

Excerpt from Staff report memo, April 27, 2021 Planning Commission meeting

Amending tree credit value section MMC 20.52.130(C) (increase or decrease) (NEW)

At the March Planning Commission meeting, the possibility of amending the tree credit value table (MMC 20.52.130(C)) so that larger trees (36" DBH or greater) were given a value of 1.25 was suggested (the current code has trees with a DBH of 50" or greater assigned to this value). As staff began the analysis, it quickly became apparent that assigning trees that are 36" or larger the 1.25 value did not have the impact that was assumed. In fact, it did not alter the net trees of any of the analyzed permits. Instead of raising the tree credit values, perhaps reducing them would be more appropriate. In the examples, a reduced tree credit value coupled with the .4 tree density multiplier resulted in more trees either being saved through retention or by supplemental planting.

The following is an analysis of six previously approved tree permits. Using the approved applications the examples show: what was permitted per the code; increasing the value to 1.25 for trees with a 36" DBH or greater; and reducing all of the tree credit values. For ease of reference, the baseline of what is used for each example is shown in the tables below:

Table for 1st Example (current code)

Tree Type	Diameter Breast Height of Existing Tree	Tree Unit
Deciduous	6 to 10 inches	0.75
	Greater than 10 inches	1.0
Coniferous	6 to 10 inches	0.75
	Greater than 10 inches, but less than 50 inches	1.0
	50 inches and greater	1.25

Table for 2nd Example (36" and larger 1.25)

Tree Type	Diameter Breast Height of Existing Tree	Tree Unit
Deciduous	6 to 10 inches	0.75
	Greater than 10 inches	1.0
Coniferous	6 to 10 inches	0.75
	Greater than 10 inches, but less than 36 inches	1.0
	36 inches and greater	1.25

Table for 3rd Example (reduce all values by .25)

Tree Type	Diameter Breast Height of Existing Tree	Tree Unit
Deciduous	6 to 10 inches	0.5
	Greater than 10 inches	0.75
Coniferous	6 to 10 inches	0.5
	Greater than 10 inches, but less than 36 inches	0.75
	36 inches and greater	1.0

707 Overlake Drive (TREE-20-049)

This is one of the permits that Steve Wilcox discussed in his presentation. This is a property on a steep slope critical area and is a heavily wooded site.

Lot size: 19,753

Zoning: R-16

Permitted

Total Existing Tree Units: 35.5
 Total Tree Units Removed: 20.75
 Net Tree Units: 14.75
 Required Tree Units (.35): $6.9 = 7$
 Supplemental Units Required: No

Using 1.25 tree credits for trees 36” and greater and the .4 multiplier

Total Existing Tree Units: 36
 Total Tree Units Removed: 21.25 (based on updated credits)
 Net Tree Units: 14.75
 Required Tree Units (.4): $7.9 = 8$
 Supplemental Units Required: No

Reducing tree credits and the .4 multiplier

Total Existing Tree Units: 26.25
 Total Tree Units Removed: 15.5 (based on updated credits)
 Net Tree Units: 10.75
 Required Tree Units (.4): $7.9 = 8$
 Supplemental Units Required: No

Result between tree credit values – No Difference

There was no difference in increasing the tree credit value for the two trees that were 36” on this site (both of which were approved to be removed) to 1.25. Once the trees that were to be removed were subtracted from the existing tree units, there was no difference in the net tree units between the existing code and increasing the credit value for trees larger than 36”. Additionally, by reducing the number of credits the trees are worth, they would have still been able to remove the same

number of trees and have more tree credits than the minimum required. No supplemental trees would have been required under any of the examples.

Result of legacy tree removal

This project removed two 36” trees. By amending the code to include trees 36” and above, this would either have required the homeowner to amend their site plan to ensure both trees were saved (the trees were located on the outer perimeter) or would have required 36” of replacement tree caliper. If the owner did not want to amend the site plan, this would have likely resulted in the homeowner requesting to use the in-lieu of planting section of the code.

