

Arboricultural Assessment

**Construction of 2No. 2 Bed End of Terrace Maisonettes
(as Alternative to Previous Planning Permission
APP/11/01177), Together with Single Storey
Rear Extension to Existing House.**

1, Braishfield Road, Havant, PO9 2HS



October 2011

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1. Introduction

1.1 Background

Planning permission (APP/11/01177) was granted on 01/09/2011 for the construction of a 3 bed end of terrace house adjacent to 1 Braishfield Road in conjunction with a single storey rear extension to the existing property. The planning approved new end of terrace dwelling comprised 118m² GEA over two floors.

This development proposal involves subdividing the previously approved 3 bed dwelling into two self contained maisonettes. Each maisonette will have 2 bedrooms and comprise 61.5m² GEA. The single storey permitted development extension to the existing property will also be implemented to minimise overshadowing.

1.2 Scope of Works

The arboricultural issues were considered in detail as part of the previously approved application APP/11/01177. A subdivision of the approved building is now proposed in order to create two self-contained maisonettes. However, no new arboricultural issues present themselves. For completeness, all the issues considered as part of the previous application are re-visited below: -

- Categorisation of all trees that may be affected by the proposed development.
- Comparison of tree root protection areas before and after development.
- Tree protection measures required to ensure the safe retention of all trees.
- The timetable for tree protection works.

2. Tree Categorisation

This Arboricultural Assessment has been prepared in accordance with BS5837:2005 which suggests that trees should be allocated to one of the following categories: -

- Category A – Trees whose retention is most desirable - Healthy trees with a significant physical presence that add significant value to the landscape.
- Category B – Trees where retention is desirable - Trees that have a significant visual impact but require considerable management or maintenance.
- Category C – Trees which could be retained - Trees that are in adequate condition but short/long term retention is in question.
- Category R – Trees for removal - Dead, dying or dangerous trees.

Tree 1



Tree 1 is a vigorous and healthy mature tree that is located just outside the development site boundary. It has a diameter of 320mm and has been classified as category A. Retention of tree 1 is most desirable.

Tree 2



Tree 2 is a middle-aged tree with a certain amount of amenity value that is located in the corner of the front garden. It has a diameter of 240mm and has been classified as category B. Retention of tree 2 is reasonably desirable.

Tree 3



Tree 3 is a vigorous and healthy mature tree that is located just inside the front garden of the development site boundary. It has a diameter of 430mm and has been classified as category A. Retention of tree 3 is most desirable.

3. Construction of Permeable Driveway

Since the approval of the previous planning application APP/11/01177, Permitted Development Rights have been used in order to construct a permeable gravel driveway to benefit the existing property. The new driveway will also provide the 3 communal parking spaces required to serve the proposed new maisonettes.



The area required for the new driveway was excavated to a depth of 175mm and as can be seen in the above picture, no tree roots are present.



The new driveway comprises a bedding layer of 20mm pea shingle, Gridforce plastic tile reinforcement, and a top layer of 10-20mm pea shingle. The gravel drive construction maximises rainwater percolation down to the tree roots of the Whitebeam and ensures its long term protection.



The Permitted Development driveway has now been completed and the White Beam is still vigorous and healthy. There can therefore be no valid objection to the proposed parking layout for the maisonettes on grounds of tree protection.

4. Root Protection Area Comparison

The Root Protection Area (RPA) of each tree is defined as a circle with radius: -

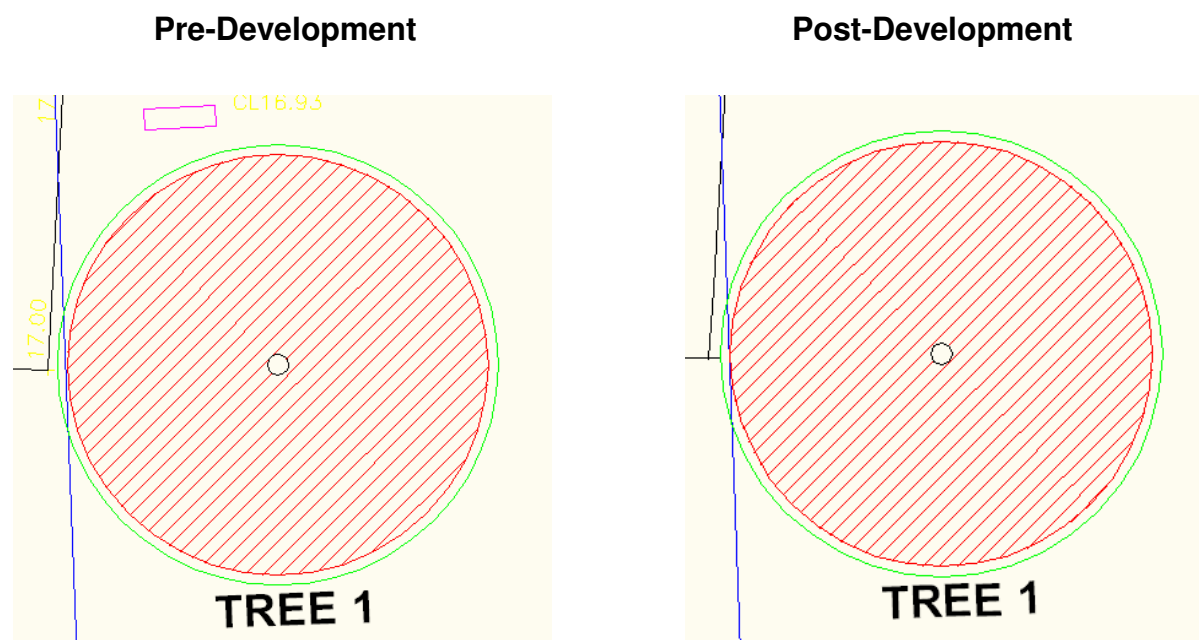
- 12 times the diameter of the trunk, measured at a height of 1.5m for a single stemmed tree, or
- 10 times the diameter of the trunk, measured immediately above the buttress flare for a multi-stemmed tree.

