

Analysis of submitted arboricultural information on land adjacent
43 Portsdown Hill Road, Havant

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Summary

Purpose of this document

This is an appraisal report, to assess the submitted arboricultural information by Barry Chambers, Changing Scenes Garden Design dated 12 March 2014, and summarise what the impact of the development proposal on those trees will be and indicate how any adverse impact will be mitigated. Its primary purpose is for the design team to review the tree information to help identify any significant issues that may require clarification or further submission. As its status is preliminary and considers another's report, explanations are kept to a minimum and only expanded upon where necessary.

The contents of this document

It includes:

- a summary of the impact on trees; and
- a discussion on the impact on visual amenity; and
- proposals to mitigate any impact; and
- issues likely to require further clarification and their description.

Background administrative information

Background information on our specific instructions and how we carried them out is included as Appendix 1.

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1.1 SUMMARY OF THE IMPACT ON TREES

Development proposals can impact on trees by causing them to be removed, by adversely affecting their health through disturbance in root protection areas (RPAs) or by severe pruning. However, in many instances, disturbance to trees close to development activity can be reduced to tolerable levels through the use of precautionary measures. Our assessment of the submitted information detailing trees that will be affected by this proposal and those that need to be protected by special precautions is summarised in Table 1.

Table 1: Summary of trees that will be affected and protected

	British Standard 5837 category		
	A (High quality)	B (Moderate quality)	C (Low quality)
Trees to be removed		19, 20, 88	79
Trees to be protected through special precautions (other than fencing and ground protection)	3, 8, 9	1	

1.2 DISCUSSION OF THE IMPACT ON VISUAL AMENITY

1.2.1 Trees to be removed for development (19, 20, 79 and 88)

Three category B trees will be removed. From the provided paperwork the trees are well within the site and are not prominent from outside the site. The trees are on the lower slopes, below the level of the proposed dwellings and their loss will be buffered by the retention of adjacent trees.

One category C tree will be removed. This tree is not sufficiently important to be worthy of influencing any layout. It is not important in the overall planning context and its loss should not influence the determination of this application.

1.2.2 Trees to be protected through the use of special precautions (1, 3, 8 and 9)

All the retained trees within the front garden will be protected from damage by the use of barriers (fencing and ground protection). Additionally, in the precautionary areas shown on the submitted tree protection plan, special precautions relating to the management of existing and new surfacing and services will be required. The protective measures including, barriers, signage, supplementary trackway protection over the existing driveway, mixing areas and storage have been described in the arboricultural method statement. Installation of new services is described within the tree protection plan document and on the site plan PO53-2.08 the route of the utility trench is shown running through the access drive. The new surfacing installation method has been briefly described and areas for its installation are shown on the site plan.

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1.2.3 Trees advised for pruning or removal for management reasons (5, 7, 10, 14, 15, 17, 21, 23, 26, 27, 29, 38, 59a, 63, 67, 79 and 80)

In addition to trees to be removed because of the development proposal, further trees have been advised for pruning or removal in the interest of good management. These works are advisory and are not as a direct result of the proposal, so they should not be attributed to it. They are not listed in Table 1 for that reason.

1.3 PROPOSALS TO MITIGATE ANY IMPACT

1.3.1 Protection of retained trees

The successful retention of trees depends on the quality of the protection and the administrative procedures to ensure those protective measures remain in place whilst there is an unacceptable risk of damage. An effective means of doing this is through an comprehensive arboricultural method statement that can be specifically referred to in a planning condition. Implementation of a suitable method statement will allow all the retained trees to survive without any adverse impact and allow them to continue to contribute to local amenity and character. The submitted arboricultural information deals with all the main issues, but lacks enough detail in some places to be considered sufficient for planning consent to be granted without being conditioned.

1.3.2 Issues likely to require further clarification

From this appraisal, the issues that the LPA tree officer is likely to need clarification on, and will be considered for direct reference in a planning condition include:

1. Pre-commencement meeting to agree tree works, precise location and installation of CEZ barriers (fencing and/or ground protection).
2. Programme of tree protection installation and arboricultural supervision/site monitoring.
3. Design and installation of special surfacing. Cross sections through the proposed surfacing design to demonstrate that existing levels will not be altered causing detrimental impact on retained trees.
4. Dimensions and installation detail of new service trench to include exploratory investigations prior to trench excavation. All utility installations must be in accordance with National Joint Utilities Group (2007) Volume 4, Issue 2: *Guidelines for the planning, installation and maintenance of utility apparatus in proximity to trees*.
5. Tree planting and general landscaping to mitigate tree losses.

