



Arboricultural Report

58 – 64 STATION ROAD
HAYLING ISLAND
HAMPSHIRE
PO11 0ER

NOVEMBER 2014

16 Manor Close, Wickham, Hampshire, PO17 5BZ
07814 403146
johnstontreeconsultancy@gmail.com

C O N T E N T S

Arboricultural Report including 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	8
6.0	Root Protection Areas	8
7.0	Legal Constraints	8
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	17
	<i>Authors Credentials</i>	17

Appendix 1	Tree Quality Assessment Plan
Appendix 2	Root Protection Area Plan
Appendix 3a	Tree Protection Plan (Demolition)
Appendix 3b	Tree Protection Plan (Construction)
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 Nigel Slydell. The report details all trees over 75mm at 1.5m above ground level that are relevant to the siting of the proposed development at 58 – 64 Station Road, Hayling Island, Hampshire. The position of the trees on the site is illustrated at **Appendix 1** on the topographical survey 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 13th November 2014. 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, windy and overcast.

3.0 SITE DESCRIPTION

- 3.1 The site is located on Hayling Island, south of Havant in Hampshire. The area is predominately residential and light commercial. The site currently comprises a few residential dwellings and a commercial garage with associated out buildings. There are no trees within the site itself. The trees were either in adjacent property or inaccessible due to ground conditions.

4.0 TREE SURVEY DATA

- 4.1 In accordance with British Standard BS 5837 2012: Trees in Relation to Design, Demolition and Construction – Recommendations, the characteristics of trees over 75mm stem diameter measured at 1.5m above ground level (or immediately above root flare if multi-stemmed) have been recorded. The following tree data tables should be read in conjunction with the annotated site plan shown at **Appendix 1** and the legend after 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 Oak <i>Quercus</i> sp.	12	340* 290*	6	4	6	5.5	3.5 2.5 East	SM	40 Fair	Inspection limited due to fence and drainage ditch. Ivy extends into crown. Stem bifurcates about 0.4m, union not visible. Minor past management. No immediate work required.	B1 Retain and protect	486	12.6
T2 Oak <i>Quercus</i> sp.	8	370*	6	4.5	6	4.5	3 2.5 West	SM	40 Fair	Inspection limited due to fence and drainage ditch. Ivy extends into crown. Torn limb at 3.5m west. Minor deadwood. Minor poor past management. No immediate work required.	B1 Retain and protect	64	4.5
T3 Oak <i>Quercus</i> sp.	12	400*	6*	8	8*	5.5	3 3.5 South	EM	40 Fair	Inspection limited as outside of site. Kink in stem from ground level to 0.5m, good reaction wood. Form and deadwood typical of species. Storm damage evident. No immediate work required.	B1 Retain and protect Crown raise to 4m south and west parts of canopy.	74	4.8

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 Common Ash <i>Fraxinus excelsior</i>	14	720*	5	5	6*	7	2 5 South	M	20 – 40 Fair	In drainage ditch no access. Base and lower stem not visible. Visible parts of tree stem appear sound with no obvious signs of defects. Stem bifurcates about 4m, scaffold limbs then bifurcate again. Storm damage. Squirrel damage. Minor deadwood. No immediate work required. Advisory: Undertake aerial inspection.	B2 Retain and protect	238	8.7
T5 Sycamore <i>Acer pseudoplatanus</i>	13	380*	4*	2.5*	6*	1*	5 6 North	SM	10 -20 Fair	On other side of drainage ditch. No access inspection limited. Lean 25° east. Dense Ivy extends to top of stem. Basal shoots. Poor taper due to light competition. Minor deadwood and Squirrel damage. No immediate work required.	B2 Retain and protect	64	4.5
T6 Common Ash <i>Fraxinus excelsior</i>	14	800*	9.5	9*	9*	6	4 3 South	M	20 – 40 Fair	On farside of ditch, roots extend into bottom of ditch. Large anchor roots present along ditch edges. Originally two stem, one historically failed at 3.5m, now decayed and colonised by <i>Daldinia concentrica</i> . Past management, stem removed at 3m north side and crown raised, all wounds completely occluded. Cavity in secondary branch at 10m. Storm damaged limb within east canopy. No immediate work required. Advisory: Undertake aerial inspection.	B2 Retain and protect	308	9.6