**707 Overlake Drive East
Tree Credit Analysis Table**

Description	Tree Diameter	Proposed Removal	Tree Credits Per Existing Code	Tree Credits w/ 36” DBH and larger at 1.25	Tree Credits Reduced
Madrona	6	x	0.75	0.75	0.5
Douglas Fir	6		0.75	0.75	0.5
Madrona	6		0.75	0.75	0.5
Tree	6	x	0.75	0.75	0.5
Cedar	6	x	0.75	0.75	0.5
Cedar	6	x	0.75	0.75	0.5
Deciduous	8		0.75	0.75	0.5
Tree	8	x	0.75	0.75	0.5
Hemlock	8	x	0.75	0.75	0.5
Cedar	10		0.75	0.75	0.5
Cedar	10		0.75	0.75	0.5
Deciduous	10	x	0.75	0.75	0.5
Cedar	10	x	0.75	0.75	0.5
Cedar	10	x	0.75	0.75	0.5
Cedar	12		1	1	0.75
Cedar	12	x	1	1	0.75
Douglas Fir	12	x	1	1	0.75
Madrona	12	x	1	1	0.75
Douglas Fir	14		1	1	0.75
Douglas Fir	16	x	1	1	0.75
Cedar	18	x	1	1	0.75
Douglas Fir	22	x	1	1	0.75
Deciduous	22		1	1	0.75
Douglas Fir	24		1	1	0.75
Hemlock	24		1	1	0.75
Douglas Fir	24	x	1	1	0.75
Deciduous	26		1	1	0.75
Douglas Fir	26	x	1	1	0.75
Douglas Fir	28		1	1	0.75

Douglas Fir	30	x	1	1	0.75
Douglas Fir	30		1	1	0.75
Cedar	30		1	1	0.75
Douglas Fir	30	x	1	1	0.75
Douglas Fir	32		1	1	0.75
Douglas Fir	32		1	1	0.75
Douglas Fir	32	x	1	1	0.75
Douglas Fir	32	x	1	1	0.75
Douglas Fir	36	x	1	1.25	1
Douglas Fir	36	x	1	1.25	1
TOTAL			35.5	36	26.25

7815 NE 28th ST (TREE-20-013)

Lot size: 8,120 sq. ft.

Zoning: R-16

Permitted

Total Existing Tree Units: 12
 Total Tree Units Removed: 8.25
 Net Tree Units: 3.75
 Required Tree Units (.35): $2.9 = 3$
 Supplemental Units Required: No

Using 1.25 tree credits for trees 36" and greater and the .4 multiplier

Total Existing Tree Units: 12.25
 Total Tree Units Removed: 8.5 (based on updated credits)
 Net Tree Units: 3.75
 Required Tree Units (.4): $3.2 = 4$
 Supplemental Units Required: **Yes – 1 tree**

Reducing tree credits and the .4 multiplier

Total Existing Tree Units: 8.75
 Total Tree Units Removed: 6.25 (based on updated credits)
 Net Tree Units: 2.5
 Required Tree Units (.4): $3.2 = 4$
 Supplemental Units Required: **Yes – 2 trees**

Result between tree credit values – Reducing tree credits with the .4 multiplier resulted in more trees

The net tree unit number was unchanged for what was permitted per code and increasing the tree credit value for trees over 36" to 1.25. The .4 multiplier increased the requirement of a supplemental tree by 1 tree (or this could have been achieved by retaining another tree). Having the multiplier at .4 plus reducing the tree credit value resulted in 2 additional tree credits, which again could have been accomplished by retaining two more or by supplemental planting.

Result of legacy tree removal

This project removed one 44” tree that was located in the corner of the lot. It’s possible that the site plan would have been amended so that the tree root wasn’t disturbed and the tree could remain, or that the owners would not be willing to plant 22” of replacement tree caliper and so would ask to utilize the in-lieu of planting section of the code.

