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Arboricultural Implication Assessment (AIA)

Arboricultural Implication Assessment derived from the Tree Survey and Report

Downlands Community School Dale Avenue Hassocks BN6 8LP

Ref No: 221012

| Client: | Faithfull and Gould | | | | | | |
|-----------------------|--|--|--|--|--|--|--|
| Instructed by: | Peter Myall | | | | | | |
| Documents referenced: | Tree Survey and Report and Tree Constraints Plan Ref No: 221012 2417-TFC-XX-XX-DR-L-1001 Construction Access and Removals Plan.dwg 2417-TFC-XX-XX-DR-L-1002 Landscape Proposals.dwg 22048-HNW-ZZ-00-A-DR-2200.dwg showing proposed floor plan. 22048-HNW-ZZ-00-DR-A-2100.dwg showing site plan. 22048-HNW-ZZ-ZZ-A-DR-2300.dwg showing side elevations. 22048-HNW-ZZ-ZZ-A-DR-2301.dwg showing proposed short and long sections. | | | | | | |
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1: Introduction

1.1 Aims of this Assessment:

The aim of this Arboricultural Implication Assessment (AIA) is to consider how the proposed development and the associated trees will co-exist and interact in the present and the future. The AIA addresses and considers issues such as statutory constraints, above and below constraints, alternatives to tree loss and infrastructure requirements. It also considers such issues as end use of space, the need to prune or remove trees due to excessive shade or encroachment and whether it is possible to plant new trees.

1.2 Aspects not dealt with within this Assessment

Please also refer to Appendix 1.

The AIA does not include an Arboricultural Method Statement (AMS), or Tree Protection Plan (TPP).

This AIA does not consider issues relating to boundary lines and the proposed structures. It maybe that such issues effect ownership of trees but the assessment does not deal with this issue. (Issues of boundary line dispute and/or ownership of vegetation may require a land registry search and reference to local records. This can be conducted if so requested).

2. Implications of Proposed Development on current Tree Populations

2.1 Description of Proposed Development

From our understanding the proposed works involve the following:

- 1. Construction of one new single storey detached building.
- 2. Hard and soft landing including relocation of community garden area.

2.2 Considerations of those trees that will be affected by the proposed build

| Tree no. | Species | Remova | al due to | Mitigation required | | Details of how proposed build layout affects tree and outline mitigation required | |
|----------|------------------------------|--------|-----------|---------------------|-----|---|--|
| | | Works | Condition | Crown | RPA | | |
| T1 | Common Beech | n/a | n/a | ✓ | n/a | The height of current crown clearance is 4m. Crown lift to 5m above ground level over road, to facilitate development access. | |
| H1 | Mixed Hedge | n/a | n/a | n/a | n/a | No issues | |
| G1 | Mixed Group | n/a | n/a | n/a | n/a | No issues | |
| T2 | Crab Apple | n/a | n/a | n/a | n/a | No issues | |
| T3 | Norway Maple | n/a | n/a | n/a | n/a | No issues | |
| T4 | Horse Chestnut | n/a | n/a | √ | n/a | Lateral crown spread encroaches approx. 1.5m within road. Reduce lateral crown spread to the west by approx. 1.5m, to facilitate development access. | |
| T5 | Crab Apple | n/a | n/a | n/a | n/a | No issues | |
| T6 | Common Beech | n/a | n/a | n/a | n/a | No issues | |
| G2 | Mixed Group | n/a | n/a | n/a | n/a | No issues | |
| T7 | Silver Birch 'Youngii' | n/a | n/a | n/a | n/a | No issues | |
| Т8 | Crab Apple | n/a | n/a | n/a | n/a | No issues | |