All three trees are multi-stemmed, therefore the RPA is 10 times the diameter of each of the trees. For the purposes of this Arboricultural Assessment, a comparison of each Root Protection Area has been made both before and after completion of the proposed development.

The pre-development Root Protection Areas are shown on the Existing Tree Survey and the post-development Root Protection Areas are shown on the Tree Protection Plan. The individual tree protection measures are discussed in more detail in sections 5, 6 and 7.

Tree 1

The diameter of tree 1 is 320mm which gives a root protection radius of 3.2m and an associated RPA of 32.2m².

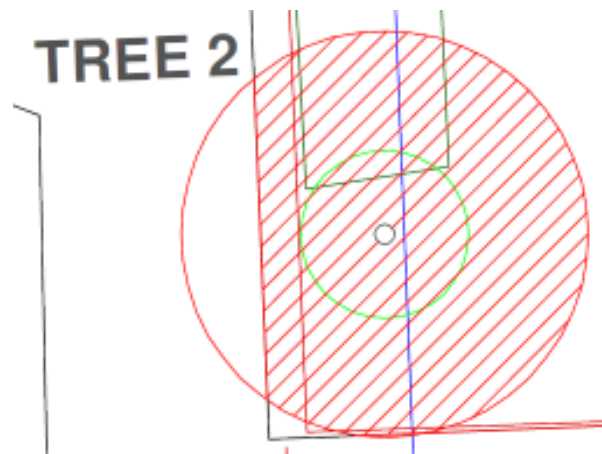


The pre-development RPA is completely contained within a soft grass landscaping area outside the development boundary. The proposed development respects and retains 100% of the RPA as soft landscaping. The new dwelling will therefore have no adverse impact on tree 1.

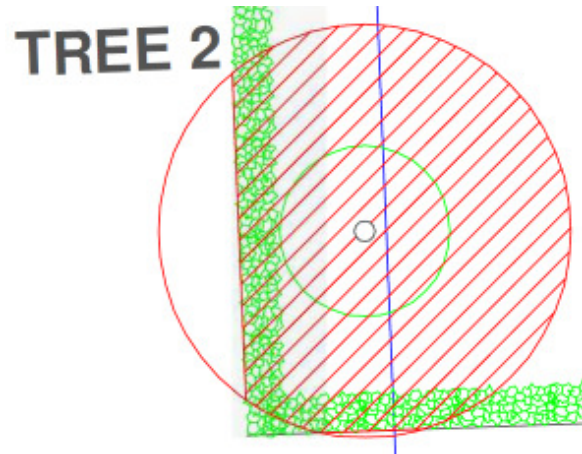
Tree 2

The diameter of tree 2 is 240mm which gives a root protection radius of 2.4m and an associated RPA of 18.1m².

Pre-Development



Post-Development

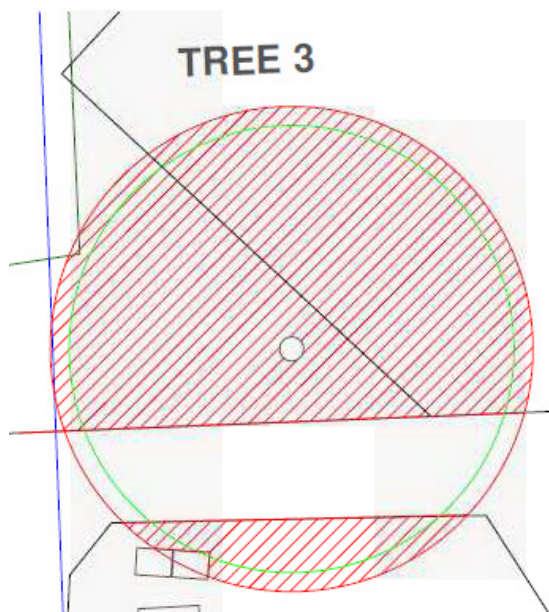


The paved area of the adopted highway encroaches 2.5m² into the pre-development RPA which represents about 14%. The proposed development retains and protects the remaining 86% of the RPA as soft landscaping. The new dwelling will therefore have no adverse impact on tree 2.

