

Pollie McCloskey

From: Nancy Morris <taweyahnan@gmail.com>
Sent: Monday, September 12, 2022 7:19 PM
To: City Council
Cc: Rachael Markle; Catherine Lee; Keith Scully; Doris McConnell; Chris Roberts; Betsy Robertson; Laura Mork; John Ramsdell; Eben Pobee
Subject: [EXTERNAL] Comment to City Council for Agenda 8(a) code amendment for MUR 70 zones September 12 2022
Attachments: Tree Assessment Report_00.pdf
Importance: High

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Please distribute to Council and include this comment in the public comment for Agenda 8(a) document library for Council meeting September 12, 2022.

Council and Colleagues:

Below is the draft of the verbal comment presented tonight with references at the end, regarding Agenda 8(a) to support the original proposal (not the revised language from staff) to save 10% significant trees on MUR-70' building sites; 15% on 80' building sites; and 20% on 90' and 140' building sites.

Regards,
Nancy Morris
Shoreline, WA resident

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"Climate emergency is here. We must demand the best building designs for heat mitigation. City wide temperatures will continue to increase; designing to include existing urban tree groves when possible and at the very least preserving perimeter trees in development sites should also be a top priority. Builders need the guidance of codes -- not recommendations by city staff that do not legally have to be adhered to. Builders will not choose building design that would be better for the natural environment if it is not in code already. Saving a few perimeter trees in highly prized development areas of Shoreline is hardly a deal breaker to any developer who is keeping up with the current best science on the importance of established trees and the need to keep them whenever possible (Reference 1 and 2). The 56 inch diameter, 90 foot tall Giant Sequoia on 145th street, a perimeter tree, may have been saved had the code amendments been in place (Reference 6).

It is a social justice issue when you force people to live in areas totally clearcut of established trees, but those deciding the fate of established trees generally live in single family homes surrounded by established trees with 10 degree cooler ambient temperature in their neighborhoods. “. . . a Forest Service scientist and partners [found](#) that heatwave exposure was 40% greater in the past decade in lower income regions compared to higher income regions. In more vulnerable areas, future heatwave exposure may increase up to 5-fold (Reference 3).” We are losing our urban canopy in all new development; you are allowing continued clearcutting of neighborhoods without regard to innovative design to meet the demands of climate crisis; this puts many residents of Shoreline at risk and especially in areas denuded of established trees and paved over with imperious cement creating even more heat island effects (Reference 4,4a,5); the council has been informed many times about these issues. We ask you to vote tonight **not** for the revised language provided by staff, but for the original proposal to save 10% significant trees on MUR-70’ building sites; 15% on 80’ building sites; and 20% on 90’ and 140’ building sites.”

REFERENCES

- 1. [Letter from 134 Scientists Conserve Mature Forests and Large Trees \(PDF\)](#)** Reference source: **Climate Forests:** <https://www.nrdc.org/resources/climate-forests#undefined> . . . On the importance of conserving mature forests and large trees. All forest canopy is so vitally important now in our urban environments. The letter has signatures from some scientists at our own University of Washington.
- 2. Urban Forest Patches Help Cool Cities: “Natural Turned National Infrastructure: Urban Forest Patches in the 21st Century.”** “The term "urban forest" is often used to describe trees along streets and sidewalks, but communities nationwide contain natural areas such as [forest patches](#). These areas may have more in common with their larger, wild brethren than they do with street trees or a manicured park. Maintaining and restoring urban forest patches can provide life-saving regional cooling, especially in vulnerable communities, during extreme heat. Forest patches can also help improve human health and well-being and climate resilience.” *Cross-Pollinator Issue Summer 2020.* http://www.fs.fed.us/research/docs/cross-pollinator/Cross-Pollinator_issue-1-summer-2020.pdf
- 3. Lower Income Regions Globally Feel the Brunt of Increasing Heat Exposure: “Increasing heat-stress inequality in a warming climate.” Published 2022.** Society will need to adapt to more frequent and intense heatwaves, which can overwhelm power grids and possibly negate

electricity-dependent adaptation efforts. In a global study, a Forest Service scientist and partners [found](#) that heatwave exposure was 40% greater in the past decade in lower income regions compared to higher income regions. In more vulnerable areas, future heatwave exposure may increase up to 5-fold. This work highlights the urgent need for heat-adaptation strategies in lower income regions. <https://www.fs.usda.gov/treearch/pubs/63860>

4. **“Learn About Heat Islands,” EPA report** <https://www.epa.gov/heatislands/learn-about-heat-islands>

4(a). **“Reduce Urban Heat Island Effect,” EPA Report** - <https://www.epa.gov/green-infrastructure/reduce-urban-heat-island-effect>

5. **Why some Seattle neighborhoods are hit harder by heat waves** <https://www.seattletimes.com/seattle-news/why-some-seattle-neighborhoods-are-hit-harder-by-heat-waves/> August 25, 2022 — When extreme heat bears down on the Seattle area, communities of color and low-income neighborhoods are more likely to experience the brunt ...

