

# Four trees of concern within the public R.O.W. of the Halprin Sequence

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Above: *Unter der Linden* approaching the Brandenburg Gate, in Berlin.

Below: Under the Lindens in Portland—the 3rd Ave Pedestrian Mall between SW Harrison Street and the Lovejoy Fountain, looking north towards Harrison.

*Unter der Linden* [German for *Under the Lindens*], is perhaps the most famous boulevard in Berlin, first developed during the mid-17th century. With its multiple rows of carefully-placed trees, it is more than just a street—it provides a *sense of urban place*. Every proud city has an equivalent street, although often they are planted with Elms or Maples; in Portland the Park Blocks provide that sense of place.

One would like to imagine that during the mid-60s, Lawrence Halprin, out of admiration or homage to the Berlin original, selected Lindens to line the newly-created pedestrian malls of 2nd and 3rd Avenues, which now make up the historic *Halprin Sequence*.

A half century later, the original intent has held up well, at least, for the most part. Even where new trees were planted around 1996, adjacent to the new City of Portland 1900 Building, the trees seem healthy and straight.

By contrast, there is at least one block within the Halprin Sequence where several trees are deformed, and a couple of trees appear about ready to topple. This is the block of 2nd Ave between SW Harrison Street and Pettygrove Park, where a huge preexisting Elm had dominated 1/3 of the block for a century, restricting healthy growth of the Lindens, and blocking sunlight to such a degree that even the English Ivy, ground cover seemed unable to flourish.

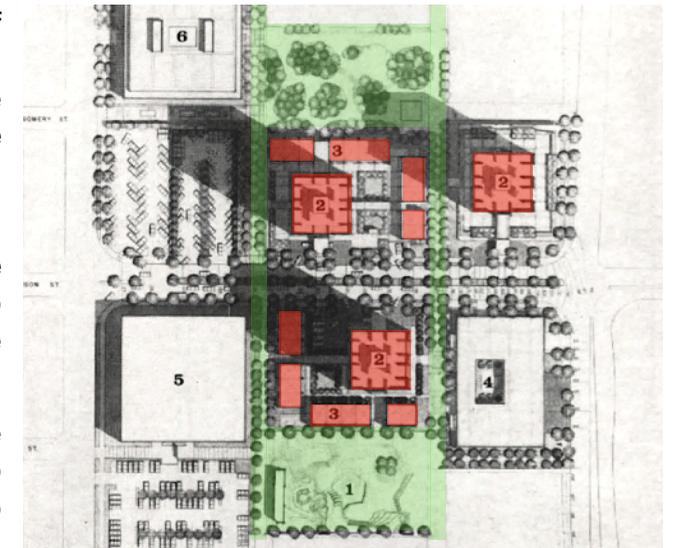
This brief assessment considers four problem trees—three Lindens and one Norway Maple—that seem most likely to cause property damage, bodily injury or death, if they were to topple or break.

An Ordinance, of 1979, placed the responsibility for tree maintenance and management on the “Park Bureau,” so these observations are provided merely as a courtesy, to allow the Bureau to determine the most appropriate action.

This report has been prepared by Richard Bosch, a townhome owner at the Harrison West condominium complex. This report and these observations do not necessarily reflect the opinion of the HW HOA or its Board, nor the Halprin Landscape Conservancy.

Richard does not purport to be an arborist. But, as a long-time staff architect and project manager with Portland Parks & Recreation, his direct involvement with Urban Forestry had been ongoing for fifteen years, especially with legendary, tree guru, Charley Davis, with whom he prepared various tree assessments, most notably that of Mt Scott Park in 1998.

This report focuses on just one block and does not reflect a comprehensive survey of the entire Halprin Sequence, although other areas do appear to be in better condition.



Above: Overall Lawrence Halprin master plan from 1965, showing: 3 Harrison towers, 24 townhomes, Pettygrove Park and the Lovejoy Fountain.



Above: The four problem trees are all on the same block, although only two of the trees, **2** and **3**, were impacted by the huge Elm that came down in 2020.  
 Right: Diagram, not to scale, showing location of the four problem trees and the ghost of the huge Elm.

