

Tree Assessment Report

Prepared For

The Legends at North Park

By

Ben Harris

Consulting Arborist

May 23, 2022

Introduction

I was approached by Doug White on behalf of the Legends at North Park HOA Board to assess the health and condition of the development's trees. This report contains my findings and recommendations. I performed a site visit and inspection of each tree on Thursday, April 28 2022 and a brief follow-up visit three weeks later.

I determined tree health by examining leaf color, leaf density, average leaf size, recent growth length, bark condition, quantity of buds, density of canopy, presence of wounds and symptoms of disease.

The following species and quantities have been planted at Legends:

- Flowering pear – 71
- Aspen – 10
- River birch – 9
- Willow – 5
- Colorado spruce – 4
- Fruiting apple – 3
- Flowering crabapple – 2
- Honeylocust – 2
- Littleleaf linden – 2
- Weeping white spruce – 2
- White ash – 2
- Fruiting peach – 1
- Freeman maple – 1
- Ornamental willow – 1

General Observations

I was impressed by the overall good condition of the trees. They appear to be receiving adequate irrigation and none are showing symptoms of nutrient deficiencies. They range from moderately young near the entrance to very young along the west side. The number of trees in each condition class is:

- Good condition – 80 trees
- Fair condition – 25 trees
- Poor condition – 8 trees
- Dead – 2 trees

I also observed the following additional conditions:

- 56 six trees have adequate rings free of grass around their bases

- 23 trees have been damaged on the lower trunks and branches by lawn mowers and string trimmers. Although most of these wounds are not serious and will seal over in time, a few are large enough to significantly impact the trees' health and growth rate.
- 3 trees have current or previous fireblight infections, which is surprisingly low considering how susceptible flowering pears are
- 2 trees have a fungal infection
- 1 tree has a mild borer infestation
- 1 tree experienced previous stem failure
- 1 tree has a loose root ball
- See the Specific Observations section for specific conditions of each tree.

Maintenance Recommendations

My understanding is that the residents are responsible for the maintenance of the trees on their lots, although many have been unaware of this. Moving responsibility for tree maintenance to the HOA would provide many advantages. First, it would allow the board to perform needed maintenance that it would not be able to otherwise. Second, it would ensure a more uniform and potentially more professional standard of care. Third, it may result in lower contractor costs due to the volume of work and fewer site visits. Fourth, it would allow maintenance to be scheduled more regularly and possibly timelier when needed.

I observed the following needed maintenance tasks: structural training, crown raising, basal protection, removal, crown cleaning, pruning away from structures, removal of trunk wrap, and staking.

Structural training involves systematic pruning of the trees in order to establish a single dominant stem with no structural defects. Structural training is best performed early in a tree's life and repeated every three to two years for the first fifteen years. Flowering pears especially benefit from structural training since they naturally tend to develop multiple stems that are more susceptible to breakage. This pruning requires specialized training and experience and is best performed by certified arborists. Although this may sound extensive, this maintenance is second only to watering to ensure long-lived, trees with structural integrity.

Crown raising involves pruning back or removing the lower branches of the trees in order to allow access for lawn mowers, pedestrians or vehicles. So far access for lawn mowers is the only concern. This pruning can be performed competently with minimal training.

Basal protection involves the removal of lawn around the trees or the installation of guards on the trunk to avoid damage from mowers and string trimmers to the base of the trees.

Crown cleaning involves pruning out dead and broken branches and can also be performed with minimal training.

The following numbers of trees would benefit from maintenance:

- Structural training – 79 trees
- Crown raising – 55 trees
- Basal protection – 31 trees
- Remove – 9 trees
- Crown cleaning – 5 trees
- Prune away from structures – 1 tree
- Remove trunk wrap – 1 tree
- Staking – 1 tree

See the Specific Observations section for maintenance needs of each tree.

Items of Concern

There are two items that warrant specific discussion. One is the flowering pears. Although these trees are very ornamental and are, in general, much healthier than I expected, they have some liabilities the board should be aware of. First, they are among the most susceptible trees to fireblight. The severity of fireblight infections varies from year to year and will result in more pruning and possible removals compared to other species. There is no effective preventive or curative control for fireblight other than planting non-susceptible or resistant species and cultivars. Second, flowering pears are notorious for branch breakage due to poor structural form and branch unions. Structural training can significantly reduce branch failures but it requires repeat sessions early in a tree's life to be effective. Third, flowering pears do produce fruit that can be a significant nuisance. Although the fruit is small, it is soft and plentiful when it falls in late fall and winter and is easily tracked into cars and homes. Fourth, flowering pears are larger at maturity than many people anticipate or want, growing up to 45 feet tall and 35 feet wide. Because of these limitations and since there are many better species available, I do not generally recommend planting flowering pears. I suggest the board make these facts known to the residents so they are aware what potential problems these trees could pose in the future and can plan accordingly.