6. **Giant Sequoia in tree report at 90 feet tall, 56” diameter.**



LAYTON TREE CONSULTING, LLC

**TREE INVENTORY & ASSESSMENT
NE 145th Street and 1st Avenue NE Project
Shoreline, WA**



**Report Prepared for:
Shea Properties Management Company, Inc**



**Report Prepared by:
Bob Layton
Registered Consulting Arborist #670
Certified Arborist #PN-2714A**

October 6, 2020

It's all about trees.....

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DEV22-1504

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Attachments

Photos, pages 7 - 11

Tree Summary Tables

Tree Condition Maps

Assignment

Layton Tree Consulting, LLC was contacted by Kirk Bezanson of Shea Properties, and was asked to compile a Tree Inventory and Assessment Report for a block of multiple parcels in Shoreline. The subject properties are located northeast of the intersection of NE 145th Street and 1st Avenue NE.

The assignment is to prepare a written report on present tree conditions. The report will aid the project design team by identifying any poor condition or declining tree conditions and those that are in the best condition and/or suitable for long-term retention at the site.

Date of Field Examination: October 1, 2020

Description

67 significant trees were identified and assessed on the subject property. A 'significant' tree is defined by the City as any coniferous species eight-inches and larger and any deciduous species 12-inches and larger when measured at four and half feet above grade.

A numbered aluminum tag was attached to the lower trunk of most of the subject trees for ease of reference. Access was restricted to some trees so measurements in those cases are estimated. The tag numbers correspond with the numbers on the Tree Summary Table and the attached tree condition maps.

The trees are found scattered across the subject properties. They are comprised of planted ornamental varieties and also of native species. Several non-significant trees were surveyed that are not regulated by the City. These trees were not inventoried or assessed but are identified on the attached maps. The vast majority of these are small fruit trees.

Methodology

Tree diameters were measured by tape. The tree heights were measured using a Spiegel Relaskop. Each tree was visually examined for defects and vigor. The tree assessment procedure involves the examination of many factors:

- The crown or canopy of the tree is examined for current vigor/health by examining the foliage for appropriate color and density, the vegetative buds for color and size, and the branches for structural form and annual shoot growth; and the overall presence of limb dieback and/or any disease issues.
- The trunk or main stem of the tree is inspected for decay, which includes cavities, wounds, fruiting bodies of decay (conks or mushrooms), seams, insect pests, bleeding or exudation of sap, callus development, broken or dead tops, structural defects and unnatural leans. Structural defects can include but are not limited to excessive or unnatural leans, crooks, forks with V-shaped crotches, multiple attachments.
- The root collar and exposed surface roots are inspected for the presence of decay, insect damage, as well as if they have been injured or wounded, undermined or exposed, or the original grade has been altered.

Based on these factors a determination of condition is made.

Judging Condition

The three condition categories are described as follows:

Good – free of significant structural defects, no disease concerns, minor pest issues, no significant root issues, good structure/form with uniform crown or canopy, foliage of normal color and density, average or normal vigor, will be wind firm if isolated or left as part of a grouping or grove of trees, suitable for its location

Fair – minor to moderate structural defects not expected to contribute to a failure in near future, no disease concerns, moderate pest issues, no significant root issues, asymmetric or unbalanced crown or canopy, average or normal vigor, foliage of normal color, moderate foliage density, will be wind firm if left as part of a grouping or grove of trees, cannot be isolated, suitable for its location

Poor – major structural defects expected to cause fail in near future, disease or significant pest concerns, decline due to old age, significant root issues, asymmetric or unbalanced crown or canopy, sparse or abnormally small foliage, poor vigor, not suitable for its location

The attached Tree Summary Table provides specific information on tree sizes, condition and drip-line measurements.

Judging Retention Suitability

Not all trees necessarily warrant retention. The three retention suitability categories as described in ANSI A300 Part 5 (Standard Practices for the Management of Trees During Site Planning, Site Development and Construction) are as follows:

Good – trees are in good health condition and structural stability and have the potential for longevity at the site

Fair – trees are in fair health condition and/or have structural defects that can be mitigated with treatment. These trees may require more intense management and monitoring, and may have shorter life-spans than those in the “good” category.