**SUMMARY OF PRIMARY OBSERVATIONS**

**4** is a 16” caliper Linden, perhaps 60 to 70 feet tall, that slopes precariously over the 2nd Ave Pedestrian Mall, at 26 degrees from vertical—apparently no root structure has developed towards the northwest, hindered by the 16” concrete curb, the sidewalk and the former roadway.

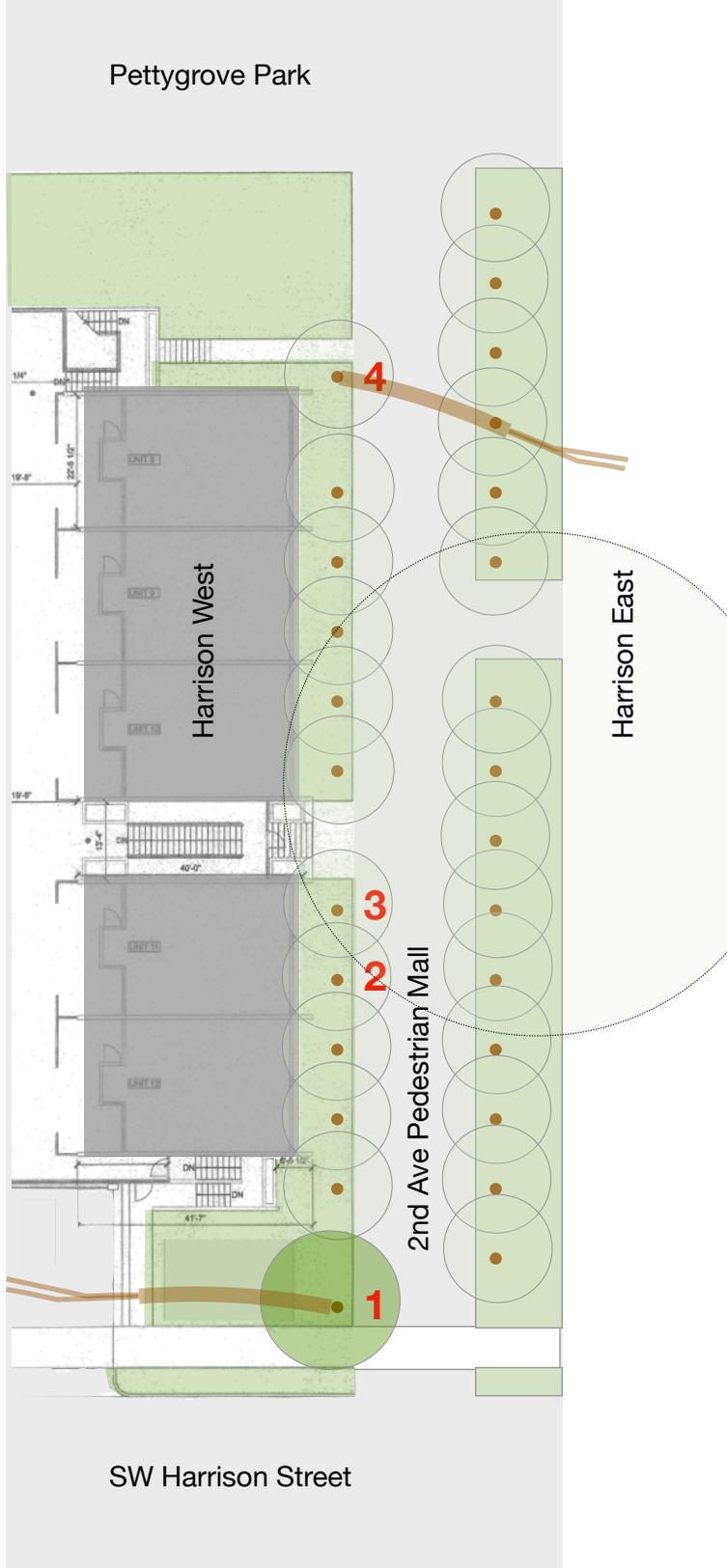
Once toppled, the main trunk would block the full width of the pedestrian mall, with tributary limbs falling onto the planted strip of the Harrison East Tower.  
 (Most likely to cause bodily injury or fatality.)