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							
T7 Sycamore <i>Acer pseudoplatanus</i>	9	160* 180*	5	4	4	2	2 2 west	SM	20 Good	Access to base and lower stem limited. Stem bifurcates at 0.4m, union not visible. Buckled bark under southern stem. Moderate extension growth, No immediate work required.	B1 Retain and protect	238	5.7
TG1 Sycamore, Robinia and Ash <i>Acer pseudoplatanus</i> , <i>Robinia pseudoacacia</i> , <i>Fraxinus excelsior</i>	Up to 8	Up to 300	8		6		2 2 North	SM	20 – 40 Fair Good	No access but mixed species group providing screening role between site and public house to the south. No management. Dense undergrowth. No immediate work required. Advisory: Clear Bramble and undergrowth, thin out if required and plant 3 standards, Cherry, Rowan and Whitebeam once development complete.	B2 Retain and protect	41	3.6

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 shown in the following table and on the plan attached at **Appendix 2**.

Table 2 Root Protection Area

Tree No	RPA in m ²	Recommended radial distances for RPAs (in metres from the centre of the tree to protective fencing)
T1	486	12.6
T2	64	4.5
T3	74	4.8
T4	238	8.7
T5	64	4.5
T6	308	9.6
T7	238	5.7
TG1	41	3.6

7.0 LEGAL CONSTRAINTS

- 7.1 Havant Borough Council has verbally stated that the trees are not subjects of a Tree Preservation Order and that the site does not fall within a Conservation Area. This information should be confirmed in writing before any work is undertaken to the trees.

8.0 ARBORICULTURAL IMPLICATIONS ASSESSMENT

8.1 Description of Proposed Development

It is proposed to demolish the existing garage and associated outbuildings then redevelop with a mixture of residential properties and light commercial units.

8.2 Drawings Used

A topographical survey showing the existing site layout was provided at the time of survey scale 1:200 at A1 and has been used to prepare the Tree Quality Assessment Plan **Appendix 1** and the Tree Protection Plan (Demolition) **Appendix 3a**. A proposed site layout plan was also provided at a scale of 1:200 at A1 and has been used for the Root Protection Area Plan **Appendix 2** and the Tree Protection Plan (Construction) **Appendix 3b**.

8.3 Direct Loss of Trees

The proposal will not require the removal of any of the trees within this report.

8.4 Position of Trees in Relation to Proposed Development

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

8.5 Protective Barriers

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 Removal of Existing Concrete Hard Surface/Changes in Ground Surface within RPAs

There will be a change in ground surface within the RPAs of several of the retained trees as the existing concrete hard surfacing will be removed as part of the demolition process.

In most cases the surface area will change from concrete to grass but T7 Sycamore will have a porous finish of block paving replacing the concrete. T5 Ash will have a small area of driveway established once the concrete has been removed.

This will be undertaken as detailed in the Arboricultural Method Statement section of this report and as shown on the Tree Protection Plan (Demolition) at **Appendix 3a**.

8.7 Changes in Ground Level within the RPA

There are no proposed changes in the existing ground levels within the RPAs of any retained tree.

8.8 Services

No overhead services are proposed.

No underground services are to be installed within the RPAs of any retained tree outside of the existing service runs at the time of writing this report. If this changes the report will be revised to detail methodology of installation.

8.9 Foundations within RPAs

The foundations of plots 1, 2 and 3 will breach the RPA of T1 Oak. Plot 5 will breach the RPAs of T4 Ash and T5 Ash.

The breach of the RPA of T1 Oak is in total much less than 20%. It is proposed to build a traditional strip foundation and it is not considered that this will be detrimental to the health or longevity of the tree. Ground protection will be installed if machinery needs to operate within the RPA but most operations are to be carried out from outside of the RPA.

T4 Ash is located in a drainage ditch approximately 1.5m – 2m below the existing ground level. T5 Ash is located on the other side of this drainage ditch. Between the ditch and the proposed layout there is currently concrete hard surface and in some instances a building. It is considered that the rooting pattern of the trees has adapted to this and as such it is proposed to install a traditional strip foundation. Ground protection will be installed if machinery needs to operate within the RPA but most operations are to be carried out from outside of the RPA.

8.10 New Access Driveway and Parking within RPAs

The RPA of T7 Sycamore will be breached by the new access driveway and parking. Use of no-dig construction methods under supervision will ensure minimum disruption.