Poor – trees are in poor health condition and have significant defects in structure that cannot be mitigated with treatment. These trees can be expected to decline regardless of management. The species or individual tree may possess characteristics that are incompatible or undesirable in landscape settings or be unsuited for the intended use of the site.

Observations

Seven dead trees were identified in the study area, as well as the survey dead birch snag (see Map 2). These include Trees #21, #47, #48, #51, #53, #60 and #63. Tree #21 was a semi-mature bigleaf maple. It has had significant issues for quite some time now, evidenced by the condition of the lower trunk. See picture below. This dead tree poses a risk to surrounding targets.

The other dead trees (#47, #48, #51, #53, #60 and #63) are all Lawson cypress. All are located in front of the property at 132 - NE 145th Street. Some have been dead for a year or more and others have recently

succumbed to mortality. The cause of decline and mortality is likely associated with a root disease and drought-stress.

The semi-mature row of Lawson cypress in front of 114 – NE 145th Street is also showing signs of decline. Top foliage has recently died back. There is a good chance these trees will continue to gradually decline.

Trees #2 and #14 are semi-mature to mature Colorado spruce trees adjacent to 1st Avenue NE. Both have a major infestation of the Cooley spruce gall adelgid. This is evident by the numerous cone-like growths at the branch tips. Both trees are of good vigor despite the infestation. The damage caused by this pest is mostly aesthetic and not life-threatening. Tree #14 has large exposed surface roots within its dripline.

The subject Douglas fir is in good condition. No disease or pest issues were identified. Trees are of good vigor with foliage of normal color and density. The lower trunks have no outward indicators of any internal decay issues. Most are in 'good' condition.

The Western hemlock and Western red cedar at the site are also of good vigor. Foliage is of normal color and density. These do not appear to have been significantly impacted by past summer drought conditions over the last five years or so.

Tree #43 is a semi-mature to mature giant sequoia located in front of 122 - NE 145th Street. It has a massive root system that is lifting the adjacent concrete and asphalt. It is of good vigor and has sound structural form. Condition is rated as 'good'.

There are no neighboring or off-site significant trees that are close to the exterior property lines or project boundary.

Discussion/Recommendations

The property is zoned MUR-70 and therefore not subjected to or is exempt from the City's standard tree retention requirements. Tree retention requirements including the protection of 'landmark' trees do not apply to this zoning.

The scale or intensity of development will not afford the necessary space for the successful retention of any existing trees. Given the density allowance for this zoning, the building and underground garage will be very close to the edges of the property line. The retention of existing trees is not feasible considering the proposed development and the City's Right-of-Way 145th Corridor project to widen the street and sidewalk/parkway work.

The removal of all of the identified dead trees (#21, #47, #48, #51, #53, #60 and #63) is recommended to abate any potentially hazardous conditions. Trees #21 and #51 pose an elevated risk and should be prioritized for removal. The owners of these properties should be made aware of these conditions.

[REDACTED]

A total of 67 significant trees were identified in the study area. Seven of these are dead. Several are rated as 'fair-to-poor' condition. These have poor retention suitability and are not feasible for preservation. These trees cannot be expected to positively contribute to the landscape for the long-term.

The property is zoned MUR-70 and therefore not subjected to or is exempt from the City's standard tree retention requirements.

[REDACTED]

Arborists are tree specialists who use their education, knowledge, training and experience to examine and assess trees, recommend measures to enhance the beauty and health of trees, and attempt to reduce the risks associated with living near trees. Clients may choose to accept or disregard the recommendations of the arborist, or to seek additional advice.

Arborists cannot detect every condition that could possibly lead to the structural failure of a tree. Trees are living organisms that grow, respond to their environment, mature, decline and sometimes fail in ways we do not fully understand. Conditions are often hidden within trees and below ground.

Arborists cannot guarantee that a tree will be healthy and/or safe under all circumstances, or for a specified period of time. Likewise, remedial treatments, like any medicine, cannot be guaranteed. Treatment, pruning and removal of trees may involve considerations beyond the scope of the arborist's services such as property boundaries, property ownership, site lines, disputes between neighbors, and other issues. Arborists cannot take such considerations into account unless complete and accurate information is disclosed to the arborist. An arborist should then be expected to reasonably rely upon the completeness and accuracy of the information provided.

Trees can be managed, but they cannot be controlled. To live near trees is to accept some degree of risk. The only way to eliminate all risk associated with trees is to eliminate all trees.