**2** and **3** are 16” caliper Lindens, perhaps 60 to 70 feet tall, that seem to have become deformed from the huge Elm that dominated this block until about a year ago. Although the trunks start off reasonably straight at the base, they are severely bent over from about 30 feet upward, so that their entire crowns hover over the adjacent townhome.

Both trees have exhibited diseased conditions for many years, but number **2** has recently developed a decay hole, that is several inches deep, about 5 feet off the ground.  
 (Most likely to cause severe structural damage.)

**1** is a 20” caliper Norway Maple, perhaps 80 feet tall, that slopes precariously at 17 degrees, but away from the pedestrian mall. Apparently no root structure has developed towards the east, hindered by the 16” concrete curb and the former roadway.

Once toppled, the main trunk would *not* block the driveway to the Harrison West parking garage, although tributary limbs and the crown would fall across the driveway.  
 (Least likely to cause injury or structural damage.)



# 1 Norway Maple



Above: The 20" caliper Norway Maple listing towards the HW parking garage entrance and flagpole (not shown in this photo).



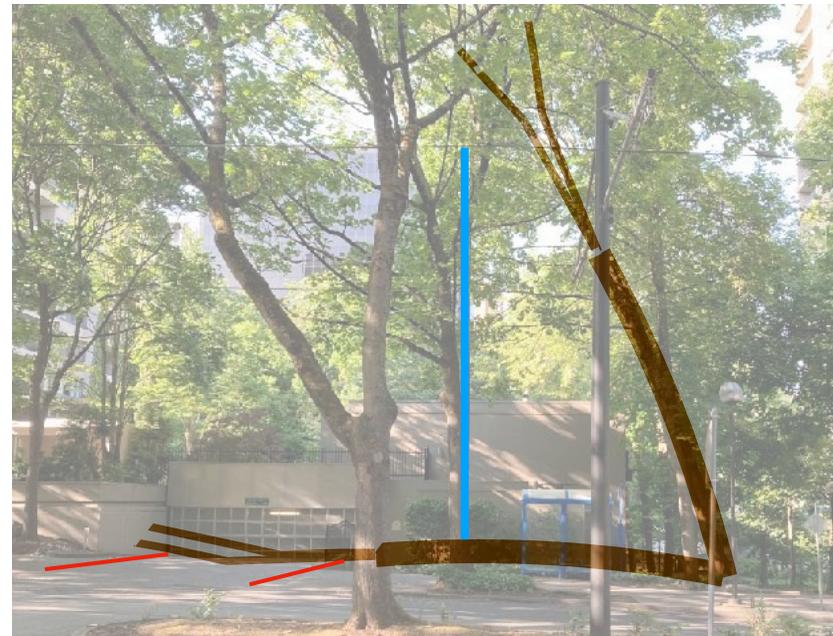
This 20" caliper Norway Maple, about 80 feet tall, is located near the southeast corner of the Harrison West property. It lists 17 degrees from vertical, for its entire height. Based on visual observation, only, some of the root structure appears to be anchored below the concrete curb [note the 1" displacement], but, it appears that the roots have not found their way below the former roadway. In other words, the concrete curb may be preventing the tree from toppling.

There is also evidence of "stem girdling," the tendency for roots to grow over the root flare and around the trunk of the tree.

*"As the tree grows in diameter, it eventually hits the girdling root, which compresses the tree trunk. As a result, nutrients can't flow correctly from leaves to roots and back, and the tree may also become unstable. Stem girdling leads to a decline in the tree's health and an early death for the tree."*