1.3.3 Description of the issues requiring further detail

1. **Pre-commencement meeting:** A pre-commencement meeting will be held on site before any of the site clearance and construction work begins. This would normally be attended by the site manager, the arboricultural consultant and a LPA representative. In the event that a LPA representative declines to be present, the

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arboricultural consultant will inform the LPA in writing of the details of the meeting. All tree protection measures detailed in this document will be fully discussed so that all aspects of their implementation and sequencing are understood by all the parties. This will include agreeing the form and location of the most appropriate combination of fencing and/or ground protection to be used as barriers for the CEZ. Any agreed clarifications or modifications to the consented details will be recorded and circulated to all parties in writing. This meeting is where the details of the programme of tree protection will be agreed and finalised, which will then form the basis of any supervision arrangements between the arboricultural consultant and the developer

2. **Programme of tree protection and site monitoring:** Once the site is active, the arboricultural consultant will visit at an interval agreed at the pre-commencement site meeting. This would normally be every two to four weeks for general supervision, but could be at a longer interval if agreed between the parties. The supervision arrangement will be sufficiently flexible to allow the supervision of all sensitive works as they occur. The arboricultural consultant's initial role is to liaise with the developer and the LPA to ensure that protective measures are fit for purpose and in place before any works start on site. Once the site is working, that role will switch to monitoring compliance with arboricultural planning conditions and advising on any tree problems that arise or modifications that become necessary. All supervisory visits will be formally confirmed in writing and circulated to all relevant parties, including the LPA. The purpose of these written records is firstly to provide proof of compliance that will allow the developer to robustly demonstrate adherence to best practice in the event of any disputes, and secondly to help the LPA efficiently discharge the relevant planning conditions.
3. **New special surfacing:** BS 5837 (7.4) confirms that new surfacing can be installed within RPAs, but it has to be carried out with care. These operations are potentially damaging to trees because they may require changes to existing ground levels, resulting in localised soil structure degradation and/or disrupt the efficient exchange of water and gases in and out of the soil. Older trees are much more prone to suffer from such changes than young and maturing trees. Adverse impact on trees can be reduced by minimising the extent of these changes in RPAs. Generally, the most suitable surfacing will be relatively permeable to allow water and gas movement, load spreading to avoid localised compaction and require little or no excavation to limit direct damage. The actual specification of the design is an engineering issue that needs to be considered in the context of the bearing capacity of the soil, the intended loading and the frequency of loading. The detail of product and specification are engineering issues and must be provided by appropriate specialists. BS 5837 (7.4.2.) sets out that no-dig, three dimensional cellular confinement systems can be used as the basis for extending hard surfacing into RPAs. It is our experience (www.barrelltreecare.co.uk/case-studies/SurfacingNearTrees.pdf) that this type of surfacing can be installed in the majority of situations without any significant adverse impact on adjacent trees,

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provided that proper consideration is given to all the circumstances. Most of our experience is with the CellWeb system supplied by Geosynthetics Ltd (www.geosyn.co.uk) and because of its sustained good performance over time, this is our preferred choice of product. The product is made from heavy-duty plastic that can be pulled apart to open into cells. These are then filled with washed stone, after the product is spread over the ground and pinned in place. This forms a base layer that acts as a floating raft, spreading the load across the whole construction width.

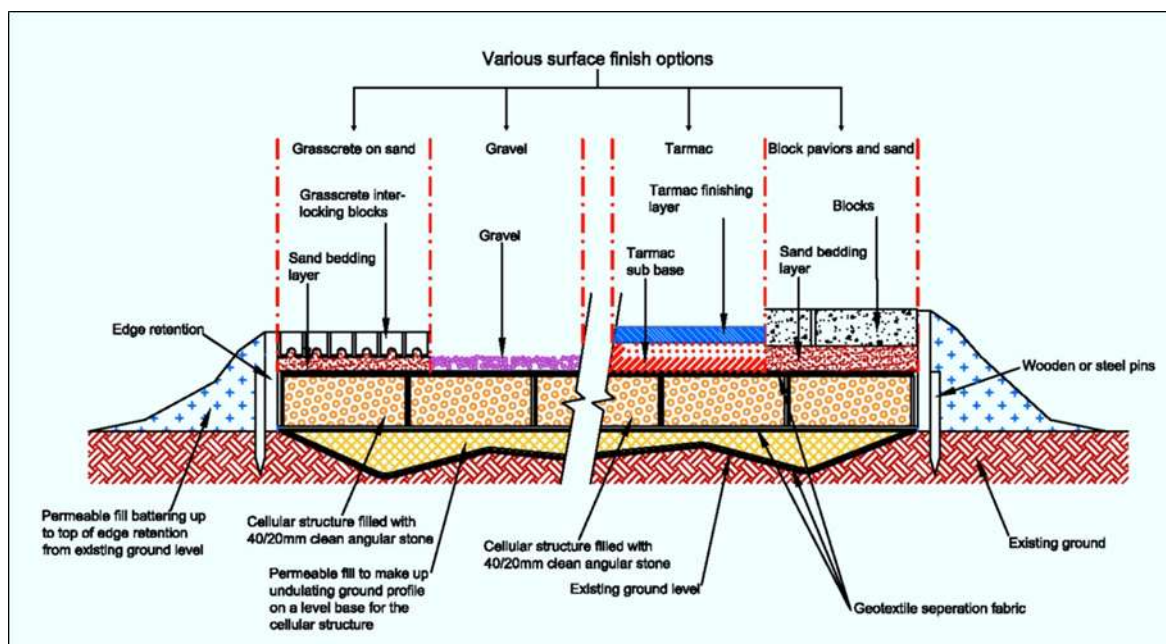


Figure 1: This conceptual cross-section illustrates the structural elements of the system and the multiple surfacing options that can be used with it.