Photo Documentation

Tree #21



1st Ave NE looking north, Tree #21 in background



Tree Assessment Report – NE 145th ST Project - Shoreline

NE 146th CT, looking east from 1st AVE NE, Trees #5 > #12 in background



Trees #14 and #17 > #20 adjacent to 1st AVE NE



Row of Lawson cypress (Trees #35 > #42) in front of 114-NE 145th ST



Top dieback/decline of trees pictured above



Tree #43



Tree #43 – lower trunk



Trees in front of 132 – NE 145th ST, declining Lawson cypress (center)



Recent dead Tree #63 (center-right)



Layton Tree Consulting LLC

For: Shea Properties
 Site: NE 145 ST & 1st AVE NE Project - Shoreline

Tree Summary Table

Date: 10/1/2020



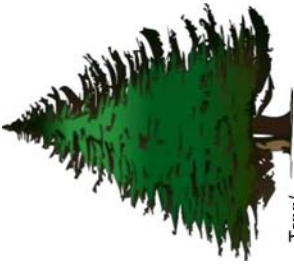
Tree/ Tag #	Species	DBH (inches)	Height (feet)	Drip-Line Measurements (feet)				Condition	Retention Suitability	Comments	Proposal
				N	S	E	W				
1	Western hemlock	8,7 (11)	30	10	8	8	7	Fair-Good	Fair	forked at root crown	Remove
2	Colorado spruce	24	62	10	11	11	12	Fair	Good	major spruce gall infestation, forked trunk	Remove
3	Japanese maple	13,11 (17)	30	10	16	12	18	Good	Good	good form,good vigor	Remove
4	highclere holly	9,9,8,7,6 (18)	33	10	9	9	10	Fair	Fair	typical cluster, good vigor	Remove
5	Japanese maple	9,7 (12)	18	12	14	8	13	Good	Good	good form,good vigor	Remove
6	Douglas fir	14	47	11	12	8	13	Good	Good	young, good vigor	Remove
7	Western hemlock	14	48	11	7	9	11	Fair-Good	Good	trunk deformity, good vigor	Remove
8	Western red cedar	16	41	8	10	9	8	Fair-Poor	Poor	forked at 4 feet, multiple tops, problematic structure	Remove
9	Western red cedar	18	44	9	12	9	7	Fair-Poor	Poor	forked at 4 feet, multiple tops, problematic structure	Remove
10	Douglas fir	26	106	12	13	11	9	Good	Good	old broken top, good form,good vigor	Remove
11	Pacific madrone	9,8,3 (12)	40	14	16	8	7	Good	Good	cluster, good vigor, natural leans	Remove
12	Douglas fir	24	108	12	13	14	10	Good	Good	good form,good vigor	Remove
13	apple	9,9,7 (15)	20	7	6	8	7	Fair	Fair	typical	Remove
14	Colorado spruce	25	96	16	13	14	13	Fair	Good	large exposed surface roots, major spruce gall infestation	Remove
15	magnolia	9,6,6 (12)	15	10	10	8	8	Good	Good	well maintained, good vigor	Remove
16	European white birch	24	62	16	14	14	12	Fair-Poor	Poor	no access, dead, broken tops, in decline	Remove
17	Western hemlock	22	88	16	8	16	13	Fair	Fair	spiral frost crack	Remove
18	Western hemlock	17	84	6	8	4	8	Fair	Fair	foliage somewhat sparse	Remove
19	Western hemlock	21	90	7	10	15	8	Fair-Good	Fair	natural lean south	Remove
20	bigleaf maple	25,24 (35)	86	18	15	19	22	Fair	Fair	some trunk decay,dead wood	Remove
21	bigleaf maple	24	72	x	x	x	x	Dead	Poor	recent dead,high risk	Remove
22	Western red cedar	34	93	18	16	14	16	Good	Good	no access	Remove
23	Western hemlock	11	68	9	5	9	6	Fair	Fair	natural lean north, forked top	Remove
24	Western hemlock	19	77	15	14	12	10	Fair	Fair	foliage somewhat sparse	Remove
25	bigleaf maple	11,10,10,8 (20)	57	14	14	13	15	Fair	Fair	young cluster, decent vigor	Remove
26	Alaska weeping cedar	7,5 (9)	20	6	10	6	8	Fair	Fair	suppressed by maple	Remove
27	apple	12,7 (14)	14	6	11	8	6	Fair	Fair	typical	Remove
28	apple	14,10,8 (19)	18	10	8	10	12	Fair	Fair	typical	Remove
29	Western red cedar	14	38	12	12	8	12	Good	Good	young, good vigor	Remove
30	Colorado blue spruce	11	36	7	9	7	6	Fair	Good	forked trunk, good vigor	Remove