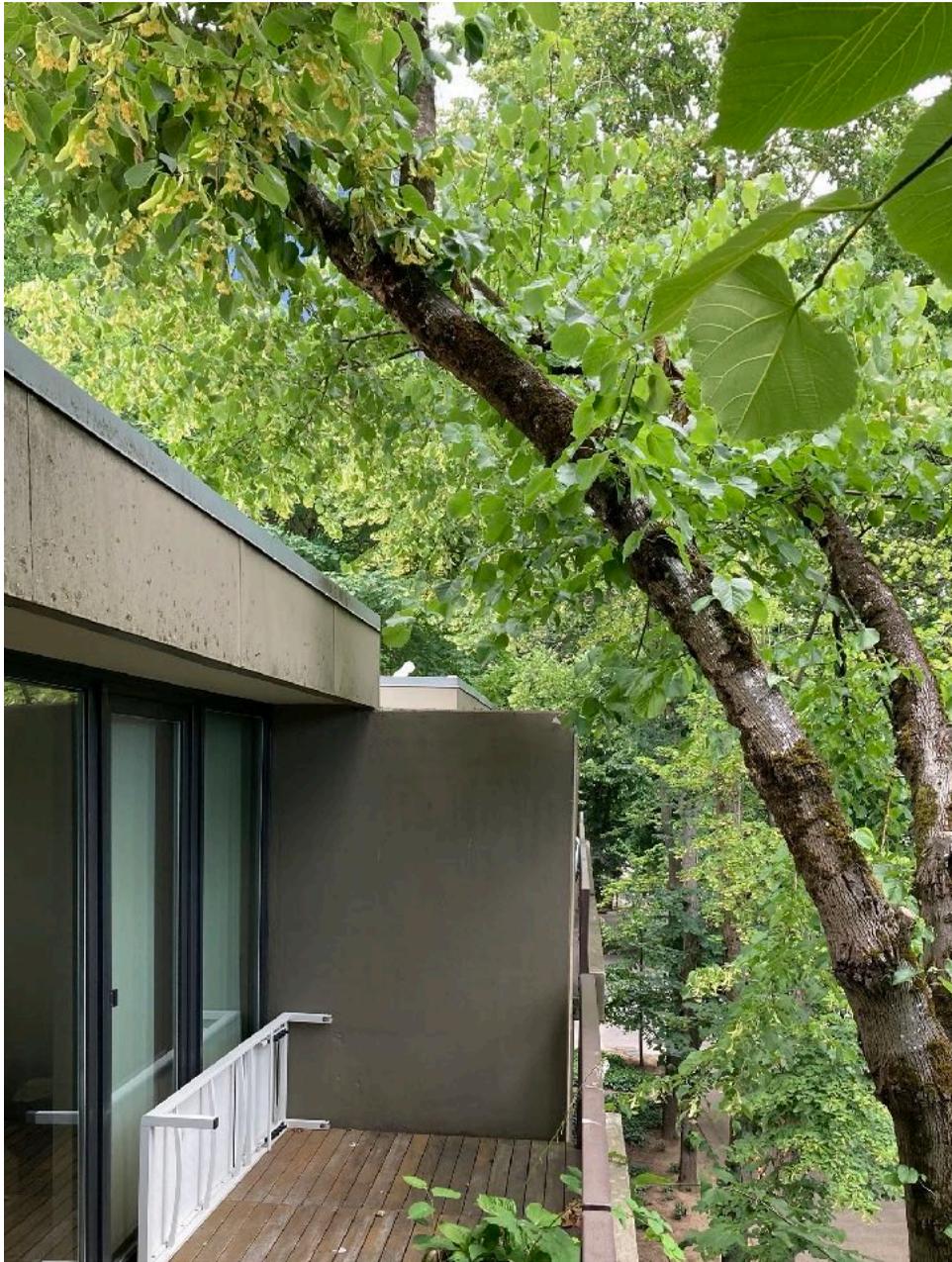
If this tree were to topple, it would cause the least damage. It would fall away from the pedestrian mall and it is sufficiently away from the TriMet bus shelter and the Streetcar overhead power lines.

The main trunk, requiring a chainsaw to cut into manageable pieces, would *not* reach the driveway entrance to the Harrison West property, although tributary branches and the crown would cover the driveway. The most likely damage will be to the HW flagpole.