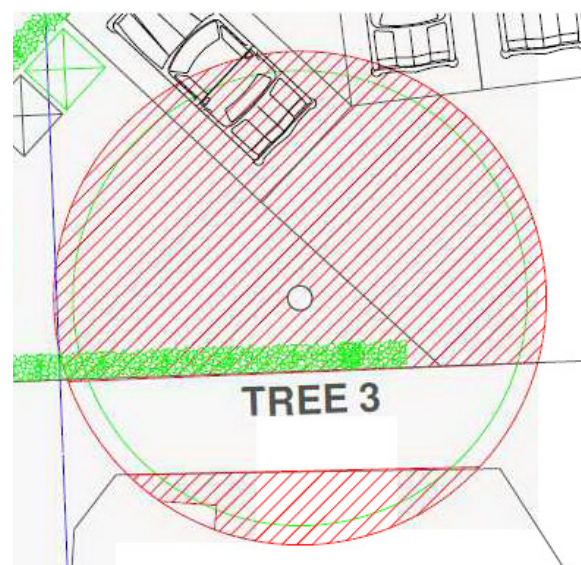
Tree 3

The diameter of tree 3 is 430mm which gives a root protection radius of 4.3m and an associated RPA of 58.1m².

Pre-Development



Post-Development



The existing tarmac footpath encroaches into the pre-development RPA covering a total area of 13.1m². This represents about 23%. The proposed development retains and protects the remaining 77% of the RPA as permeable gravel and soft landscaping. The 23% of hard surfacing within the RPA has already compacted the underlying soil, and the mature tree remains vigorous and healthy. The new dwelling will therefore have no adverse impact on tree 3.

5. Tree Protection Measures

The tree protection measures that are required comprise the protective barrier fencing works which will cordon-off and safeguard the root protection areas.

Protective barrier fencing is to be installed prior to commencement of the proposed development. No demolition, site clearance, building work or delivery of materials shall take place until the protective barrier fencing (PBF) is installed, sited and aligned in accordance with the Proposed Tree Protection plan.