**7815 NE 28th
Tree Credit Analysis Table**

Description	Tree Diameter	Proposed Removal	Tree Credits Per Existing Code	Tree Credits w/ 36” DBH and larger at 1.25	Tree Credits Reduced
Cedar	7		0.75	0.75	0.5
Douglas Fir	7		0.75	0.75	0.5
Cedar	7.2		0.75	0.75	0.5
Cedar	8		0.75	0.75	0.5
Cedar	8.5		0.75	0.75	0.5
Plum	9	x	0.75	0.75	0.5
Apple	9.5	x	0.75	0.75	0.5
Hawthorne	10	x	0.75	0.75	0.5
Plum	12.6	x	1	1	0.75
Douglas Fir	18	x	1	1	0.75
Douglas Fir	24	x	1	1	0.75
Douglas Fir	26	x	1	1	0.75
Douglas Fir	28	x	1	1	0.75
Douglas Fir	44	x	1	1.25	1
TOTAL			8.25	8.5	6.25

2000 79th Ave NE (TREE-16-013)

Lot size: 40,108 sq. ft.

Zoning: R-20

Permitted

Total Existing Tree Units: 35.5

Total Tree Units Removed: 20.5

Net Tree Units: 15

Required Tree Units (.35): 14

Supplemental Units Required: No

Using 1.25 tree credits for trees 36” and greater and the .4 multiplier

Total Existing Tree Units: 36

Total Tree Units Removed: 21 (based on updated credits)

Net Tree Units: 15

Required Tree Units (.4): 16

Supplemental Units Required: **Yes – 1 tree**

Reducing tree credits and the .4 multiplier

Total Existing Tree Units: 26.5

Total Tree Units Removed: 15.5 (based on updated credits)

Net Tree Units: 11

Required Tree Units (.4): 16

Supplemental Units Required: **Yes – 5 trees**

Result between tree credit values – Reducing tree credits with the .4 multiplier resulted in more trees

Once again, the net tree unit number was unchanged for what was permitted and increasing trees over 36” to a 1.25 tree credit. The multiplier of .4 increased the requirement of a supplemental tree by 1 tree (or this could have been achieved by retaining another tree). Having the multiplier at .4 plus the reduced tree credit value resulted in 5 additional trees, which could have been accomplished by retaining more trees or by supplemental planting.

Result of legacy tree removal

This project removed one 36” tree and one 38” tree, both of which were located well outside of the building envelope. Due to their locations, it is staff’s opinion that both of these trees were removed to improve the view of the golf course. Lowering the legacy tree requirements would have possibly made the owners reconsider removing these trees, or they would have most likely requested to use the in-lieu of planting section to not have to plant 37” of replacement tree caliper.

**2000 79th Avenue NE
Tree Credit Analysis Table**

Description	Tree Diameter	Proposed Removal	Tree Credits Per Existing Code	Tree Credits w/ 36” DBH and larger at 1.25	Tree Credits Reduced
Dogwood	6	x	0.75	0.75	0.5
Dogwood	6	x	0.75	0.75	0.5
Dogwood	6	x	0.75	0.75	0.5
Dogwood	6	x	0.75	0.75	0.5
Dogwood	6		0.75	0.75	0.5
Dogwood	6		0.75	0.75	0.5
Dogwood	8	x	0.75	0.75	0.5
Dogwood	8	x	0.75	0.75	0.5
Dogwood	8		0.75	0.75	0.5
Dogwood	9		0.75	0.75	0.5
Douglas Fir	10		0.75	0.75	0.5
Cherry	12		0.75	0.75	0.5
Ash	12		0.75	0.75	0.5
Ash	14	x	0.75	0.75	0.5
Cherry	15	x	1	1	0.75

Douglas Fir	16	x	1	1	0.75
Magnolia	16		1	1	0.75
Douglas Fir	16		1	1	0.75
Birch	16		1	1	0.75
Maple	17		1	1	0.75
Cedar	18	x	1	1	0.75
Douglas Fir	18		1	1	0.75
Douglas Fir	18	x	1	1	0.75
Douglas Fir	20	x	1	1	0.75
Cherry	20	x	1	1	0.75
Douglas Fir	24		1	1	0.75
Douglas Fir	24		1	1	0.75
Douglas Fir	24		1	1	0.75
Douglas Fir	25	x	1	1	0.75
Douglas Fir	26	x	1	1	0.75
Douglas Fir	30	x	1	1	0.75
Douglas Fir	30	x	1	1	0.75
Douglas Fir	30	x	1	1	0.75
Douglas Fir	32		1	1	0.75
Douglas Fir	32	x	1	1	0.75
Douglas Fir	35	x	1	1	0.75
Hemlock	36	x	1	1	0.75
Cedar	38	x	1	1.25	1
TOTAL			35.5	36	26.25

1306 Evergreen Point Road (TREE-17-033)

Lot size: 16,364 sq. ft.

