

Rhys Nelson
Backhouse Housing Limited

11th June 2024

Former Westbury Hospital Site, Westbury

Instructions/Scope

Following comments from Wiltshire Councils Tree Officer we have been instructed to conduct an inspection of a Cedar tree growing within an area of public open space at the entry to a new residential development on the site of the former Westbury Hospital.

The Tree Officer has requested we ‘*assess the current condition of the tree, determine any damage that may have been caused to the tree, and advise on the potential risk of failure within an POS caused by the works, using information provided by the Agent relating to the method and type of materials used for any works carried out within the root protection area of the tree.*’

As the works had been completed at the time of our inspection, this assessment is based on ground level observations of the tree, the surrounding rooting area and the method statement supplied by the ground works contractors who undertook the works. (a copy of which is attached to this report). It is difficult to assess any potential impact on the tree without knowing the full extent of works and methodology use to complete said works.

The site assessment was undertaken by Chris Wright *M.Arbor.A.* a professional member of the Arboricultural Association and Certified Lantra Professional Tree Inspector with over 30 years’ experience in the industry. Chris Wright inspected the site on Tuesday 7th May 2024. The weather was bright with good visibility.

Inspections were made from ground level with the use of binoculars, sounding hammer and metal probe where necessary, using the Visual Tree Assessment method (Mattheck & Breloer 1995). The presence and condition of bark and stem wounds, cavities, decay, fungal fruiting bodies and any structural defects that could affect the structural integrity or longevity of the trees have been noted.

Findings

The tree is a mature Cedar approximately 14m tall with an average crown spread of 10m. The stem diameter was measured at 1240mm creating a Root Protection Area of 15m in accordance with BS5837:2012. The tree was categorised A1,2 in a previous survey and considered worthy of the A1,2 categorisation at the time of our inspection.

At the time of our inspection there were no significant defects noted within the stem or canopy of the tree. It was obvious that the canopy had been reduced in the past with a major limb having been removed at approximately 3m up on the north-west side.

Ground observations identified no dieback within the canopy or at the tips of the branches which could indicate potential root severance or ground compaction resulting in root damage. There was minor deadwood within the inner canopy, as would be expected with a mature tree, probably a result of canopy shading rather than dieback. Overall, the tree appeared to be in a good structural and physiological condition.

It would appear that the ground within the rooting area of the tree has been graded as part of the landscaping. It is not known to what extent these works altered levels, however there is no evidence of level changes around the base or stem of the tree.

There is a headwall approximately 8m from the stem of the tree, on the southern side. It is not unclear whether this is new or an existing feature which has been replaced as part of the development. The headwall is on the fringes of the calculated Root Protection Area of the tree it is therefore considered that any root growth within this area would be small, less than 25mm diameter, and could have been severed in accordance with BS 5837:2012 and the ground workers method statement, to facilitate the works.

Ground Worker Method Statement.

The methodology contained in the statement is in accordance with best industry practice and the recommendations in BS5837:2012. It is considered that if all works were conducted in accordance with the provided method statement there should have been minimal impact on the rooting area of the trees.

Conclusion

At the time of our inspection there was no sign of dieback or ill health evident within the canopy of the tree. The levels around the stem and base of the tree appear to have been unchanged. It was clear that works have been undertaken to level/regrade the area within the wider Root Protection Area of the tree but is unknown to what extent. It is considered that providing the works were undertaken in accordance with the supplied method statement they will have had minimal impact on the health or longevity of the tree.

We were not informed of when the ground works were undertaken so are only able to comment on the current condition of the tree rather than the possibility of any future dieback. Trees can utilise stored energy to continue physiological functions and maintain a full canopy following any impact on their rooting areas, subsequently any potential root damage would not be obvious immediately.

It is therefore recommended that the tree is inspected in a year time to re-assess the condition of the canopy, at which time any root damage, which may have occurred, should be visible within the crown of the tree.

Chris Wright. *MArborA*.

Principal Consultant

Silverback Arboricultural Consultancy

11th June 2024

Appendix 8 – Groundworker responsibilities when working within Arboriculturally sensitive areas

Overview

It is anticipated that within our Westbury hospital development site there will be instances where working either in close proximity of, or within the tree protection zones.

Suitable tree protection fencing will need to be installed. As groundworker, your tender should include allowances to work within the below requirements:

Tree & hedge protection

All hedges, trees, shrubs, buildings and structures which are to be retained must be properly fenced off to the satisfaction of the Backhouse Construction specification before works can commence.

The subcontractor is responsible for the initial erection and all day to day management and maintenance.

BS5837: 2012 recommends the erection of protective fencing around retained trees before development takes place, in order to protect the roots. The position of the fencing is calculated using the tree's diameter (DBH) measured at 1.5m up the stem. The area within the fencing is called the Root Protection Area (RPA).

It should be noted that no Oil, bitumen, cement or other harmful materials must not be stored within 10m of any retained trees.

Potential Works within Root Protection Area (RPA)

Should there ultimately be consented works within an RPA, then these must be done under strict conditions and supervision to avoid or minimise any damage to a tree root system.

Whenever possible, apparatus should be diverted outside of the RPA. To be clear, under no circumstances should machinery be used in any excavation within the RPA unless this has been pre agreed with the relevant arboriculture consultant.

Our default option is an approved hand dig method. The objective is to retain as many undamaged roots as possible. After the careful removal of the hard surface the remainder must be with hand tools.

- Clumps of roots less than 25mm in diameter should be retained without damage

- Roots above 25mm should be retained without damage

- Exposed roots should be wrapped and covered
- Roots less than 25mm may be pruned back with a clean, sharp cut.
- When backfilled, roots need to be surrounded with topsoil or similar suitable material.