8.11 Scaffolding within the RPAs

The scaffolding will fall within the RPAs T1 Oak, T4 Ash and T5 Ash. Ground protection will ensure that there is no damage to their rooting areas. This ground protection will also ensure pedestrian traffic will have no impact on the rooting area.

Details are to be found in the Arboricultural Method Statement section of this report.

8.12 Access for Machinery and Site Storage

There is ample space on site for the storage of materials, machinery and the provision of site toilets outside of the RPAs of any retained tree.

9.0 CONCLUSIONS

- 9.1 The trees adjacent to the site are of a moderate quality providing a screening/softening role.
- 9.2 No trees are to be removed to facilitate the proposal.
- 9.3 The existing concrete hard surface is to be removed as part of the demolition work. This is within all of the retained trees RPAs. It is not considered this will be detrimental to their health or longevity. Supervised work will ensure any disruption in this area is kept to a minimum.
- 9.4 The existing buildings are to be demolished. Some of these are adjacent to retained trees or within their RPAs. It is not considered this will be detrimental to their health or longevity. Supervised work will ensure any disruption in this area is kept to a minimum.
- 9.5 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 Plans should be made to the Local Authority Tree Officer before any demolition or development starts.
- 9.6 The proposed foundations will fall within the RPAs of T1 Oak, T4 Ash and T5 Ash. It is not considered this will be detrimental to their health or longevity. Supervised work will ensure any disruption in this area is kept to a minimum.
- 9.7 Scaffolding will fall within the RPAs of T1 Oak, T4 Ash and T5 Ash; ground protection will ensure soil compaction is kept to a minimum. This ground protection will also ensure pedestrian traffic will have no impact on the rooting area.

- 9.8 The RPA of T5 Ash will be marginally breached by the new access driveway of Plot 5 but this is so minor that it is not considered significant.
- 9.9 The RPA of T7 Sycamore will be breached by the proposed parking and access driveway. Supervised no-dig construction in this area will ensure any disturbance is kept to a minimum.
- 9.10 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**

Developer	Nigel Slydell	Apartment 128 Number 1 Building, Gunwharf Quays, Portsmouth, PO1 3FS 07802 254221 nigelslydell@googlemail.com
Architect	Jeffery Douglas Chartered Architect	Jeffery Douglas 60a Sinah Lane, Hayling Island, Hampshire, PO11 0HH 07725 504799 jd@jefferydouglas.co.uk
Arboricultural Consultant	Sarah Johnston M.Arbor.A. B.Sc. (Hons.) Arboriculture	Johnston Tree Consultancy 16 Manor Close, Wickham, Hampshire, PO17 5BZ 07814 403146 johnstontreeconsultancy@gmail.com
Local Authority Case Officer	Unknown at Present	Havant Borough Council Public Service Plaza, Civic Centre Road, Havant, PO9 2AX 02392 44 60 19 planning.development@havant.gov.uk
Local Authority Tree Officer	Jamie Gargett	Havant Borough Council Public Service Plaza, Civic Centre Road, Havant, PO9 2AX 02392 44 60 19 jamie.gargett@havant.gov.uk

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 58 – 64 Station Road, Hayling Island. No development shall take place on the site until this document has been submitted to and approved in writing by Havant Borough 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

Protective Barriers

Tree protection measures to be installed under the supervision of the retained Arboriculturalist for all the trees in accordance with the Tree Protection Plan **Appendix 3a**

The protective barriers erected will be in accordance with Figures 2 and 3 of BS 5837:2012 **Appendix 4 and Appendix 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'.

Demolition of the Existing Buildings

Demolition is to be 'top down' which is undertaken inwards within the footprint of the existing buildings where they fall within or adjacent to the RPAs of T1 Oak, T3 Oak, T4 Ash and T5 Ash.

Machinery will operate in a roll-out way that is from the area closest to the trunks of retained trees, outwards so as not to compact the soil and damage the rooting area.

This will be under Arboricultural supervision to ensure no damage to above-ground tree parts. Where required branches are to be tied back during this process and if there is a heavy buildup of dust on buds or leaves this will be hosed off once demolition is complete.

Removal of Concrete Hard Standing

This is to be undertaken within the RPAs of all retained trees to a greater or lesser degree with the exception of TG1. Hand-held tools will be used within the RPAs. This will be under Arboricultural supervision to ensure damage to below-ground tree parts is kept to an absolute minimum.