Layton Tree Consulting LLC

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Tree Summary Table

Date: 10/1/2020



Tree/ Tag #	Species	DBH (inches)	Height (feet)	Drip-Line Measurements (feet)				Condition	Retention Suitability	Comments	Proposal
				N	S	E	W				
31	Colorado blue spruce	9	35	6	5	6	6	Fair	Good	forked trunk, good vigor	Remove
32	flowering cherry	15	28	8	11	9	10	Fair-Good	Good	decent form, decent vigor	Remove
33	Douglas fir	14	54	11	12	14	11	Good	Good	good form, good vigor	Remove
34	Western hemlock	14	62	10	10	8	14	Fair-Good	Fair	no access	Remove
35	Lawson cypress	15	41	9	6	4	10	Fair	Poor	dying top	Remove
36	Lawson cypress	17	43	6	8	4	4	Fair	Poor	dying top	Remove
37	Lawson cypress	12,12 (17)	40	7	7	4	4	Fair	Poor	top decline	Remove
38	Lawson cypress	16,9 (18)	46	8	8	4	4	Fair-Poor	Poor	sparse foliage, top decline	Remove
39	Lawson cypress	14,13 (19)	48	6	8	4	4	Fair	Poor	natural lean, some top decline	Remove
40	Lawson cypress	12,10 (16)	45	7	6	4	4	Fair	Poor	top decline	Remove
41	Lawson cypress	13	48	4	4	5	0	Fair	Poor	cable wrapped around trunk	Remove
42	Lawson cypress	13	39	2	5	4	3	Fair	Poor	natural lean southeast	Remove
43	giant sequoia	56	90	18	18	20	18	Good	Good	roots lifting concrete and asphalt	Remove
44	Eastern red cedar	11	44	6	7	8	6	Fair	Fair	no access, sparse foliage, dieback	Remove
45	Lawson cypress	15	59	12	9	9	11	Good	Fair	good form, good vigor	Remove
46	Western red cedar	19	68	8	11	8	11	Good	Good	good form, good vigor	Remove
47	Lawson cypress	12,5 (13)	58	x	x	x	x	Dead	Poor	recent dead	Remove
48	Lawson cypress	9	32	x	x	x	x	Dead	Poor	older dead, hung up	Remove
49	Ponderosa pine	25	88	12	17	8	10	Fair-Good	Good	forked top	Remove
50	Lawson cypress	6,6 (8)	35	12	0	2	4	Fair-Poor	Poor	sparse foliage, top decline	Remove
51	Lawson cypress	16,8 (18)	55	x	x	x	x	Dead	Poor	older dead, high risk	Remove
52	Lawson cypress	10	56	2	8	2	0	Fair-Poor	Poor	asymmetric crown, topped in past	Remove
53	Lawson cypress	8	30	x	x	x	x	Dead	Poor	older dead, broken tops	Remove
54	Lawson cypress	15,13 (20)	62	12	4	6	9	Fair	Poor	trunk forks at 2 feet, sparse foliage	Remove
55	Ponderosa pine	19	75	4	14	12	8	Fair-Good	Good	natural lean north	Remove
56	Lawson cypress	8,6 9(10)	57	2	6	8	3	Fair	Poor	bent top, poor taper	Remove
57	Lawson cypress	13,7 (15)	60	2	8	12	7	Fair	Poor	forked tops	Remove
58	Lawson cypress	12	70	4	4	3	10	Fair-Poor	Poor	top decline	Remove
59	Lawson cypress	14	72	8	3	8	8	Poor	Poor	major decline, mostly dead	Remove
60	Lawson cypress	10	15	x	x	x	x	Dead	Poor	broken	Remove

Layton Tree Consulting LLC

For: Shea Properties
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Tree Summary Table

Date: 10/1/2020



Tree/ Tag #	Species	DBH (inches)	Height (feet)	Drip-Line Measurements (feet)				W	Condition	Retention Suitability	Comments	Proposal
				N	S	E	W					
61	Western hemlock	10,10 (14)	32	5	7	7	10	Fair-Poor	Poor	bent, forked top, trunks covered in ivy	Remove	
62	red maple	17,12 (21)	52	16	20	20	12	Fair-Poor	Poor	poor form, decay between forked trunks	Remove	
63	Lawson cypress	20	72	x	x	x	x	Dead	Poor	recent dead	Remove	
64	Douglas fir	29	98	8	13	12	14	Good	Good	good form,good vigor	Remove	
65	Douglas fir	31	102	10	12	10	12	Good	Good	good form,good vigor	Remove	
66	Douglas fir	26	91	11	12	12	10	Fair-Good	Good	topped in the past, good vigor	Remove	
67	Douglas fir	24	95	12	14	11	8	Good	Good	good form,good vigor	Remove	

Drip-Line measurements from face of trunk

Calculated DBH: the DBH is parenthesis is the square root of the sum of the dbh for each individual stem squared (example with 3 stems: $\text{dbh} = \text{square root}[(\text{stem1})^2 + (\text{stem2})^2 + (\text{stem3})^2]$).