| Tree no. | Species | Remova | al due to | Mitigation required | t | Details of how proposed build layout affects tree and outline mitigation required |
|----------|---------------------|--------|-----------|---------------------|-----|---|
| | | Works | Condition | Crown | RPA | |
| G3 | Mixed Group | n/a | n/a | n/a | n/a | No issues |
| T9 | Wild Cherry | n/a | n/a | n/a | n/a | No issues |
| G4 | Mixed Group | n/a | n/a | n/a | n/a | No issues |
| T10 | Common oak | n/a | n/a | n/a | n/a | No issues |
| T11 | Rowan | n/a | n/a | n/a | n/a | No issues |
| T12 | Lilac | n/a | n/a | n/a | n/a | No issues |
| T13 | Bird Cherry | n/a | n/a | n/a | n/a | No issues |
| T14 | Indian Bean tree | n/a | n/a | n/a | n/a | No issues |
| T15 | Silver Birch | n/a | n/a | n/a | n/a | No issues |
| H2 | Beech Hedge | n/a | n/a | n/a | n/a | No issues |
| T16 | Eucalypt us | n/a | n/a | n/a | n/a | No issues |
| T17 | Silver Birch | n/a | n/a | n/a | n/a | No issues |
| T18 | Bird Cherry | n/a | n/a | n/a | n/a | No issues |
| T19 | Field Maple | n/a | n/a | n/a | n/a | No issues |

| Tree no. | • | | Mitigation required | | Details of how proposed build layout affects tree and outline mitigation required | |
|----------|-------------------|-------|---------------------|-------|---|-----------|
| | | Works | Condition | Crown | RPA | |
| T20 | Pin Oak | n/a | n/a | n/a | n/a | No issues |
| T21 | Japanes e Acer | n/a | n/a | n/a | n/a | No issues |
| T22 | Pin Oak | n/a | n/a | n/a | n/a | No issues |
| T23 | Pin Oak | n/a | n/a | n/a | n/a | No issues |
| T24 | Pin Oak | n/a | n/a | n/a | n/a | No issues |
| T25 | Pin Oak | n/a | n/a | n/a | n/a | No issues |
| T26 | Pin Oak | n/a | n/a | n/a | n/a | No issues |
| НЗ | Mixed Hedge | n/a | n/a | n/a | n/a | No issues |
| T27 | Common Alder | n/a | n/a | n/a | n/a | No issues |
| T28 | Common Alder | n/a | n/a | n/a | n/a | No issues |
| T29 | Pin Oak | n/a | n/a | n/a | n/a | No issues |
| T30 | Pin Oak | n/a | n/a | n/a | n/a | No issues |
| T31 | Hornbea m | n/a | n/a | n/a | n/a | No issues |
| T32 | Pin Oak | n/a | n/a | n/a | n/a | No issues |
| T33 | Hornbea m | n/a | n/a | n/a | n/a | No issues |
| T34 | Hornbea m | n/a | n/a | n/a | n/a | No issues |

| Tree Species no. | | Species Remova | | Mitigation required | | Details of how proposed build layout affects tree and outline mitigation required | |
|------------------|-----------------|----------------|-----------|---------------------|----------|--|--|
| | | Works | Condition | Crown | RPA | | |
| T35 | Common Alder | n/a | n/a | n/a | n/a | No issues | |
| H4 | Hedge | n/a | n/a | n/a | n/a | No issues | |
| T36 | Silver Birch | n/a | n/a | n/a | n/a | No issues | |
| T37 | Paper Birch | n/a | n/a | n/a | n/a | No issues | |
| H5 | Mixed Hedge | n/a | n/a | n/a | n/a | No issues | |
| H6 | Hedge | n/a | n/a | n/a | n/a | No issues | |
| H7 | Hedge | n/a | n/a | n/a | n/a | No issues | |
| G5 | Mixed Group | n/a | n/a | n/a | n/a | No issues | |
| H8 | Mixed Hedge | n/a | n/a | n/a | n/a | Proposed location of Heras fencing separating compound storage area and school hard playground to accommodate retention of hedgerow. | |
| H9 | Beech Hedge | √ | n/a | n/a | n/a | The footprint of the proposed hard landscaping encroaches within an approx. 20m section of hedgerow. Fell and grind stumps of approx. 20m hedgerow, to facilitate hard landscaping. Proposed location of Heras fencing separating compound storage area and school hard playground to accommodate retention of hedgerow. | |
| T38 | Field Maple | n/a | n/a | √ | ✓ | The footprint of the proposed new single storey detached building encroaches within the RPA by approx. 9%. Construction has the potential to conflict with tree roots, mitigation is therefore deemed necessary. Exploratory excavations are to be carried out using hand held tools only to establish the presence of roots within the area of encroachment posed by the development. Should it be established that there is a lack of rooting activity within the area then traditional | |