Materials: Access and Storage

Access and storage will be established outside of any of the retained trees RPAs.

3.2 Phase 2 – Construction Phase

Protective Barriers

Tree protection measures to be installed/re-located under the supervision of the retained Arboriculturalist for all the trees in accordance with the Tree Protection Plan **Appendix 3b**.

The protective barriers erected will be in accordance with Figures 2 and 3 of BS 5837:2012 **Appendix 4 and Appendix 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'.

Ground Protection for Machinery if Required

Machinery which needs to operate from within the RPA of T1 Oak, T4 Ash, T5 Ash or T7 Sycamore once the concrete hard surface has been removed and the protective barriers established; will operate on temporary ground protection suitable for the type of vehicle.

Pedestrian-operated plant up to a gross weight of 2 t, proprietary, inter-linked ground protection boards placed on top of a compression-resistant layer (e.g. 150 mm depth of woodchip) laid onto a geotextile membrane.

For wheeled or tracked construction traffic exceeding 2 t gross weight, an alternative system (e.g. proprietary systems or pre-cast reinforced concrete slabs) to an engineering specification designed in conjunction with arboricultural advice, to accommodate the likely loading to which it will be subjected.

Ground Protection for Pedestrians and Scaffolding

Ground protection to tolerate pedestrian traffic and scaffolding will be established within the RPAs of T1 Oak, T4 Ash and T5 Ash as shown on the Tree Protection Plan at **Appendix 3b**.

Specification will be a geotextile membrane with a minimum of 100mm depth of wood-chip with single thickness scaffold boards on top. This ground protection will also ensure pedestrian traffic will have no impact on the rooting area.

Establishment of No-Dig Access Driveway and Parking

Within the RPA of T7 Sycamore this is to be a no-dig construction installed under arboricultural supervision. The methodology is to be as follows:

Establishment of the access driveway within the RPAs must incorporate a 3D cellular confinement system and no-fines aggregate sub-base.

Ground preparation will ensure that the 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 non-woven geo-textile membrane overlapped by 300mm at joints; such as Treetex T300 is to be secured in place with pins.

Placement of the cellular confinement system **Cell Web 200mm** will be stretched into position and pinned into place by reinforced steel pins. Sections will be stapled together to create a continuous mattress.

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 is to be porous specifications, to be supplied at the time of the application or in response to a planning condition.

Protective Barriers

Once established the protective barriers are not to be moved without written consent from Havant Borough Council.

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.
 - Establishment of protective barriers to form the CEZ for demolition and construction.
 - Removal of buildings in and adjacent to the trees.
 - Removal of concrete hard surfacing within the RPAs of retained trees.
 - Establishment of ground protection for machinery if required.
 - Establishment of ground protection for pedestrian traffic and scaffolding.
 - Establishment of no-dig access road and parking bays.
- 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 Arboriculturalist 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 cover trading as Johnston Tree Consultancy.



APPENDIX 1 - TREE QUALITY ASSESSMENT PLAN, STATION ROAD

Builder's Yard

Tree of moderate quality

Garage

West
Town
Hotel
(PH)

Stations List

Name	Easting	Northing	Height
SR1	1000.000	2000.000	5.815
SR2	983.816	1990.953	5.809
SR4	1015.903	1979.665	5.904
SR5	997.855	2023.761	6.026
SR6	1022.417	2027.763	5.938
SR7	1034.040	2040.428	5.732
SR8	1056.162	2031.975	5.884
SR9	1015.901	2041.391	5.948
SR10	1034.790	2048.659	5.664

Tree List

Tree No	Name	Trunk Dia	North	South	East	West	Height	Trunka
	PINE	500	5	4	5	1	9	1
	PINE	500	5	6	3	5	12	1
	SYCAMORE	220	3	3	2	3.5	10	2
	OAK	360	5	5	6	4	12	2
	OAK	360	3	3	3	2	8	1
	OAK	UNACCESSIBLE - NOT SURVEYED						
	ASH	360	4	4	4.5	4.5	12	1
	SYCAMORE	400	4	3	6	0	11	1
	ASH	600	7	6	7	5	14	1

Abbreviations

[illegible]

AFL	Apple
ASM	Asb.