NE 147TH ST

NEIGHBORHOOD WATCH

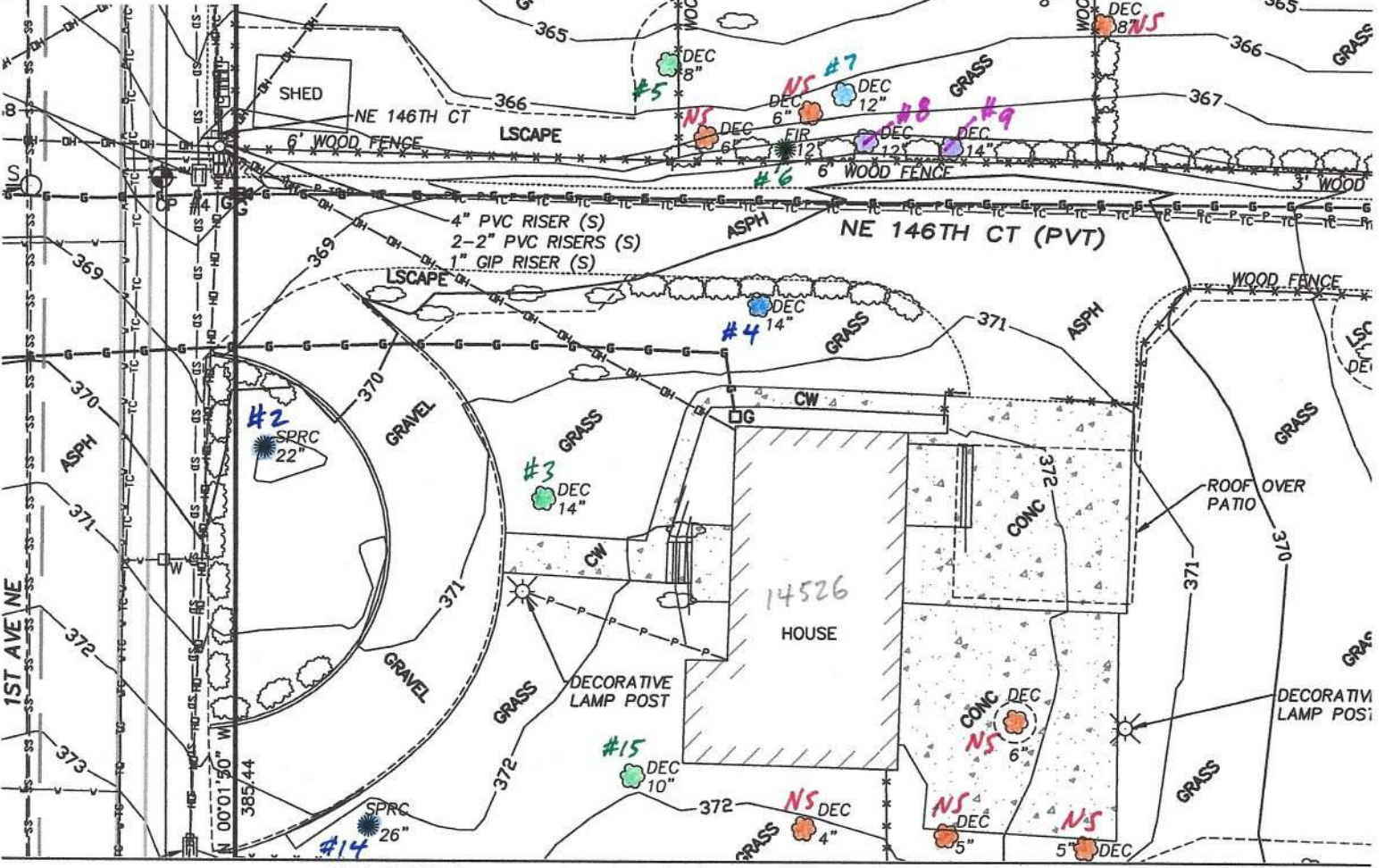
SSMH 2196
RIM = 357.43'
IE 8" PVC (E)
IE 8" PVC (W)



