650	16		25	2 5 East	M	40+ Good	On adjacent land, subject of a TPO. Limited inspection as no access. Sound base and lower stem. Minor dead wood. Form typical of species.	B2 Retain & protect. Remove hanging limb east most tree. Dead wood the two trees adjacent to the boundary north side only. Crown raise north side tree to 2.4m removing material 50mm diameter or less.	191	7.8	

Key to Terms

- Identification numbers have been used and correspond to the site plan shown at **Appendix 1**.
- Vegetation type has been categorized as one of the following: Tree (T), Hedge (H), Shrub (S), Group (G), Stump (ST)
- Species are listed by common and botanical name where appropriate.
- Where possible, measurements have been made in accordance with the conventions detailed below. Where this was not possible, due to site conditions or the vegetation being in third party ownership, dimensions have been estimated. * Indicates estimated measurement.
- Height has been recorded to the nearest half metre.
- Stem diameter has been measured at 1.5m and recorded in millimetres, except where forking or swelling has meant that this is not possible, stem diameter has then been recorded at the narrowest point below these features. Multi-stemmed trees have had individual stems measured at 1.5m. Where this was not possible the actual height where the diameter was measured is recorded. G.L. = Ground Level.
- Crown spread has been recorded to the nearest half metre. Rounded up for dimensions up to 10m and the nearest whole metre for dimensions over 10m.
- Age class has been recorded as follows:
 - Y** Young recently planted or establishing tree that could be transplanted without specialist equipment, i.e. up to 12-14cms-stem girth.
 - S/M** Semi mature. An established tree but one that has not reached its potential ultimate height and has significant growth potential.
 - E/M** Early mature. A tree reaching its ultimate potential height, whose growth rate is slowing down but will increase in stem diameter and crown spread, and has a safe life expectancy.
 - M** Mature. A mature specimen with limited potential for any significant increase in size but with a reasonable safe life expectancy.
 - O/M** Over mature. A senescent or moribund specimen with a limited safe life expectancy. Possibly also containing significant structural defects with attendant safety and/or duty of care implications.
- Physiological Condition has been recorded as Good, Fair or Poor.
- Recommendations for tree management have been based on current Arboricultural Best Practice as set out by the Arboricultural profession and all relevant publications.

5.0 TREE QUALITY ASSESSMENT

- 5.1 The trees have been categorized according to BS5837: 2012 as a guide to their condition and value in terms of visual amenity.
- 5.2 The trees are coloured on the plan attached at **Appendix 1** and the colours are explained in the key of the plan.

6.0 ROOT PROTECTION AREAS

- 6.1 In accordance with BS5837: 2012, the root protection area (RPA) of the trees has been calculated and is shown in the tree data tables and on the RPA plan attached at **Appendix 2**.

7.0 LEGAL CONSTRAINTS

- 7.1 East Hampshire District Council's website mapping system shows none of the trees are subjects of a TPO but this should be confirmed in writing prior to undertaking any recommendations contained within this report.

8.0 ARBORICULTURAL IMPLICATIONS ASSESSMENT

8.1 Description of Proposed Development

The proposed development is for the modification of the old Travel Lodge on site into offices and the conversion of the existing Starbucks to accommodate a drive-thru and the establishment of a new decking area.

8.2 Drawings Used

A topographical survey plan 1: 200 @ A1 has been used for the Tree Quality Assessment Plan **Appendix 1** and the Root Protection Area Plan **Appendix 2**. A proposed layout plan drawing 1: 200 @ A1 P360-P-020-C has been used for the Tree Protection Plan found at **Appendix 3**.

8.3 Direct Loss of Trees

The proposal would require the removal of T4 Silver Birch. A replacement would be planted after the development has been completed. It is advised that a Silver Birch within TG1 is removed on safety grounds at the same time. Minor remedial work to a few other trees is also required.

8.4 Position of Trees in Relation to Proposed Development

It is not considered that the proposal will increase future pressure to fell any of the trees retained on the site.

8.5 Protective Barriers

Protective barriers will be established prior to any construction taking place. The location of the barriers is shown on the Tree Protection Plans at **Appendices 3**.

Protective barriers in accordance with Figure 2 of BS 5837: 2012 (**Appendix 4**) should be erected around the trees to be retained. The fencing is to be supported with an appropriate stabilizing system (**Appendix 5**). Where possible, the positions of these fences should be based on a distance equivalent to the radius of each tree's RPA. All site personnel shall be made aware of the importance of root protection areas and shall ensure that they are properly maintained at all times. Once established the fencing will define the boundary of the Construction Exclusion Zone (CEZ).

Once erected all weather signage should be displayed stating 'Construction Exclusion Zone'.

No development works shall commence within the CEZ until written confirmation has been obtained from the Local Planning Authority. The project Arboriculturalist shall supervise all work within the RPAs.