BOH	Beech
CNK	Chestnut
CHY	Cherry
ELM	Elm
ELC	European larch
FIR	Fir
FRT	Fruit Tree (no specific)
HAZ	Hazel
HBR	Hornbeam
HCH	Horse Chestnut
HLN	Holly
HTF	Hawthorn
LME	Lime
LTF	Linden/Plane Tree
LRL	Laural
OKA	Oak
PIB	Pine
POW	Powder
SIL	Silver Birch
SYC	Sycamore
UNK	Unknown tree species
WILW	Willow
WIS	Weeping Willow
YEW	Yew

Line types

Diagram illustrating various measurements and components of a tree canopy:

- Fences
- Kerb
- Walls
- Stairs
- Change of Surface
- Footpath
- Bank Top
- Bank Bottom
- Building
- Building Overhead
- Roof heights
- Flower Bed
- Overhead Cable
- Road Edge
- Hedge Row
- Canopy
- Edge of vegetation

Multi directional tree canopy

Trunk position at ground level

30°

No. 38

Multi bole

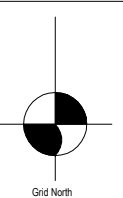
Tree number

Edge of canopy

Notes

Tree species should be confirmed by a arboricultural consultant if critical
Trunk sizes are measured at 1.5m above ground level

Eaves heights (where shown) are taken at the end of the tile / top of guttering.
Ridge heights are taken at the top of the ridge tile.
Service covers indicated where visible at time of survey



J. Brotherton & Partners
Land Surveyors & Engineers

Tel: 023 9259 1579
Email: enquiries@zpsurveys.co.uk
Web: www.zpsurveys.co.uk

Client	Jeffrey Douglas Chartered Architects
Drawing Title	Topographic Land Survey
Location	Station Road, Haying Island

REV A - 19 - 10 - 14 Levels adjusted to OS GPS datum
The OS map data on this drawing has been moved and
rotated to fit a local grid. J Brotherton and Partners have
not checked the accuracy of the OS map data.

LEVELS BASED ON:	OS GPS	Surveyor:-	MB	Assistant:-	MD
GRID BASED ON:	Local Grid	Drawn By:-	MB	Checked by:-	JB

Drawing & CAD Ref:

WDD - 111520 - Shading Road, Highway, Trees, Drains, Ditch & etc

DATE	DATE	NUMBER OF
------	------	-----------

SCALE	1:200 @ A1	14-10-14
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Removal of this block will remove all instances
This drawing has been created for use at a scale of 1:200
All critical dimensions, positions and levels to be checked on site

[Redacted Signature]

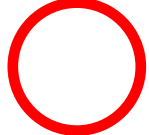


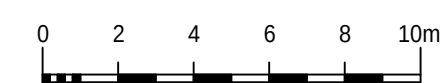
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Figured dimensions to be taken in preference to scaled.
Dimensions to be checked on site before work commences.
No deviation from this drawing will be permitted without the prior written consent of the Architect.
Ground floor slabs, foundations, structure, etc., and all work below ground is shown provisionally and inspection of ground conditions is essential prior to work commencing.
Reassessment is essential when the ground conditions are apparent and redesign may be necessary in the light of soil conditions found.
The responsibility for establishing the soil and subsoil conditions rests with the Contractor.



