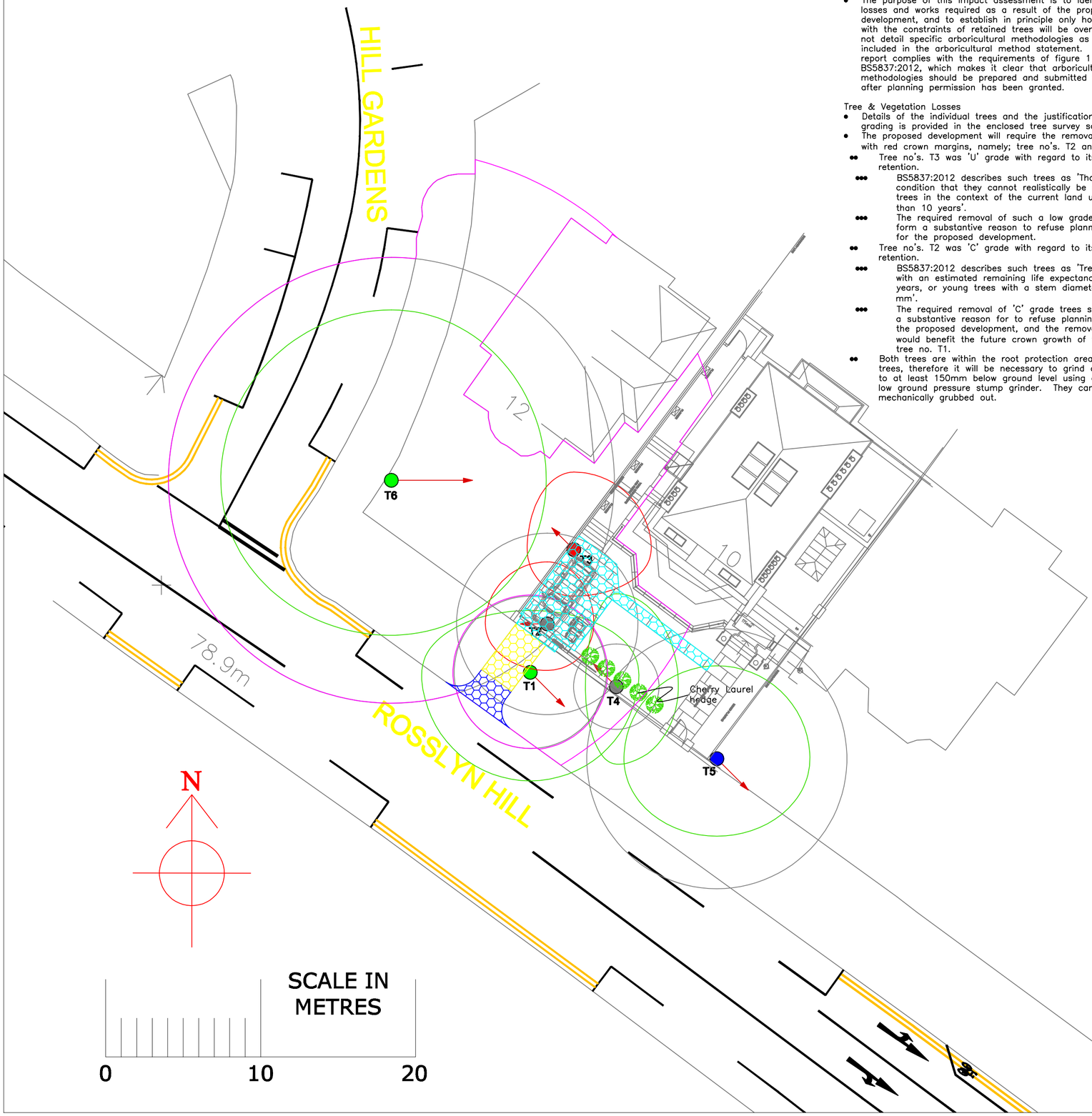

Arboricultural Impact Assessment

Introduction

- It is proposed to construct the following:
  - A paved parking bay and bin store with a similar access path in the western half of the area to the front of 10 Rosslyn Hill:
  - An electronic and sliding gate between the parking area and the pavement to the south:
  - A cross over between the parking area and the highway to the south.
- The proposed development is illustrated in this plan in colour.
- The purpose of this impact assessment is to identify the tree losses and works required as a result of the proposed development, and to establish in principle only how other conflicts with the constraints of retained trees will be overcome. It does not detail specific arboricultural methodologies as these would be included in the arboricultural method statement. In this way, this report complies with the requirements of figure 1 of BS5837:2012, which makes it clear that arboricultural methodologies should be prepared and submitted for approval after planning permission has been granted.

Tree & Vegetation Losses

- Details of the individual trees and the justification of their grading is provided in the enclosed tree survey schedule.
- The proposed development will require the removal of those trees with red crown margins, namely; tree no's. T2 and T3.
  - Tree no's. T3 was 'U' grade with regard to its desirability for retention.
    - BS5837:2012 describes such trees as 'Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years'.
    - The required removal of such a low grade tree cannot form a substantive reason to refuse planning permission for the proposed development.
  - Tree no's. T2 was 'C' grade with regard to its desirability for retention.
    - BS5837:2012 describes such trees as 'Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm'.
    - The required removal of 'C' grade trees should not form a substantive reason for to refuse planning permission for the proposed development, and the removal of this tree would benefit the future crown growth of the 'A' grade tree no. T1.
  - Both trees are within the root protection area of retained trees, therefore it will be necessary to grind out their stumps to at least 150mm below ground level using a pedestrian or low ground pressure stump grinder. They cannot be mechanically grubbed out.