4. **Services:** Excavation to upgrade existing services or install new services in RPAs may damage retained trees. Where possible, all services should be outside RPAs and installation in RPAs should only be chosen as a last resort. If installation within RPAs is being considered, as advised in 4.1.3 of the NJUG guidance, the decision should be made in consultation with the LPA or the supervising arboriculturist before any work is carried out. If service installation is agreed within RPAs, the NJUG protocol as set out in 4.1.3 of its guidance should be used to decide the most appropriate method. In summary, this sets out that "*Acceptable techniques in order of preference are; a) trenchless, ... b) Broken trench – hand-dug ... c) Continuous trench – hand-dug*". If trenchless methods are to be used, there is normally a starting pit and a finishing pit that have to be dug at each end of the service run and these must be outside RPAs (photo 44). Where a hand-digging option is agreed (photo 45), any roots discovered during the excavations should be dealt with as set out in paragraph 7 above. Where possible, backfilled material around excavated services must not be heavily compacted, with specific advice provided in 4.1.5 of the NJUG guidance.

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5. **Landscaping:** Soft landscaping activity after construction can be extremely damaging to trees. No significant excavation or cultivation, especially by rotovators, should occur within RPAs. Where new designs require levels to be increased to tie in with new structures or the removal of an existing structure has left a void below the surrounding ground level, good quality and relatively permeable top soil should be used for the fill. It should be firmed into place, but not over compacted, in preparation for turfing or careful shrub planting. Ideally, all areas within 1m of tree trunks should be kept at the original ground level and have a mulched finish rather than grass to reduce the risk of mowing damage.

1.4 CONCLUSIONS

1.4.1 Tree loss

The proposal will result in the loss of three category B trees that are all set back in the site and will have no impact on local amenity or character.

1.4.2 Tree protection

As advocated in BS5837:2012 sufficient space has been provided for the important trees to be retained and protected. Special surfacing and installation of new utilities has been described in principle where appropriate and will not lead to detrimental impact on the retained trees, providing that all works within RPAs are subject to arboricultural supervision. Further specialist details as described above can be provided through planning conditions and agreed at a pre-commencement meeting between all parties.

1.4.3 Opinion

I believe that the proposal achieves a sustainable relationship between its built form elements and the retained trees. By implementing the precautions to protect the retained trees that are specified through the arboricultural method statement included as part of the submissions, the development proposal will have no significant impact on the contribution of these trees to amenity or character in the wider setting. Further details regarding the design and installation of special surfacing and utilities will be required, but can be conditioned.

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Appendix 1: Administrative information, site visit and data collection

Administrative information

1. Instruction

We are instructed by Randell Design Group Ltd to assess the arboricultural information submitted in support of the development proposal at land adjacent to 43 Portsdown Hill Road, Havant and provide recommendations for further documentation if required:

2. Documents provided

This report has considered the following information:

- Arboricultural impact assessment, tree protection plan, tree survey and report, method statement, root test hole method statement; all separately produced by Barry Chambers, Changing Scenes Garden Design
- Site plan PO53-2.08, block plan PO53-2.01E and roof/landscape plan PO53/2.06D produced by Randell Design Group

3. Limitations of this report

The following limitations apply to this report:

- **Statutory protection:** The existence of tree preservation order or conservation area protection does not automatically mean trees are worthy of being a material constraint in a planning context. Trees can be formally protected, but be in poor structural condition or in declining health, which means that they are unsuitable for retention or influencing the future use of the site. Furthermore, a planning consent automatically takes precedent over these forms of protection, which makes them of secondary importance. For these reasons, we do not check statutory protection as a matter of course in the process of preparing this report. However, if any tree works are proposed before a planning consent is given, then the existence of any statutory protection must be checked with the LPA.
- **Ecology and archaeology:** Although trees can be valuable ecological habitat and can grow in archeologically sensitive locations, we have no specialist expertise in these disciplines and this report does not consider those aspects.

4. Technical references

This assessment is based on the following primary technical references:

- British Standards Institution (2012) BS 5837: *Trees in relation to design, demolition and construction – Recommendations*
- National Joint Utilities Group (2007) Volume 4, Issue 2: *Guidelines for the planning, installation and maintenance of utility apparatus in proximity to trees*

5. Qualifications and experience

This report is based on my site observations and the provided information, interpreted in the context of my experience. I have experience and qualifications in arboriculture that can be reviewed at www.barrelltreecare.co.uk/about-us.php.



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