8.6 Changes in Ground Surface within RPAs

There is a small area of the RPA of T3 which will change from grassed area to the drive-thru access road. This is less than 10% of the total RPA and with the supervised installation of no-dig surfacing it is not considered this will be detrimental to the safety or longevity of the tree.

Within the RPA of T1 Silver Birch there is again a minor breach at the periphery due to the drive-thru access, a small footpath area and decking area. The path will be no-dig installed under arboricultural supervision and the holes for the posts to support the decking will also be excavated under supervision to ensure minimal disruption within the rooting area. This is again, less than 10% of the total RPA and with the supervised installation of no-dig surfacing it is not considered this will be detrimental to the safety or longevity of the tree.

8.7 Changes in Ground Level within the RPA

There is no proposed change in ground level within the RPAs of any of the retained trees.

8.8 Foundations

No foundations are proposed within the RPA's of any retained tree.

8.9 Services

No overhead services are to be installed.

At the time of writing no details of underground services have been supplied. Once they have, if they fall within the RPA's of any retained tree, details of design and methodology for their installation will be provided for approval by the Tree Officer.

8.10 Access for Contractors and Storage of Materials.

There is ample space on the site outside of the RPAs of the trees for contractor parking and storage of materials.

9.0 CONCLUSIONS

- 9.1 The trees on the site are predominately of a moderate quality providing a screening/softening role.
- 9.2 The remedial work will ensure no above ground parts of the trees will be damaged during the construction process nor will they be in physical contact with the proposed buildings.
- 9.3 The establishment of the protective barriers should be supervised by the project Arboriculturalist and confirmation of adherence with the Arboricultural Method Statement and Tree Protection Plan should be made to the Local Authority Tree Officer before any development starts.
- 9.4 Supervised operations within the RPA's of T1 Silver Birch and T3 Oak will ensure minimal disruption within their RPA's.
- 9.4 Given these conclusions the following section 'Arboricultural Method Statement' details the recommendations/methodology for the construction of the proposed works in terms of the effect on trees on the site.

Details within this AIA are considered correct at the time of writing but modifications may need to be made as more information becomes available.

Important Notes

The comments made with regard to the health and stability of the trees within this report were correct at the time of inspection. It should be recognized that trees are dynamic structures that can never be completely predictable and may become unstable or partially unstable even in average weather conditions. Changes can occur not only to environmental triggers but also in response to biological or mechanical events.

Inspection Caveats

The inspection was carried out from ground level. Binoculars were used to observe features higher in the canopies.

Foliage, extension growth and/or bud proliferation were assessed visually.

No soil or tissue samples were taken during this inspection.

No invasive diagnostic equipment was used to detect decay.

A nylon hammer was used to test for possible decay and dead or loose bark around the lower stems and bases of the trees.

Ivy has been removed during the inspection process only where reasonable and practicable. Where this has not been possible it has been noted as a recommendation to be removed to allow detailed re-inspection.

No tree is ever absolutely safe due to the unpredictable laws and forces of nature.

ARBORICULTURAL METHOD STATEMENT**1.0 CONTACT DETAILS**

Architect	Abe Mohsin	<p>Mohsin Cooper Architects</p> <p>7 Hove Manor Parade Hove Street Hove East Sussex BN3 2DF</p> <p>01273 358 306/07963 592 615</p> <p>abe@mohsincooper.com</p>
Arboricultural Consultant	Sarah Johnston	<p>Johnston Tree Consultancy</p> <p>16 Manor Close, Wickham, Hampshire, PO17 5BZ</p> <p>07814 403146</p> <p>johnstontreeconsultancy@gmail.com</p>
Local Authority Case Officer	Unknown at Present	<p>East Hampshire District Council</p> <p>Planning Department, Penns Place, Petersfield, GU31 4EX</p> <p>01730 266551</p> <p>planningdev@easthants.gov.uk</p>
Local Authority Tree Officer	Adele Poulton	<p>East Hampshire District Council</p> <p>Planning Department, Penns Place, Petersfield, GU31 4EX</p> <p>01730 266551</p> <p>adele.poulton@easthants.gov.uk</p>

2.0 INTRODUCTION

- 2.1 This Arboricultural Method Statement (AMS) has been produced in line with BS 5837 2012: Trees in relation to design, demolition and construction-Recommendations to aid the successful retention of trees on and adjacent to the proposed development at A3 Services, Northbound, Liphook. No development shall take place on the site until this document has been submitted to and approved in writing by East Hampshire District Council
- 2.2 This document sets out the methodology for all proposed works that affect trees on and adjacent to the site. Compliance with this method statement will be a requirement of all relevant contracts associated with the development proposals. Copies of this document will be available on site for inspection.
- 2.3 For details of trees to be retained and location and types of special protection methods, reference should be made to the Tree Protection Plan (TPP). A copy of which should be displayed prominently on site.