Existing Tree Survey Showing Protective Barrier Fencing

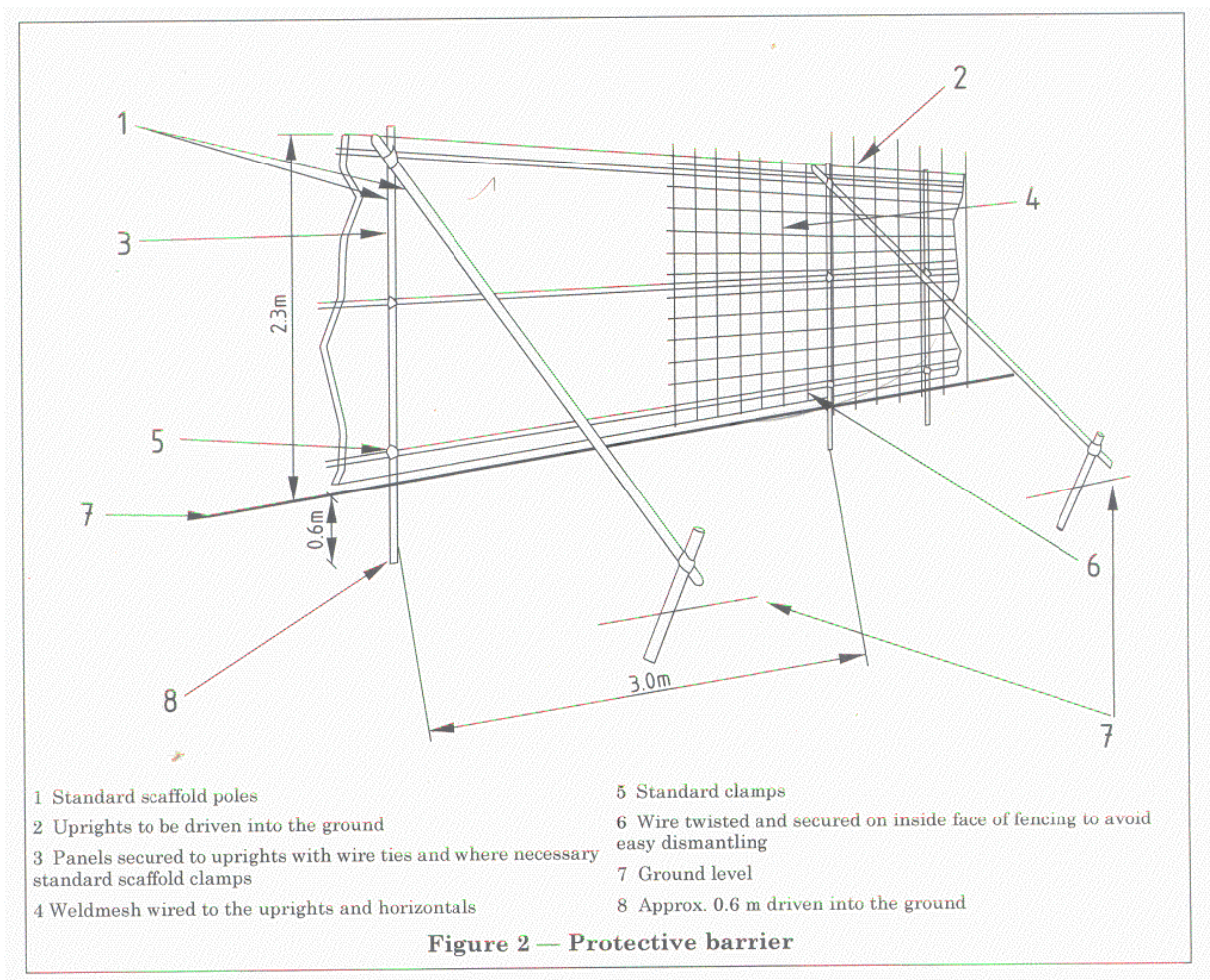


Proposed Tree Protection Plan Showing Protective Barrier Fencing



Protective barrier fencing should be designed according to the intensity and proximity of the proposed development to the retained trees. In order to protect trees where development activity is in close proximity, BS5837 defines protective barrier fencing to be: -

“a vertical and horizontal scaffold framework, well braced to resist impact with the vertical tubes spaced at a maximum of 3.0m. Onto this, weld mesh panels should be securely fixed with wire or scaffold clamps. Weld mesh panels on rubber or concrete feet are not resistant to impact and should not be used.”



Signage denoting the words “*tree protection area*” at 5.0m intervals should be fixed to the protective barrier fencing.

Protective barrier fencing in accordance with this arboricultural statement and the Proposed Tree Protection plan are to remain unaltered and in situ for the entire duration of the construction.

The only hard surfacing required within the root protection areas is already in place. This comprises the tarmac pavements. Hand dug trenches and root pruning will therefore not be necessary, as the existing hard surfacing within the root protection areas will remain in situ.

6. Prohibited Activities Within RPA

In order to ensure the safe retention of all trees: -

- Mechanical digging or scraping will not be permitted within defined root protection areas, or within areas cordoned off by protective barrier fencing.
- No spoil shall be mounded, spread or stored within the root protection area of any tree.
- Fires will not be permitted within 10 metres of any vegetation.
- Machinery, plant and vehicles will not be permitted to be washed down within 5 metres of any vegetation.
- Leaning objects against trees, or attaching objects to a tree will not be permitted.
- Chemicals and materials will not be transported, stored, used, or mixed within a root protection area, or within any area cordoned off by protective barrier fencing.
- Protective barrier fencing will only be removed once the building construction has been completed.

7. Timetable for Tree Protection Works

The tree protection measures will be phased as follows: -

1. All tree works will be carried out in accordance with this arboricultural report.
2. The protective barrier fencing will be installed.
3. All construction and hard landscaping works will be undertaken.
4. The protective barrier fencing will be removed.
5. All soft landscaping works will be undertaken.

No site personnel are to be present and no demolition, site clearance, building work or delivery of materials is to occur until the protective barrier fencing (PBF) is installed.

Protective barrier fencing in accordance with this arboricultural statement and the Proposed Tree Protection Plan are to remain unaltered and in situ for the entire duration of the construction.

8. Summary and Conclusions

Based on the evidence presented within this report, the proposed development at 1 Braishfield Road will not have any adverse impact on the 3 trees that could be affected. This is based on the following conclusions of the above report: -

- There are 3 mature or middle-aged trees within, or just outside the development site boundary.
- All 3 trees are desirable for retention.
- The root protection areas of all 3 trees remain unaffected by the proposed development.
- Protective barrier fencing will be installed prior to commencement of development and will cordon-off and safeguard all root protection areas.
- No excavation will be necessary, and no harmful operations will be allowed within root protection areas.
- The protective barrier fencing will remain in situ for the entire duration of the construction process.

In light of this Arboricultural Assessment, Havant Borough Council are respectfully requested to confirm that the proposed development accords with local and national planning policy relating to tree protection and is therefore acceptable.