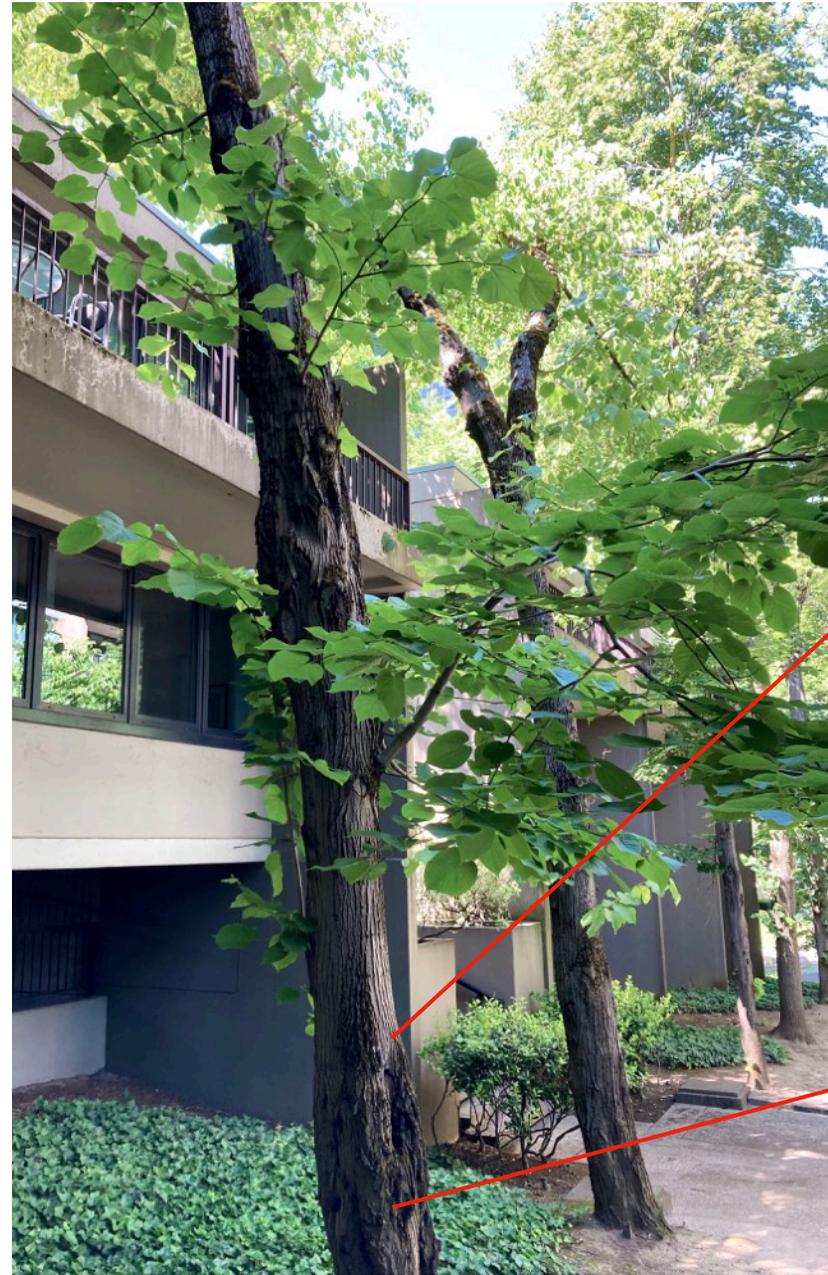


Above: Detail of asymmetrical root structure and stem girdling. Below: Assumed direction of tree toppling—flagpole indicated in blue; driveway into parking garage, with red lines.

## 2, 3 Lindens



Above: The upper part of the 16" caliper Linden leans over the roof of townhome 11. The entire crown hovers over the roof and has been the source of vermin, insect infestation, and during high winds, has even toppled the metal chimney.



Above: Trees start off reasonably straight and start to bend around 30 feet above the ground. The tree in the foreground recently developed a decay hole and is showing lateral stress marks just above that hole.