APPENDIX 2 - ROOT PROTECTION AREA PLAN, STATION ROAD

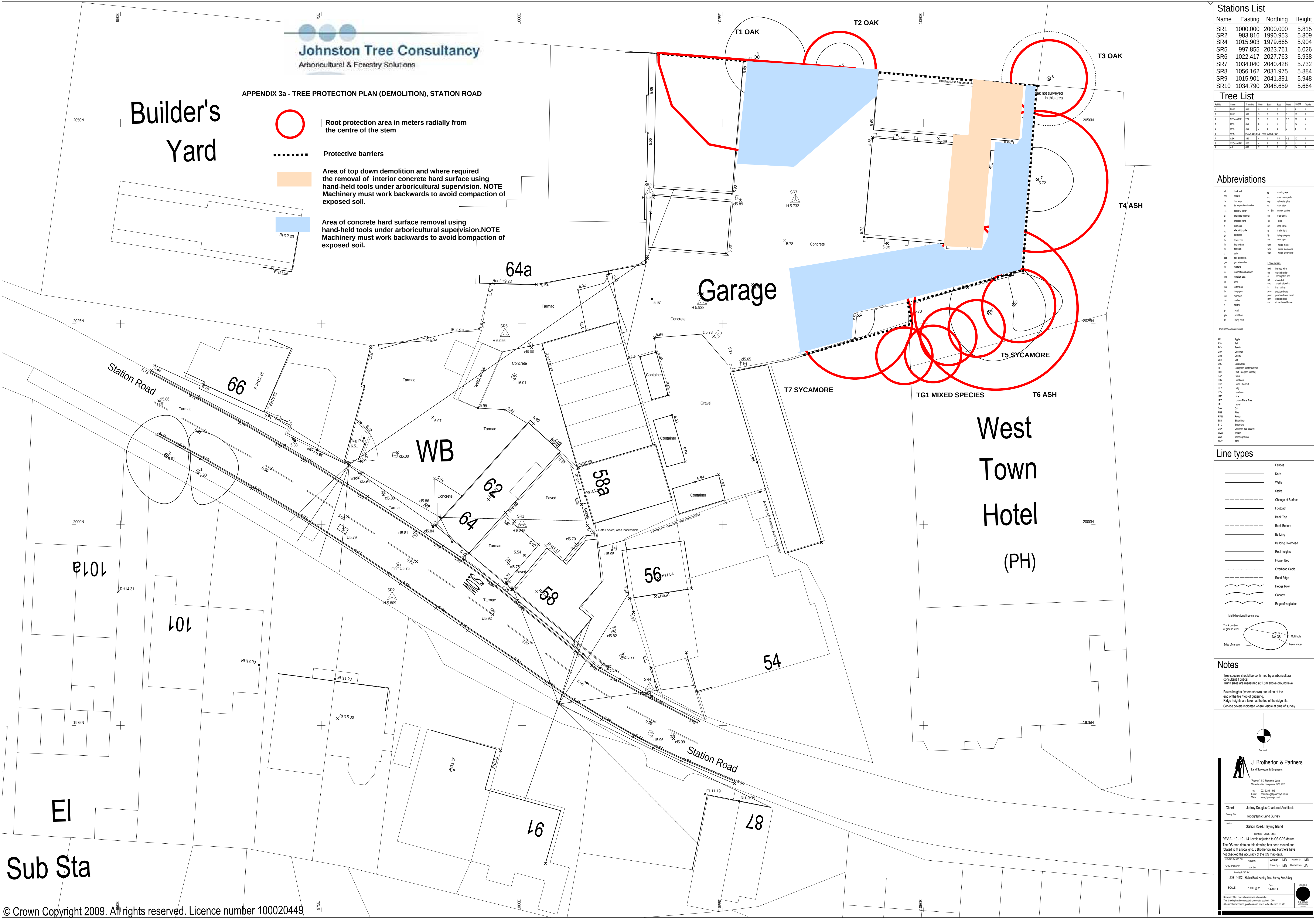
 Root protection area in meters radially from the centre of the stem



PRELIMINARY

Proposed Site Plan 1:200

revisions					date
drawing	drawing no.	rev.	date	scale(s)	sheet size
PROPOSED SITE PLAN	21412/202		NOV 2014	1:200	A1
client					
N P SLYDELL					
project					
PROPOSED RESIDENTIAL & COMMERCIAL REDEVELOPMENT OF HAYDEN GARAGES & ADJOINING SITES, 58-64 STATION ROAD HAYLING ISLAND, HAMPSHIRE PO11 0EL					
Jeffrey Douglas Chartered Architect					
60a Sinah Lane Hayling Island Hampshire PO11 0HH Tel: (023) 9246 8889 E-mail: jd@jeffreydouglas.co.uk					





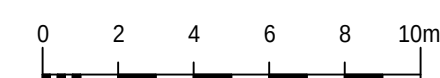
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Figured dimensions to be taken in preference to scaled. Dimensions to be checked on site before work commences. No deviation from this drawing will be permitted without the prior written consent of the Architect. Ground floor slabs, foundations, structure, etc., and all work below ground is shown provisionally and inspection of ground conditions is essential prior to work commencing. Reassessment is essential when the ground conditions are apparent and redesign may be necessary in the light of soil conditions found. The responsibility for establishing the soil and subsoil conditions rests with the Contractor.