| Tree no. | • | | Mitigation required | | Details of how proposed build layout affects tree and outline mitigation required | |
|----------|----------------|----------|---------------------|-------|---|---|
| | | Works | Condition | Crown | RPA | |
| | | | | | | construction methods such as strip foundations may be used. If significant rooting activity is found, then specialist construction methods should be utilised to allow for their retention. |
| | | | | | | Lateral crown spread encroaches approx. 2.0m of the proposed new single storey detached building. |
| | | | | | | Reduce lateral crown spread to the north, east and south by approx. 2.5m, to facilitate development. |
| H10 | Beech Hedge | ✓ | n/a | n/a | n/a | The footprint of the proposed new single storey detached building encroaches within an approx. 50% area of the hedge. |
| | | | | | | Hedgerow has been recently planted and is of an age and size which would be deemed suitable to transplant and relocate on site. Hedgerow to be relocated with ameliorants such as biochar and phosphites added to soils when replanted. |
| T39 | Paper Birch | ✓ | n/a | n/a | n/a | The main stem is located directly within the footprint of the proposed new single storey build. |
| | | | | | | Tree has been recently planted and is of an age and size which would be deemed suitable to transplant and relocate on site. Tree to be relocated with ameliorants such as biochar and phosphites added to soils when replanted. |
| T40 | Paper | ✓ | n/a | n/a | n/a | The main stem is located directly footprint of the proposed new single storey detached. |
| | Birch | | | | | Tree has been recently planted and is of an age and size which would be deemed suitable to transplant and relocate on site. Tree to be relocated with ameliorants such as biochar and phosphites added to soils when replanted. |
| T41 | Paper | ✓ | n/a | n/a | n/a | The main stem is located directly footprint of the proposed new single storey detached. |
| | Birch | | | | | Tree has been recently planted and is of an age and size which would be deemed suitable to transplant and relocate on site. Tree to be relocated with ameliorants such as biochar and phosphites added to soils when replanted. |

2.3 Summary of effects on the Trees from Proposed Layout

2.3.1 Loss and consequent works to trees

The development as proposed would require the removal of 20m section of 1 no. hedge and relocation of 3no. individual trees and 1no. hedge. There would also be a requirement for 3no. individuals to be pruned to facilitate the development and access.

2.3.2 Mitigation.

Mitigation methods for works or access that encroach Root Protection Areas and tree canopies are outlined in the table included in section 2.2 above and detailed in the Arboricultural Method Statement.

2.4 Infrastructure requirements.

Details of new utility service provision is not currently available. Where possible existing utility services; including electricity, water and drainage should be retained and utilised to serve the new dwellings. Any new trenches that are required should be located to avoid the Root Protection Areas of retained trees.

2.5 Installation of Protective Barriers and Ground Protection.

It will be necessary to install vertical protective barriers prior to the commencement of the development. Barriers will need to be erected to protect H8, H9 and T38. Where practically possible existing hard standing will be utilised as ground protection within the RPA of retained trees on site.

3. Change in Site Use and Tree Management Implications

3.1 The Implications of the Potential Growth and/or Nuisance of the Trees within the next 10 years

Due to the proximity of T38 to the new proposed single storey detached building there will be a need to prune the crown on a 3-5 year cyclical basis to provide adequate clearance from the building.

Leaf fall can cause blockages of guttering systems, installation of appropriate gutter-guards in close proximity to retained trees would reduce the risk of future problems.

3.2 Potential Root damage to Infrastructure

We are not aware of the sub-soils relating to the site in relation to possible subsidence issues. The trees considered for retention are of low through to high water demand according to NHBC Chapter 4.2. This report does not consider the implications of the trees either directly or indirectly on the proposed build/ construction. New structures should be designed to account for such potential direct/ indirect damage.