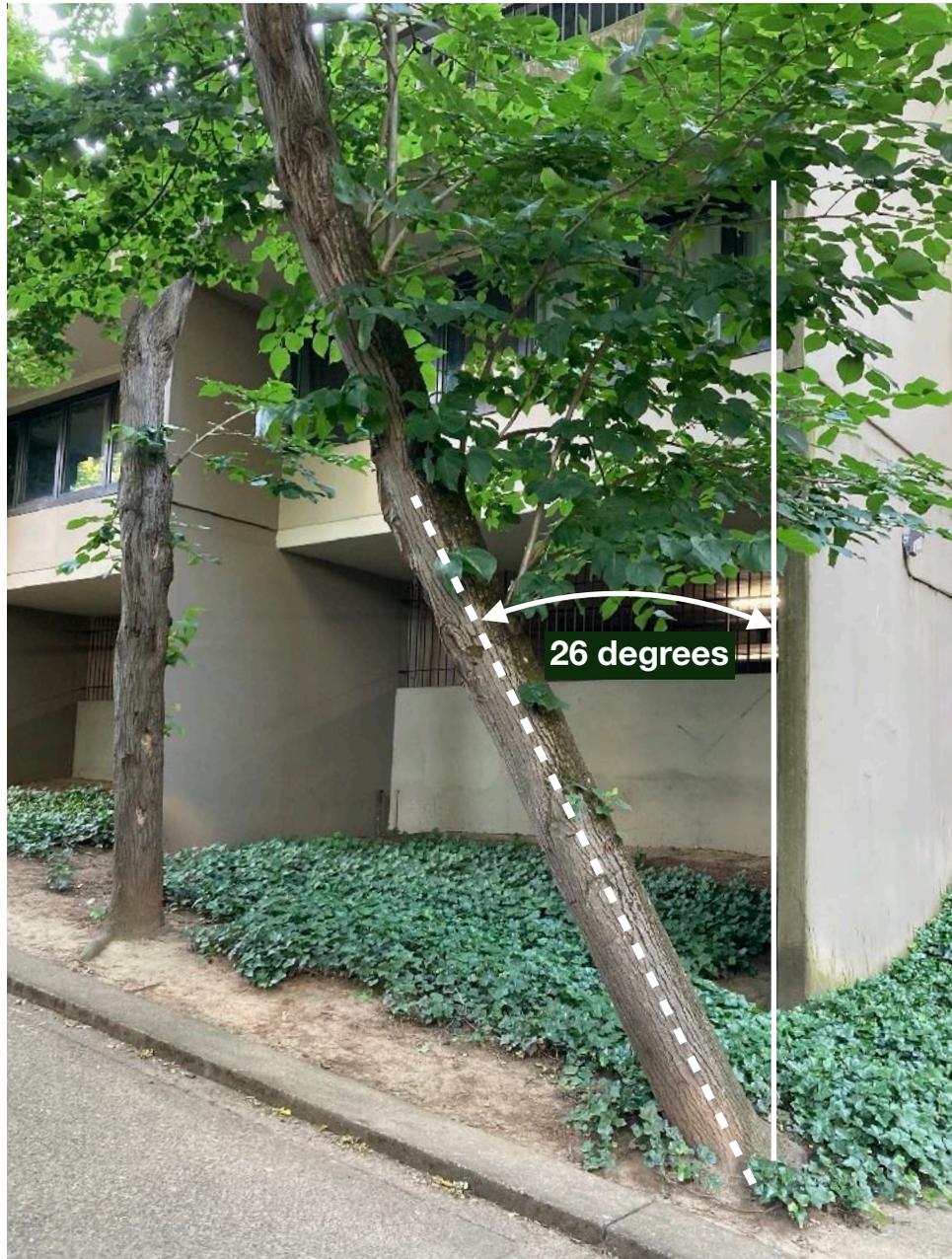
These 16" caliper Lindens, about 60 to 70 feet tall, located along the 2nd Ave Mall, hover over Townhome 11, of the Harrison West complex. These are among the several trees that were stunted or deformed from the huge Elm that dominated and darkened this area, until 2020. Although reasonably straight at their bases, these trees responded to the insufficient sunlight, by hanging over the roof of the townhome, so that their entire crowns are suspended over the roof.

Both Lindens display evidence of disease, but one of them recently developed a deep decay hole about 5 feet off the ground, with lateral stress cracks just above the new hole.