The second item is the willow trees west of unit 20. I believe these are globe willows or a closely-related species. Although they provide outstanding afternoon and evening shade, they are fast-growing, weak-wooded trees that constantly leave twig litter and frequently lose branches in wind or snow storms. They often reach 40-50 feet in height and width at maturity and could reach the unit in as quickly as five years. These trees will be the most maintenance-intensive in the development in terms of clean-up and pruning and will likely pose a risk to units 20 and 19 in the future. Although there are no easy solutions for avoiding the problems these trees will cause, the board and home-owners should understand the trees' liabilities. One possible solution might be planting replacement trees further west now and removing the willows as the replacements become large enough to provide shade.

Specific Observations

The following specific observations are grouped by lot and commons areas. Although I have tried to correctly assign trees to the correct lot I cannot guarantee that they are. Urgent needs are bolded.

MEMORY LANE

- 1 – Flowering pear SE of house, good condition, needs structural training and crown raising
Flowering pear NE of house, good condition, needs structural training and crown raising
Flowering pear NW of house, fair condition, has basal wound, needs structural training, crown raising and basal protection
Flowering pear SW of house, good condition, has basal wound, needs structural training, crown raising and basal protection
- 2 – Flowering pear NW of house, good condition, needs structural training, **crown raising**, and basal protection
Flowering pear SW of house, good condition, has basal wound, had fireblight previously, needs structural training, crown raising and basal protection
- 3 – Flowering pear NW of house, fair condition, has basal wound, needs structural training, crown raising and basal protection
Flowering pear SW of house, fair condition, has basal wound, needs structural training, crown raising and basal protection
- 4 – Flowering pear NW of house, good condition, has good tree ring, needs structural training and crown raising
Flowering pear SW of house, good condition, has good tree ring, needs structural training and crown raising
Two fruiting apples N of house, good condition, have good tree rings, need crown raising
- 5 – Flowering pear NW of house, good condition, has good tree ring, needs structural training and crown raising
Flowering pear SW of house, good condition, has two broken branches, has good tree ring, need structural training and crown raising
- 6 – Flowering pear NW of house, fair condition, has a little fireblight, has good tree ring
Flowering pear SW of house, good condition, has good tree ring, needs structural training

- 7 – Flowering pear NW of house, good condition, has good tree ring, needs structural training
Flowering pear SW of house, good condition, has good tree ring, needs structural training
- 8 – Flowering pear NW of house, fair condition, has good tree ring, needs structural training
Flowering pear SW of house, good condition, has good tree ring, **needs structural training**
- 9 – Flowering pear NW of house, good condition, has good tree ring, needs structural training
Flowering pear SW of house, good condition, has good tree ring, needs structural training
- 30 – Flowering pear NE of house, good condition, has good tree ring, needs structural training and crown raising
Flowering pear SE of house, good condition, previous stem failure, has good tree ring, needs structural training and crown raising
Flowering pear SW of house, good condition, has good tree ring, needs structural training and crown raising

LEISURE LOOP

- 11 – Flowering pear NW of house, fair condition, has basal wound
Flowering pear SW of house, fair condition, has basal and trunk wounds, needs structural training
- 13 – Flowering pear SE of house, good condition, has good tree ring, needs structural training and crown raising
Flowering pear SW of house, good condition, has basal wound, needs structural training and crown raising
- 15 – Flowering pear SE of house, good condition, has good tree ring, needs structural training and crown raising
Flowering pear SW of house, good condition, has good tree ring, needs structural training and crown raising
Ornamental willow E of house, fair condition, has fungal infection, **needs to be pruned back from house, window and gutter**

- 17 – Flowering pear SE of house, good condition, has good tree ring, needs structural training and crown raising
- Flowering pear SW of house, good condition, has good tree ring, needs structural training and crown raising
- 19 – White ash W of house, good condition, needs structural training
- Honeylocust SW of house, good condition, has good tree ring, needs structural training
- Flowering pear SW of house, good condition, has good tree ring, is being impacted by willows to the south, needs structural training
- Honeylocust S of house, good condition, has good tree ring, needs structural training
- White ash E of house, good condition, has mild borer infestation, has good tree ring, needs structural training
- Flowering pear SE of house, fair condition, has good tree ring, **needs staking due to loose root ball**
- 20 – 1st willow from N on W of house, good condition, has multiple stems, needs structural training and crown raising
- 2nd willow from N on W of house, good condition, needs structural training and crown raising
- 3rd willow from N on W of house, good condition, has multiple stems, needs structural training and crown raising
- 4th willow from N on W of house, fair condition, has trunk wounds, needs basal protection
- 5th willow from N on W of house, fair condition, has trunk wounds, needs basal protection
- Flowering pear on SW of house, good condition, **needs structural training**, crown raising and basal protection
- Freeman maple on S of house, good condition, has good tree ring, needs structural training and crown raising, may need iron fertilization in the future
- Flowering pear on SE of house, good condition, has good tree ring, needs structural training and crown raising
- Colorado spruce SE of house, good condition, needs crown raising or installation of larger tree ring to accommodate mowing