Map 1 - NW Corner

- Tree Conditions**
- # Good
 - # Fair-Good
 - # Fair
 - # Fair-Poor
 - # Poor
 - # Dead
 - NS Non-Significant

103 HOUSE
-CB 1816
RIM = 363.02'
IE 12" CONC (N) = 360.69'
IE 4" CPP (E) = 360.94'
IE 12" CPP (S) = 360.79'

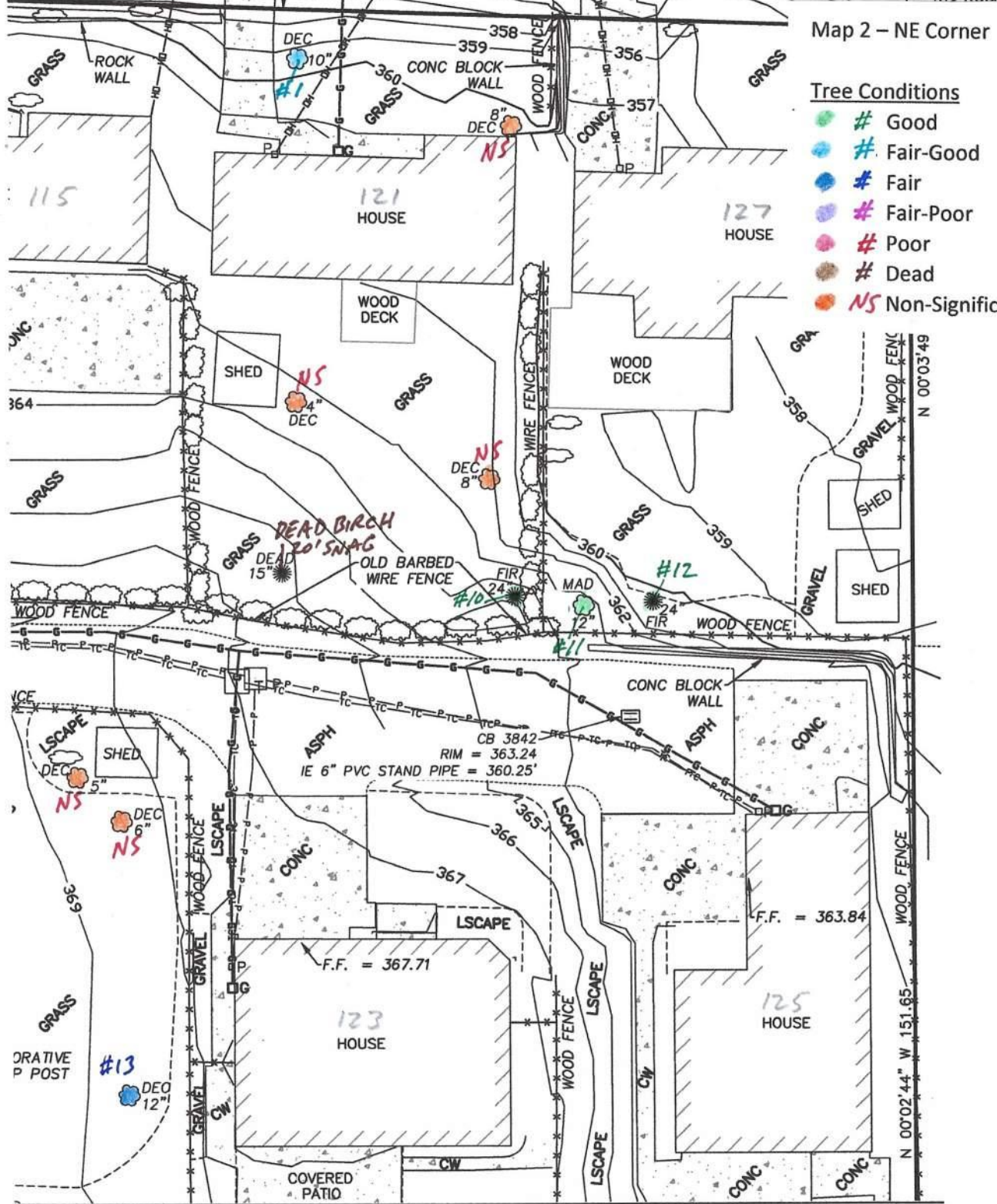


SEE SHEET 5



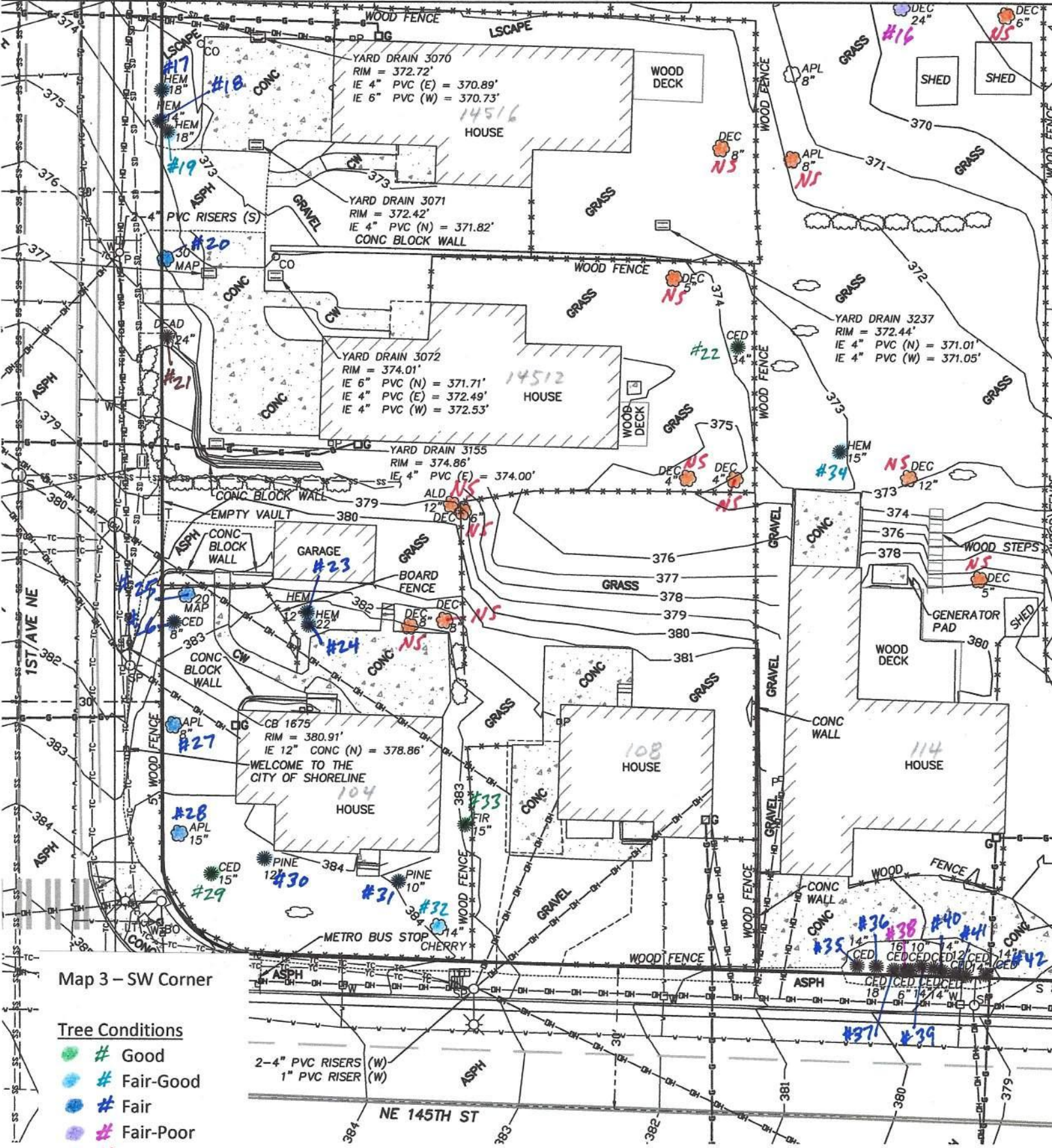
Map 2 – NE Corner

- Tree Conditions
- # Good
 - # Fair-Good
 - # Fair
 - # Fair-Poor
 - # Poor
 - # Dead
 - NS Non-Significant



SEE SHEET 5

SEE SHEET 4



Map 3 - SW Corner

- Tree Conditions**
- # Good
 - # Fair-Good
 - # Fair
 - # Fair-Poor
 - # Poor
 - # Dead
 - NS Non-Significant

SEE SHEET 4

Map 4 - SE Corner



- Tree Conditions
- # Good
 - # Fair-Good
 - # Fair
 - # Fair-Poor
 - # Poor
 - # Dead
 - # NS Non-Significant