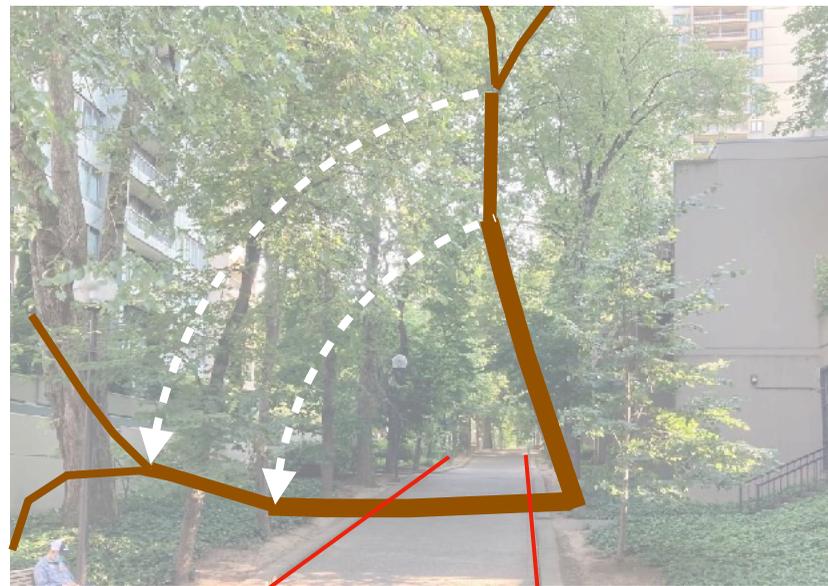
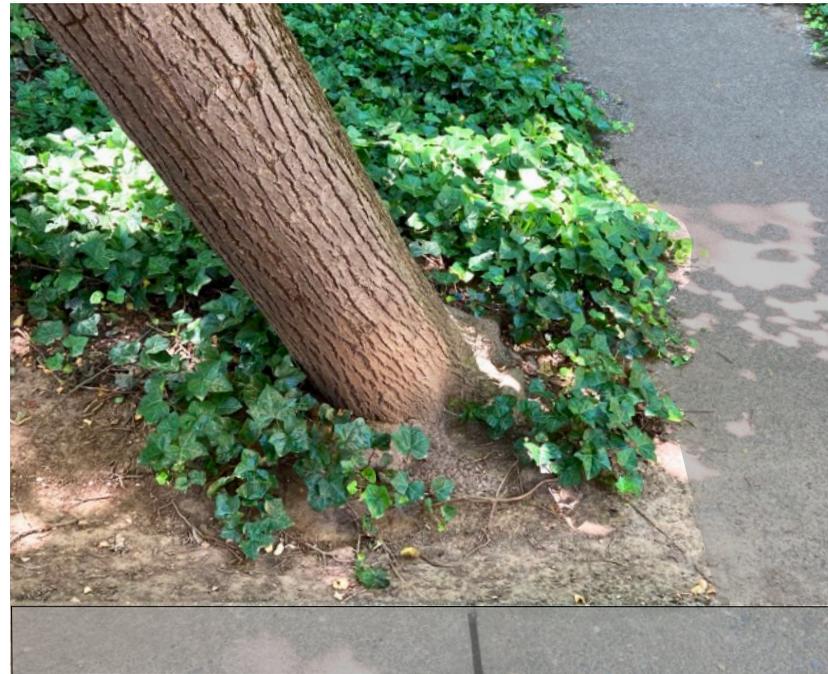


[The roofs of the townhomes are to be replaced during the summer of 2021, causing concern for the safety of the workers, as well as for potential structural damage after the work is completed.]

## 4 Linden



Above: The most frightening situation is this listing Linden, which appears to have nothing holding it up. There are no cracks in the adjacent sidewalk nor the curb, to suggest that roots have anchored underneath—only the girdling.



Above and above, right: Detail of asymmetrical root structure and stem girdling.  
Below: Assumed direction of tree toppling—pedestrian mall in red.

This 16" caliper Linden, about 60 to 70 feet tall, is located near the northeast corner of the Harrison West property adjacent to Pettygrove Park. It has a list of 26 degrees and, similar to the listing Norway Maple, described above, visual observation suggests that roots were not able to develop symmetrically below the roadway and the sidewalk.

As with the Norway Maple, there is also clear evidence of stem girdling, which may be contributing to the perilous list of this tree.



If this tree were to topple, it could cause injury or death. The main section of trunk, which would require a chainsaw to reduce to manageable pieces, would fall directly across the full width of the 2nd Ave Mall. Tributary branches and the crown would fall harmlessly onto the planted area of the Harrison East condominium complex.