APPENDIX 3b - TREE PROTECTION PLAN (CONSTRUCTION) - STATION ROAD

- Root protection area in meters radially from the centre of the stem
- Protective barriers
- Construction exclusion zone (CEZ)
- Area of no-dig construction driveway and parking
- Ground protection for scaffolding and pedestrian traffic



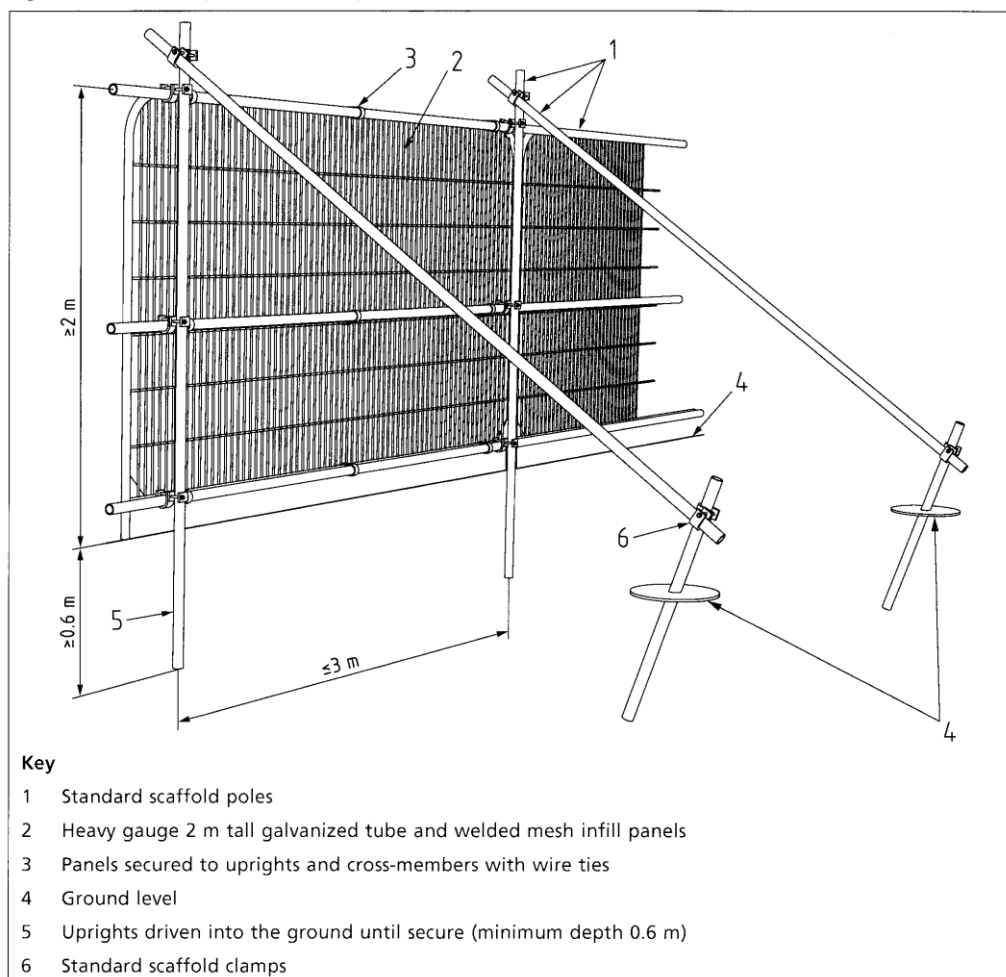
PRELIMINARY

Proposed Site Plan 1:200

revisions					date
drawing	drawing no.	rev.	date	scale(s)	sheet size
	21412/202		NOV 2014	1:200	A1
PROPOSED SITE PLAN					
client					
N P SLYDELL					
project					
PROPOSED RESIDENTIAL & COMMERCIAL REDEVELOPMENT OF HAYDEN GARAGES & ADJOINING SITES, 58-64 STATION ROAD HAYLING ISLAND, HAMPSHIRE PO11 0EL					
Jeffrey Douglas Chartered Architect					
60a Sinah Lane Hayling Island Hampshire PO11 0HH Tel: (023) 9246 8889 E-mail: jd@jeffreydouglas.co.uk					

Appendix 4 – Default Specification for Protective Fencing

Figure 2 Default specification for protective barrier



APPENDIX 5 – Examples of Above-Ground Stabilizing Systems

BRITISH STANDARD

BS 5837:2012

Figure 3 Examples of above-ground stabilizing systems

