An Arboricultural Report on Trees at St Andrews Place, Regent's Park, London NW1

Prepared for:
The Crown Estate Paving Commission

Compiled by:

Paul MacQueen (NCH ARB, ND ARB)

Modern Arboricultural Services

Woodfield Nurseries

Cool Oak Lane

London NW9 7NB

020 8200 9992

Arboricultural Report

1.Instructions

- 1.1 I have been instructed by Mr. Powell (Head Gardener) on behalf of The Crown Estate Paving Commission to inspect tree on St Andrews Place NW1 as a result of concerns they have regarding their condition and safety. I suggested carrying out an inspection from ground level to include the following:
 - a. Health and safety and overall condition of the tree.
 - b. Make recommendations regarding any future management needs.

2.Report Limitations

- 2.1 The inspection has been carried out from ground level only as this is a preliminary report. Further investigation may be required with climbing access to the tree or decay detection.
- 2.2 The inspection was carried out with the aid of binoculars using visual observation methods, a sounding mallet, a metal probe, and a ladder for access. Should a more detailed inspection be required then this will be highlighted in the recommendations.
- 2.3 Trees are living organisms whose condition can change rapidly, the health, condition and safety of trees should be checked on a regular basis, preferably at least once a year. The conclusions and recommendations in this report are only valid for a period of one year. This period of validity may be reduced in case of any change in conditions to or in proximity to the tree.
- 2.4 The tree in question may be covered by a Tree Preservation Order (TPO) or is in a Conservation Area. If so, before undertaking any works to the tree it would be necessary to obtain consent from the Local Planning Authority.

3. Introduction

- 3.1 I visited the site on Thursday 13th August to conduct the inspection. I confirm there are three trees and the species is Small leaved Lime (*Tilia cordata*). They are located, spaced apart as an avenue in the centre of the public footpath. Please find attached plan. The trees are semi-mature specimens of poor form for the species.
- 3.2 On the day of inspection, it had been raining and the York Stone was slippery from Aphid 'Honeydew' produced from the trees in question.

4. Findings

T1

Height: 9m

Diameter at 1.5m: 26cm

4.1 Leaves, buds and extension growth.

Leaves, buds and extension growth appear consistent for the species.

4.2 Trunk and Branch Structure.

- The branch structure is balanced, symmetric and consistent with this species.
 Pruning wounds from past works are apparent on the trunk and lower crown,
 which are occluding and not yet subsequently turned to cavities and pockets of
 decay.
- The trunk 'bole' forks into stems 0.1m in diameter at 3m. It 'doglegs' at 2m
 where the trunk has corrected itself. The lower trunk has a heavier South lean.
 Scale insects are present but not infesting.
- There is a swelling at the base with thick buttress roots to compensate for the lean.

4.3 Root System

 At the time of inspection no evidence would lead me to believe that the rhizosphere (rooting area) is in any way compacted or disturbed. However there is minimal movement of the adjacent paving slabs.

Conclusion

The overall health and condition of the tree following an external visual inspection would appear to be average but it has structural weaknesses. The initial lower lean, swelling at the base and correcting dogleg are indications of a progressive (continuous) lean.

T2 (Largest Tree)

Height: 14m

Diameter at 1.5m: 36cm

4.5 Leaves, buds and extension growth.

Leaves, buds and extension growth appear consistent for the species.

4.6 Trunk and Branch Structure.

- The branch structure is balanced, symmetric and consistent with this species.
 Pruning wounds from past works are apparent on the trunk and lower crown, which are occluding and not yet subsequently turned to cavities and pockets of decay.
- The trunk 'bole' forks into three main stems 0.15m in diameter at 3m. Scale insects are present but not infesting.
- There is a swelling at the base where the grate that has been removed had previously girdled the base.

4.7 Root System

 At the time of inspection no evidence would lead me to believe that the rhizosphere (rooting area) is in any way compacted or disturbed. However there has been movement of the adjacent paving slabs and have been re-instated.

Conclusions

The overall health and condition of the tree following an external visual inspection is good for the species. The only structural weakness is the girdled swelling at the base.

T3

Height: 12m

Diameter at 1.5m: 37cm

4.8 Leaves, buds and extension growth.

Leaves, buds and extension growth appear consistent for the species.

4.9 Trunk and Branch Structure.

- The branch structure is of a fastigiate form with upright growth with weak unions
 and included bark throughout the crown. Pruning wounds from past works are
 apparent on the trunk and lower crown, which are occluding and have not yet
 subsequently turned to cavities and pockets of decay.
- 2. The trunk 'bole' forks into stems five main stems 0.15m in diameter at 1.5m with very weak unions and included bark. Two of these main stems over the road have been 'split out' from the union, this must be caused by mechanical damage within the past 2 years.
- The trunk has a major lean North but corrects itself. There is a swelling at the base with thick buttress roots to compensate for the lean. The grate girdles on one side.

4.10 Root System

 At the time of inspection no evidence would lead me to believe that the rhizosphere (rooting area) is in any way compacted or disturbed. However there has been movement of the adjacent paving slabs and have been re-instated.

Conclusion

The overall health and condition of the tree following an external visual inspection would appear to be average but it has major structural weaknesses. The major lean, swelling at the base and correcting crown are indications of a progressive (continuous) lean. The 'split out' main stems will subsequently cause major decay within the main fork which is already weak from the poor unions.

T4

Height: 9m

Diameter at 1.5m: 26cm

4.1 Leaves, buds and extension growth.

Leaves, buds and extension growth appear consistent for the species.

4.2 Trunk and Branch Structure.

- The branch structure is balanced, symmetric and consistent with this species.
 Pruning wounds from past works are apparent on the trunk and lower crown,
 which are occluding and not yet subsequently turned to cavities and pockets of
 decay.
- The trunk 'bole' forks into 2 stems 0.25m in diameter at 2m. It leans East.
- There is a swelling at the base with thick buttress roots to compensate for the lean.
 The grate girdles the base on the opposite side.

4.3 Root System

 At the time of inspection no evidence would lead me to believe that the rhizosphere (rooting area) is in any way compacted or disturbed. However there is minimal movement of the adjacent paving slabs.

Conclusion

The overall health and condition of the tree following an external visual inspection is average but for the minor lean which also appears progressive (continuous).

6. Recommendations

- 6.1 The tree T3 has major structural faults which stem from its fastigiate form and weak unions. The split main stems will decay rapidly and cause further structural weakness. Therefore, fell to ground level within the next year.
- 6.2 The remaining trees have progressive (continuos) leans which are lifting the paving slabs. This may be due to soil movement or voids such as basements or coal bunkers beneath. Further investigation is required.
- 6.3 There is no consistency to the avenue due to the trees varying forms and leaning trunks. The loss of T3 in time will also cause inconsistency. Due to the trees young age it may be prudent to fell and replace. Also the Aphid 'honeydew' causes a slippery surface on the York stone.
- 6.3 All tree works are to be carried out to British Standard 3998 (1989); Recommendations for tree work, by a qualified Arborist.

This report is for the sole use of the above named client and refers to only the tree identified within, use by any other person(s) in attempting to apply its contents for any other purpose renders the report invalid.

Yours sincerely

Paul MacQueen (NCH ARB, ND ARB)