Zoning: R-16

Permitted

Total Existing Tree Units: 22.75

Total Tree Units Removed: 14.5

Net Tree Units: 8.25

Required Tree Units (.35): 5.7=6

Supplemental Units Required: No

Using 1.25 tree credits for trees 36” and greater and the .4 multiplier – *this property had no trees larger than 36”*

Total Existing Tree Units: 22.75

Total Tree Units Removed: 14.5 (no trees 36” or larger)

Net Tree Units: 8.25

Required Tree Units (.4): 6.5=7

Supplemental Units Required: No

Reducing tree credits and the .4 multiplier

Total Existing Tree Units: 16.75
 Total Tree Units Removed: 10.75 (no trees 36" or larger)
 Net Tree Units: 6
 Required Tree Units (.4): 6.5=7
 Supplemental Units Required: **Yes – 1 tree**

Result between tree credit values – Reducing tree credits with the .4 multiplier resulted in more trees

Although there were no trees that were 36" or larger on this site, the increased multiplier and reduced tree credit value did result in an additional tree.

Result of legacy tree removal

This project did not have any legacy trees.

**1306 Evergreen Point Road
 Tree Credit Analysis Table**

Description	Tree Diameter	Proposed Removal	Tree Credits Per Existing Code	Tree Credits w/ 36" DBH and larger at 1.25	Tree Credits Reduced
Dogwood	6		0.75	0.75	0.5
Dogwood	6		0.75	0.75	0.5
Dogwood	6		0.75	0.75	0.5
Dogwood	6	x	0.75	0.75	0.5
Dogwood	6	x	0.75	0.75	0.5
Dogwood	6		1	1	0.75
Dogwood	8	x	1	1	0.75
Dogwood	8	x	1	1	0.75
Dogwood	8	x	1	1	0.75
Dogwood	9	x	1	1	0.75
Douglas Fir	10		1	1	0.75
Cherry	12	x	1	1	0.75
Ash	12	x	1	1	0.75
Ash	14		1	1	0.75
Cherry	15	x	1	1	0.75
Douglas Fir	16	x	1	1	0.75
Magnolia	16	x	1	1	0.75
Douglas Fir	16		1	1	0.75
Birch	16	x	1	1	0.75
Maple	17	x	1	1	0.75
Cedar	18	x	1	1	0.75
Douglas Fir	18		1	1	0.75
Douglas Fir	18		1	1	0.75
Douglas Fir	20	x	1	1	0.75
TOTAL			22.75	22.75	16.75

1221 Evergreen Point Road (TREE-18-013)

Lot size: 65,556 sq. ft.

Zoning: R-30

Permitted

Total Existing Tree Units: 79.5
 Total Tree Units Removed: 29.75
 Net Tree Units: 49.75
 Required Tree Units (.35): 22.9=23
 Supplemental Units Required: No

Using 1.25 tree credits for trees 36” and greater and the .4 multiplier

Total Existing Tree Units: 79.5
 Total Tree Units Removed: 29.79 (no trees 36” or larger being removed)
 Net Tree Units: 49.75
 Required Tree Units (.4): 26.22=27
 Supplemental Units Required: No

Reducing tree credits and the .4 multiplier

Total Existing Tree Units: 59.25
 Total Tree Units Removed: 22 (no trees 36” or larger being removed)
 Net Tree Units: 37.25
 Required Tree Units (.4): 26.222=27
 Supplemental Units Required: No

Result between tree credit values – No Difference

Due to the size of the lot and the number of existing trees, there was neither a difference in having the trees that were 36” on this site (all of which were kept) have a tree credit of 1.25, nor was there any difference in reducing the tree credit values. No supplemental trees were required for any of the analyses.