- 18 – 1st flowering pear from W on S of house, good condition, needs structural training, crown raising and basal protection
- 2nd flowering pear from W on S of house, good condition, has stem wound, needs structural training, crown raising and basal protection
- 3rd flowering pear from W on S of house, good condition, needs structural training, crown raising and basal protection
- 4th flowering pear from W on S of house, fair condition, has stem wound, needs structural training, crown raising and basal protection
- 16 – Flowering pear SE of house, good condition, has good tree ring, needs structural training
- Flowering pear SW of house, good condition, has good tree ring, needs structural training and crown raising
- 14 – Flowering pear SE of house, poor condition, has extensive fireblight, **remove**
- Flowering pear SW of house, good condition, has basal wound, needs structural training
- 12 – Flowering pear SE of house, good condition, needs structural training, crown raising and basal protection
- Flowering pear SW of house, good condition, has trunk wound, needs structural training and basal protection
- 10 – Flowering pear SE of house, fair condition, has large trunk wound, needs structural training, crown raising and basal protection
- 29 – Flowering pear NE of house, good condition, needs structural training, crown raising and basal protection
- Flowering pear SE of house, good condition, needs structural training, crown raising and basal protection
- 27 – Flowering pear SE of house, good condition, has good tree ring, needs structural training
- 25 – Flowering pear SE of house, good condition, needs structural training and basal protection
- 23 – Flowering pear SE of house, good condition, has good tree ring, needs structural training and crown raising
- 21 – 1st flowering pear from E on S of house, good condition, needs structural training, crown raising and basal protection
- 2nd flowering pear from E on S of house, good condition, needs structural training, crown raising and basal protection

3rd flowering pear from E on S of house, good condition, needs structural training, crown raising and basal protection

4th flowering pear from E on S of house, good condition, needs structural training, crown raising and basal protection

Two weeping white spruce SW of house, good condition, **need trunk wrap removed from base**, need tree rings installed to accommodate mowing

22 – Flowering pear SW of house, good condition, has good tree ring, needs structural training and crown raising

Fruiting apple S of house, good condition, has trunk wound, needs structural training and crown raising

Flowering pear S of house, good condition, needs structural training, crown raising and basal protection

Fruiting peach S of house, good condition, needs basal protection

24 – Flowering pear SE of house, good condition, has good tree ring, needs structural training

Flowering pear SW of house, good condition, has good tree ring, needs structural training and crown raising

26 – Flowering pear SE of house, fair condition, has trunk wound, needs structural training, crown raising and basal protection

Flowering pear SW of house, good condition, needs structural training, crown raising and basal protection

28 – Flowering pear SE of house, good condition, has trunk wound, needs structural training, crown raising and basal protection

Flowering pear NW of house, fair condition, needs structural training, crown raising and basal protection

NORTH COMMONS

Littleleaf linden on E side, good condition, has good tree ring, needs structural training

River birch on center E side, poor condition, has good tree ring, consider replacing with other species

River birch on center W side, poor condition, has good tree ring, consider replacing with other species

Three aspen trees on W side, fair to poor condition, have good tree rings, replace with other species

SOUTH COMMONS

Two river birch in NW corner, good condition, have good tree rings, need structural training

Three river birch on W center, fair condition, have good tree rings, need crown cleaning to prune out dead branches

Three Colorado spruce in SW corner, good condition, have good tree rings, no maintenance necessary

Five aspen in SW corner, all have good tree rings:

- N tree W of sidewalk, dead, **remove**
- Middle tree W of sidewalk, poor condition, has fungal infection and trunk wounds, **remove**
- S tree W of sidewalk, fair condition, has trunk wound, no maintenance necessary
- N tree E of sidewalk, good condition, needs crown cleaning to remove broken branch
- S tree E of sidewalk, fair condition, has multiple stems, no maintenance necessary

Crabapple in SW corner, fair condition, has good tree ring, has trunk wound, no maintenance necessary

Crabapple on center S side, good condition, has good ring, needs structural training

Aspen in SE corner, poor condition, has trunk wound, **remove**

Aspen sprouts in SE corner, **remove**

Littleleaf linden in NE corner, dead, **remove**

Two river birch N of shed, good condition, have good tree rings, need structural training

1st flowering pear from E on N side, good condition, has good tree ring, needs structural training and crown raising

2nd flowering pear from E on N side, good condition, has good tree ring, needs structural training and crown raising

3rd flowering pear from E on N side, good condition, has good tree ring, has stem wound, needs structural training and crown raising

4th flowering pear from E on N side, fair condition, has good tree ring, has stem wound, needs structural training and crown raising

5th flowering pear from E on N side, fair condition, has good tree ring, needs structural training and crown raising

6th flowering pear from E on N side, good condition, has good tree ring, has stem wound, needs structural training and crown raising

7th flowering pear from E on N side, good condition, has good tree ring, has stem wound, needs structural training

8th flowering pear from E on N side, good condition, has good tree ring, needs structural training