3.0 PHASING OF DEVELOPMENT

3.1 Phase 1 – Pre Development Phase

Pre-Commencement Site Meeting

This is to take place with the project arboriculturalist, local authority tree officer and developer present to ensure the Arboricultural Method Statement is understood and agreed prior to any development taking place.

Tree Work

Tree work will be carried out prior to any demolition or construction taking place.

Protective Barriers

Tree protection measures to be installed under the supervision of the retained Arboriculturalist for all the trees.

The protective barriers erected will be in accordance with Figures 2 and 3 of BS 5837:2012 (**Appendix 4 and 5**) and will form the boundary of the construction exclusion zone (CEZ). Where feasible, the positions of the fencing will be based on a distance equivalent to the radius of each tree's RPA. Once erected all weather signage should be displayed stating 'Construction Exclusion Zone-Keep Out'.

Area for Mixing Materials and Storage

The storage of materials and equipment can be outside of the RPAs of any retained tree.

3.2 Phase 2 – Construction Phase

Protective Barriers

Once established the protective barriers are not to be moved without written consent from East Hampshire District Council

No- Dig Surfaces within the RPA's of T1 Silver Birch and T3 Oak.

Installation methodology is the same for both the section of the drive-thru access road and the footpath.

These are to be constructed as follows ensuring a gap of 500mm from the any stem to allow for future growth and movement:

Ground preparation will ensure surface is as level as possible using hand tools only. Sharp sand or no fines aggregate will be used where it is necessary to infill larger areas.

A geo-textile membrane such as Fibretex F4M is to be secured in place with pins.

Placement of the cellular confinement system Cell Web 200mm (access road) 50mm (footpath) will be stretched into position and pinned into place by reinforced steel pins.

The web is to be filled with 20/40 clean angular granite based aggregate raked into place. Note; as soon as the Web has been filled it can be used without causing damage to the rooting area below.

Roll out techniques should be used to ensure machinery is above the sub-base layer at all times.

Edging is to be comprised of sleepers pinned in place or gabions or other non-invasive ground contact structures.

Final surface details have not yet been provided but could be block pavers or gravel.

Decking Area

All holes for the proposed framework within the RPA of T1 will be excavated by hand and lined with a thick DPCM.

4.0 GENERAL ARBORICULTURAL CONSIDERATIONS

- 4.1 Protective barriers must be regarded as sacrosanct, and must only be moved under direct supervision of the LPA or named Arboriculturalist to enable the undertaking of works within the RPAs of trees, as set out in this AMS, and approved in writing by the LPA. It is of paramount importance the fencing is repositioned correctly after any agreed operations.
- 4.2 No materials, chemicals, machinery or vehicles must be stored within the RPAs as defined on the TPP and identified on site by protective fencing and aboveground root protection.
- 4.3 Ground protection must not be lifted or removed without prior consultation with the LPA or named Arboriculturalist.
- 4.4 Damage caused to protective fencing or ground protection must be reported to the site supervisor and the named Arboriculturalist to ensure appropriate repair.
- 4.5 Any damage to retained trees must be reported without delay to the site supervisor, the LPA and the named Arboriculturalist so appropriate remedial work can take place without delay.
- 4.6 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 5 metres of the trunk of the retained trees or any other trees on the site.
- 4.7 No fires will be lit on site.
- 4.8 Notice boards, telephone cables or any other signage or services are not to be attached to any part of the retained trees.

5.0 SUPERVISION AND MONITORING

- 5.1 The project Arboriculturalist shall be responsible for monitoring/supervising the following works.
 - Pre-commencement site meeting
 - Establishment of protective barriers
 - Establishment of no-dig surfaces within the RPA's of T1 Silver Birch and T3 Oak.
- 5.2 The project Arboricultural Consultant will be responsible for periodical monitoring and will inspect the protective fencing to ensure the CEZ is intact and monitor any works necessary within the exclusion zone. A record of site visits will be maintained for inspection on site and copies forwarded to the agent and planning authority when requested.

Please note this AMS is not a contract. The retention and services of a project Arboriculturist for supervision and monitoring must be agreed prior to commencement of construction operations



CREDENTIALS OF THE AUTHOR

Sarah Johnston M. Arbor. A., B.Sc. Arboriculture has worked in the Arboricultural profession for thirteen years. Her experience has been gained from undertaking practical tree work as well as working as an Arboricultural Surveyor and Tree Officer for Eastleigh and Havant Borough Councils respectively. In addition Sarah worked as a consultant for Marishal Thompson for two years from 2005 when she became self-employed. Sarah is a Professional Member of the Arboricultural Association and holds Professional Indemnity Insurance.