Result of legacy tree removal

This project did not remove any legacy trees.

**1221 Evergreen Point Road
 Tree Credit Analysis Table**

Description	Tree Diameter	Proposed Removal	Tree Credits Per Existing Code	Tree Credits w/ 36” DBH and larger at 1.25	Tree Credits Reduced
Cedar	6		0.75	0.75	0.5
Hazelnut	6	x	0.75	0.75	0.5
Cedar	6		0.75	0.75	0.5
Cedar	6		0.75	0.75	0.5
Cedar	6		0.75	0.75	0.5

Cedar	6		0.75	0.75	0.5
Cedar	6		0.75	0.75	0.5
Cedar	6		0.75	0.75	0.5
Cedar	6		0.75	0.75	0.5
Cedar	6.5	x	0.75	0.75	0.5
Cedar	8		0.75	0.75	0.5
Cedar	8		0.75	0.75	0.5
Apple	8	x	0.75	0.75	0.5
Cedar	8	x	0.75	0.75	0.5
Cedar	8		0.75	0.75	0.5
Hazelnut	8		0.75	0.75	0.5
Hazelnut	8		0.75	0.75	0.5
Ash	8		0.75	0.75	0.5
Maple	8		0.75	0.75	0.5
Cedar	9	x	0.75	0.75	0.5
Cedar	9		0.75	0.75	0.5
Cedar	9		0.75	0.75	0.5
Cedar	9		0.75	0.75	0.5
Cedar	9		0.75	0.75	0.5
Cedar	9		0.75	0.75	0.5
Cedar	9		0.75	0.75	0.5
Cedar	10		1	1	0.75
Cedar	10		1	1	0.75
Cedar	10		1	1	0.75
Douglas Fir	10		1	1	0.75
Douglas Fir	10		1	1	0.75
Douglas Fir	10		1	1	0.75
Douglas Fir	10	x	1	1	0.75
Cedar	10		1	1	0.75
Hawthorn	10	x	1	1	0.75
Douglas Fir	10	x	1	1	0.75
Douglas Fir	10	x	1	1	0.75
Cherry	10		1	1	0.75
Ash	10		1	1	0.75
Dogwood	10		1	1	0.75
Maple	10		1	1	0.75
Douglas Fir	11		1	1	0.75
Hemlock	11	x	1	1	0.75
Cedar	11		1	1	0.75
Douglas Fir	12		1	1	0.75
Cedar	12		1	1	0.75
Cedar	12		1	1	0.75
Cedar	12		1	1	0.75
Dogwood	12	x	1	1	0.75
Dogwood	12	x	1	1	0.75
Plum	12	x	1	1	0.75

Douglas Fir	12	x	1	1	0.75
Madrone	12		1	1	0.75
Madrone	12		1	1	0.75
Hawthorn	12		1	1	0.75
Cedar	13		1	1	0.75
Yew	13	x	1	1	0.75
Douglas Fir	15		1	1	0.75
Douglas Fir	15		1	1	0.75
Apple	15	x	1	1	0.75
Cedar	16	x	1	1	0.75
Cedar	16		1	1	0.75
Douglas Fir	16		1	1	0.75
Apple	16	x	1	1	0.75
Apple	16	x	1	1	0.75
Douglas Fir	16		1	1	0.75
Cedar	17	x	1	1	0.75
Douglas Fir	18		1	1	0.75
Cherry	18	x	1	1	0.75
Cedar	20		1	1	0.75
Cottonwood	20	x	1	1	0.75
Cedrus	22	x	1	1	0.75
Cypress	22	x	1	1	0.75
Douglas Fir	23		1	1	0.75
Cedar	23	x	1	1	0.75
Cedar	23	x	1	1	0.75
Cedar	26	x	1	1	0.75
Cedar	27	x	1	1	0.75
Cedar	27	x	1	1	0.75
Cedar	35	x	1	1	0.75
Cedar	35	x	1	1	0.75
Douglas Fir	36		1	1.25	1
Maple	36		1	1.25	1
Cottonwood	36		1	1.25	1
Cottonwood	36		1	1.25	1
Cottonwood	38		1	1.25	1
TOTAL			79.5	80.75	59.25

2626 78th Avenue NE (TREE-20-008)

Lot size: 8,120 sq. ft.