Root Protection Areas (RPA)

- The proposed works encroach over the RPA of retained trees in the areas denoted as 'No dig 1', 'No dig 2', and 'Airspade'. In order to minimise the impact of these works on tree roots in the RPA the following measures will need to be taken.
- No dig 1 area.
  - The hard surface of the cross over will either; utilise the existing paved surface, or; be constructed on the sub base of the existing paved surface after the paving slabs have been carefully lifted, or; be constructed on a three dimensional cellular confinement sub base laid on the existing soil surface immediately below the existing paving slabs and sub base after these existing structures have been carefully lifted.
  - If the construction of the cross over increases its final surface level above the adjacent paving slabs, an indeterminate area of paving slabs will need to be lifted and their sub base increased in height in order to match the paving slabs level with the cross over level. N.B. whilst this methodology will provide adequate protection to the tree roots, it will also need to be approved by the local highways authority, and the advice of a highways engineer should be sought as to its practicality and suitability.
  - If a three dimensional cellular confinement system is to be used, the precise design will need to be supplied by either the manufacturer or a suitably experienced and knowledgeable engineer in order to ensure it will bear the anticipated traffic levels without undue deformation and without allowing the anticipated traffic loads to compact the underlying soil to such an extent that tree root growth is impeded. N.B. whilst this methodology will provide adequate protection to the tree roots, it will also need to be approved by the local highways authority, and the advice of a highways engineer should be sought as to its practicality and suitability.
- No dig 2 area
  - In this area, the hard surface will be constructed on a three dimensional cellular confinement sub base system installed using a no dig technique.
  - The precise design will need to be supplied by either the manufacturer or a suitably experienced and knowledgeable engineer in order to ensure it will bear the anticipated traffic levels without undue deformation and without allowing the traffic loads to compact the underlying soil to such an extent that tree root growth is impeded.
- Airspade area
  - In the Airspade area it will be necessary to reduce the height of the existing paved surface so the level of the cross over can slope down and match that of the highway.
  - In this area the existing paving slabs, sub base and kerbs will be carefully lifted away and the underlying soil excavated to the required depth using an Airspade, or similar pneumatic excavation tool, in order to protect any tree roots present.
  - Any tree roots less than 25mm in diameter will be cut cleanly back to the edge of the excavation using a pair of sharp secateurs. Any tree roots present are likely to belong to the London Plane tree no's. T1 and/or T6. At the Arboricultural Association's annual conference of 2013, Brian Crane presented the results of a long term study of root damage caused in London during the cable television installations of the 1980's, and the long term effects this damage had on different species of street tree. This study demonstrated that Plane trees were able to tolerate severe levels of root damage/loss and then recover over a period of years as if nothing had happened. Therefore, the small level of root loss required by this severance should not cause any significant or long term damage to tree no's. T1 and T6.
  - If any roots over 25mm in diameter are encountered, the feasibility of this excavation will need to be reviewed. Therefore, it is advisable to carry out a trial excavation of this area with an Airspade or similar pneumatic excavation tool before other works commence in order to accurately ascertain the root loss required.

In this area, the hard surface and kerbs will be constructed in a conventional manner.

- The power supply for the sliding gate will most likely be underground and will pass through the RPA of retained trees.
  - The trench for this power supply will be excavated using an Airspade or similar pneumatic excavation tool to the required depth and width. Any tree roots encountered will be retained in tact and undamaged.
  - Any roots exposed in the trench overnight must be covered by 3 layers of dry Hessian sacking to protect against frost damage and desiccation.
  - The electric cable must be installed by feeding around and under the existing roots.
  - The trench will be backfilled using the excavated soil. This backfill will not be heavily compacted but can be lightly tamped by hand and in thin layers as the trench is filled.

Trunk Proximity

- In this plan, it appears that the trunk of T1 is within the cross over. This is not the case and the trunk is outside the area of the cross over. The trunk of all the trees is denoted by a coloured disc of standard size, irrespective of the size of the trunk, and this is why it appears to be within the cross over.

Summary

- The proposed works should pose an acceptable level of arboricultural impact, subject to approval of the above methods of construction by the local Highways Authority and confirmation that no significant tree roots are present in the Airspade area, which should be confirmed by a trial excavation of this area by Airspade.
- Whilst the above measures should provide adequate protection to the trees to be retained, general development activities and poor construction/installation techniques, including the installation of the electric sliding gate, have the potential to cause significant damage to these trees. Therefore, it will be necessary to draw up a detailed arboricultural method statement and to carry out all construction activities in accordance with this statement. The Local Planning Authority can ensure the adequacy of this statement by placing a condition on the grant of permission for the proposed works requiring the pre-commencement submission and approval of an arboricultural method statement.

MJC TREE SERVICES LIMITED

Site:
10 Rosslyn Hill, London, NW3 1PH.

ARBORICULTURAL IMPACT ASSESSMENT

Drawing no.
MJC-15-0105-02 rev:0

This is based on the supplied drawing no. 2014-2023-DWG-100, amended by MJC on 21/01/2015.

This plan was produced in colour. A monochrome version must not be relied upon.

KEY

- Crown spread of surveyed trees, hedges and shrubs to be retained
- Crown spread of surveyed trees to be removed
- Direction of growth of lowest significant limb
- Indicative Root Protection Area (RPA)
- Modified root protection area
- No dig 1 area
- No dig 2 area
- Airspade area
- Category U tree
- Category A tree
- Category B tree
- Category C tree

SCALE
1:200 @ A2