4. Appraisal of Tree loss

1.1 Summary of tree retention

The table below lists the number of surveyed trees to be retained and to be removed; it does not include a total number of trees that would be retained throughout the wider site.

| Consideration | Number of trees |
|---|---|
| Trees and groups that can be retained | 41no. individual trees, 5no. groups and 10no. hedges. |
| Category 'U' trees/groups/ hedges to be removed | 0 |
| Category 'A' trees/groups/ hedges to be removed | 0 |
| Category 'B' trees/groups/ hedges to be removed | 1no. part removal of hedge. |
| Category 'C' trees/groups/ hedges to be removed | 0 |

4.2 Consideration of Ecological concerns

We are not aware of any ecological concerns in relation to the site at the time of writing. Ecological considerations that involve EU Habitats Directive will over rule any Arboricultural recommendations as given within this report.

5. Conclusions

5.1 Conclusion

The proposed development would require the part removal of a hedgerow and relocation of a small number of recently planted individuals and hedgerow.

The most prominent tree which is to be affected by the proposed development is T38, which has been assessed as 'C Category'. The tree is to be retained with mitigatory works utilised to allow for its retention during the development.

5.2 Further considerations

An Arboricultural Method Statement (AMS) has been compiled together with Tree Protection Plans (TPPs) which follow on from this report.

The TPP outlines trees to be retained, removed, location of barriers and type of barrier to be installed. The AMS will take into consideration construction operations undertaken in the vicinity of the trees. It will deal with such issues as site access, intensity of construction activity, space needed for works, location of materials and installation of service runs.

Appendix 1: Limitations of Arboricultural Implication Assessment

Limitations of the Arboricultural Implication Assessment

Please also refer to sections 1.2 and 1.3 at the beginning of this report.

- This Assessment is based upon information obtained from the Tree Survey.
- All dimensions and measurements are based upon the previous data collected from the survey and from the design drawings as provided.

Data on which the Assessment is based

- Validity, accuracy and findings of the report will directly relate to the accuracy of information provided at the time of the survey.
- No checking of independent data provided will be undertaken. This is particularly relevant with regards to scaled maps and drawings provided to Writtle Forest Consultancy Ltd.

Validation of the Assessment

- The Assessment considerations/ findings in this tree report are valid for one year.
- Such considerations/ findings will become invalid if any building works are undertaken, soil levels are altered or tree work undertaken.
- If there is any alterations to either the property or soil levels, or if tree works are carried out, it is recommended that a new tree survey/report is undertaken.

Trees in relation to other Properties:

- This assessment only considers the trees in relation to the site and the proposed structures as identified.
- The Assessment only considers those trees as are relevant to the proposed structures. Comment is not made with regard to trees in relation to structures beyond the boundaries as identified, (third party property).
- Issues with regard to neighbouring property and trees on the site considered maybe relevant if new planting is considered or required.
- Damage to, or possibility of damage to, any other structure that is not referred to within the report is not considered unless otherwise specified. This includes both neighbouring structures and any other structure on the property.

Trees in Relation to Subsidence, Heave and Direct damage

- This report does not deal with issues relating to subsidence or heave in relation to any built structures and surrounding vegetation. However, it may be prudent to consider the effects of heave on any property if trees are removed.
- Unless information relating to soils is presented or if the client has instructed the assessment to consider the type and depth of foundations, then this is not considered within the assessment.

Trees subject to statutory controls:

- Where trees are covered by a Tree Preservation Order or are located in a Conservation Area it will be necessary to consult the local authority before any tree works, other than certain exemptions, can be carried out.
- The works specified above are necessary for reasonable management and should be acceptable to the local authority. However, tree owners should appreciate that the local authority may take an alternative point of view and have the option to refuse consent.

Trees are subject to changes outside man's control:

- Trees are living organisms subject to changes outside man's control.
- Changes to ground water conditions will affect the root growth of a tree. Such changes are not always the result of man's influence and others factors may be involved.

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