Zoning: R-16

Permitted

Total Existing Tree Units: 10

Total Tree Units Removed: 7

Net Tree Units: 3

Required Tree Units (.35): 3
 Supplemental Units Required: No

Using 1.25 tree credits for trees 36” and greater and the .4 multiplier

Total Existing Tree Units: 10.5
 Total Tree Units Removed: 7.5
 Net Tree Units: 3
 Required Tree Units (.4): 3.2=4
 Supplemental Units Required: **Yes – 1 tree**

Reducing tree credits and the .4 multiplier

Total Existing Tree Units: 8
 Total Tree Units Removed: 5.75
 Net Tree Units: 2.25
 Required Tree Units (.4): 3.2=4
 Supplemental Units Required: **Yes – 2 trees**

Result between tree credit values – Reducing tree credits with the .4 multiplier resulted in more trees

Again, assigning trees 36” or larger a tree credit of 1.25 did not result in much of a difference. However, the increased multiplier along with a reduction in tree credit value resulted in two additional trees, which could have been satisfied by either retaining two more trees or supplemental plantings.

Result of legacy tree removal

This project removed one 38” tree and one 39” tree. The 39” tree was located in the front of the property and the 38” was located in the rear building envelope. It’s possible that the 39” tree would have been saved but the 38” would have only been saved with a redesign of the house and possibly some sort of variance for setbacks. If the owner elected to have both trees removed, a small lot (8,120 sq. ft.) could not reasonably support 38.5” of replacement tree caliper and so they would have had to request the in-lieu of planting section.

**2626 78th Ave NE
 Tree Credit Analysis Table**

Description	Tree Diameter	Proposed Removal	Tree Credits Per Existing Code	Tree Credits w/ 36” DBH and larger at 1.25	Tree Credits Reduced
Cedar	10		1	1	0.75
Douglas Fir	15		1	1	0.75
Douglas Fir	16	x	1	1	0.75
Douglas Fir	17		1	1	0.75
Douglas Fir	17	x	1	1	0.75
Douglas Fir	26	x	1	1	0.75
Douglas Fir	29	x	1	1	0.75

Douglas Fir	33	x	1	1	0.75
Douglas Fir	38	x	1	1.25	1
Douglas Fir	39	x	1	1.25	1
TOTAL			10	10.5	8

Conclusions for reducing legacy trees to 36” or greater

Throughout the analysis of tree permits this year, it has been fairly evident that if a property is heavily wooded the homeowner can cut down a large number of trees; no slight modification or tweaking of numbers is going to change that. This is evidenced by the analysis of 707 Overlake Drive and 1221 Evergreen Point Road, both of which were heavily wooded and both of which were able to remove a large number of trees as a result. It is staff’s opinion that putting in place priorities for areas of retention should help curb the clear-cut complaints that are received. However, if after five or so more years this does not create the intended result, then the city should perhaps consider either varying tree retention requirements based on lot size or existing on-site canopy.

In analyzing six approved tree permits, raising the credit for trees that are 36” or larger to 1.25 credits did not seem to have the impact that was hypothesized at the March meeting. Permits where larger trees had been removed would not have been hindered by this additional .25 tree credit value. It’s possible that a change like that might encourage someone to save one or two additional trees, but ultimately the impact would be minimal. On average, increasing the tree density multiplier from .35 to .4 (which was voted unanimously to recommend in March) will have the result of requiring an additional tree. Reducing the tree credit values by .25 seems to result in more trees either being saved or requiring supplemental plantings more often.

Reducing the DBH of what qualifies as a legacy would require those trees to follow the legacy tree protection measures (MMC 20.52.120) which includes the replacement section. Large lots would be able to accommodate at least some of the replanting that is required more often than small lots.