



**MONTROSE  
PLANNING AND ZONING COMMISSION MEETING  
AGENDA**

**Wednesday, October 12, 2022  
7:00 PM**

**Montrose Community Center  
200 Center Avenue South  
Montrose, Minnesota 55363**

1. Call to Order
2. Roll Call
3. Pledge of Allegiance
4. Approval of Agenda
5. Approval of Minutes
  - A. September 14, 2022 Planning and Zoning Commission Meeting Minutes
6. Public Hearing
  - A. To Consider a Zoning Code Amendment to Chapter 1020-4: Required Landscaping as it relates to allowed tree species, and to Consider an Amendment to the Subdivision Ordinance Chapter 1107.14: Tree Inventory, Preservation and Replacement, and any other related sections addressing tree planting and replacement
7. Old Business
8. New Business
  - A. Updates from City Planner
9. Next Meeting
  - A. Wednesday, November 9, 2022 to be held at the Montrose Community Center – 7:00 p.m.
10. Adjournment

\* \* Please note that a quorum of the City Council may be present at the Planning and Zoning Commission Meeting. \* \*

City of Montrose  
Planning and Zoning Commission Meeting  
Montrose Community Center  
200 Center Avenue South  
Wednesday, September 14, 2022  
7:00 P.M.

## **1. CALL TO ORDER**

Pursuant to call and notice the Montrose Planning and Zoning Commission met in Regular Session on Wednesday, September 14, 2022 at 7:00pm.

Planning and Zoning Commission Chair, Mr. Charles Smallwood, called the meeting to order at 7:00 p.m.

## **2. ROLL CALL**

Present:      Commissioner Charles Smallwood  
                  Commissioner Catherine Neiberger  
                  Commissioner Sylvia Henry  
                  Commissioner Roger Fraumann  
                  Commissioner Shawn Cuff  
                  City Council Liaison Sam Solarz

Staff Present: Ms. Jessica Bonniwell, City Administrator  
                  Mr. Stephen Grittman, City Planner

## **3. PLEDGE OF ALLEGIENCE**

The Pledge of Allegiance was taken.

## **4. APPROVAL OF THE AGENDA**

**Commissioner Henry motioned to approve the September 14, 2022 Planning and Zoning Meeting Agenda as presented. Commissioner Fraumann seconded the motion. Motion carried 5-0.**

## **5. APPROVAL OF THE MINUTES**

A. August 10, 2022 Planning and Zoning Commission Meeting Minutes

**Commissioner Henry motioned to approve the August 10, 2022 Planning and Zoning Commission Meeting Minutes. Commissioner Cuff seconded the motion. Motion carried 5-0.**

## **6. OLD BUSINESS**

A. Creekside Hollow Preliminary Plat Update

Ms. Bonniwell stated that she wanted to give the Planning Commission an update that the developers for Creekside Hollow have requested to wait until the October Council Meeting to attempt to gain preliminary plat approval from Council after they make some changes based on the comments and

requirements from the planner, engineers, planning commission and staff.

## 7. NEW BUSINESS

### A. Discussion on Tree Preservation Ordinance

Mr. Grittman went through his report regarding the Tree Preservation Subdivision Ordinance as follows:

Mr. Grittman stated that the discussion this evening relates to the impact of the clauses on development (usually subdivisions) and how the code operates. Applying the code to new development, a property owner is permitted to remove up to 50% of the trees within a development area, as well as any dead or dying trees, to allow for grading and construction of streets, building pads, and stormwater or other utilities. When the plan results in more than 50% removal, the replacement requirements kick in – at a rate of 1.5 caliper inches of tree per every 1 inch removed.

Mr. Grittman continued that the issue with this formulation is that in a relatively mature woodland, most trees are well over 6 inches, and often much more. So, removal of a 24-caliper inch maple tree requires 36 caliper inches of replacement. But when replacing trees, the typical planting size is a 2.5 caliper inch tree. As a result, a subdivider is required to plant 15 trees to replace the one lost. A fully mature tree crown may cover more than 2,000 square feet of land area (in mature woodlands, it is almost certainly less as trees are more crowded). But new planting should be done to maintain healthy spacing, which means those 15 trees will cover an acre of land.

Mr. Grittman continued that the math does not help developers eliminate tree loss, as the value of an extra lot is more critical than the cost of replanting – this is because the loss of a couple of lots does not lessen the infrastructure cost of developing the land. The same amount of streets and utilities will still need to be built, they would just serve fewer parcels. The same amount of grading has to occur, again, to be spread over fewer parcels. As such, loss of a lot or two (to save trees) is a direct hit to the economics of the revenue side of a development project.

Mr. Grittman stated that for additional background, two recent subdivisions have been reviewed in areas of extensive tree cover that have resulted in significant tree replacement requirements. Northridge 6<sup>th</sup> Addition, a subdivision of 27 lots, had a tree replacement requirement of more than 2,000 caliper inches of trees, a calculation that would require more than 800 new trees to be planted. While the subdivision covered about 10 acres, a planting of 800 new trees would typically cover an area of more than 50 acres when properly planted. This is even though the subdivider was preserving approximately 500 caliper inches of existing trees on the site.

Mr. Grittman continued that in Creekside Hollow – a subdivision still in process of approval – the developers have a 40-acre parcel, of which about 30 acres is actually under development. In this plat, more than 1,700 trees would be the required replacement – requiring more than 100 acres of land to plant replacement trees.

Mr. Grittman stated that both aforementioned projects can (and should) be able to modify their grading plans to save a few more trees on site, and thus minimize the resulting replacement. However, the density of current woodland cover on those parcels makes the replacement requirement completely impractical, meaning that there is likely to be a punitive replacement – either of cash or off-site tree planting as provided for in the Subdivision Ordinance below.

#### **1020-6: Tree Preservation (Zoning Ordinance)**

Prior to the issuance of building permits for all new and/or expanded multiple-family residential, commercial, industrial, and institutional uses, a tree preservation plan shall be submitted. The plan and its implementation shall be in accordance with the requirements as outlined in the Subdivision Ordinance and shall be subject to the review and approval of the City Engineer and Zoning Administrator. The City may exempt an applicant from the submission of a tree preservation plan upon demonstration by the applicant that such a plan is not considered relevant to the site in question.

#### **1107-14 F. Replacement (Subdivision Ordinance)**

**1. Replacement Rate.** Planned, unplanned and unauthorized tree removal shall be replaced on a caliper inch per caliper inch basis in accordance with the following rates:

A) Planned Removal Authorized by the City – Trees planned for removal beyond the allowed fifty (50%) percent shall be subject to a required replacement as defined by this section. For every tree planned to be lost beyond the allowed fifty (50%) percent, cumulative replacement shall be required at a rate of one and one-half (1 ½) caliper inches for every one (1) caliper inch of tree loss.

B) Unplanned Removal Authorized by the City – In the event a tree tagged for preservation is identified for removal in conjunction with a permitted activity, cumulative replacement shall be one and one-half (1 ½) caliper inches for every one (1) caliper inch of tree loss. The tree inventory shall be updated to reflect the change.

C) Unauthorized Removal – In the event a tree identified for preservation is removed without authorization, cumulative replacement shall be two (2) caliper inches for every one (1) caliper inch of tree loss. The tree inventory shall be updated to reflect the change.

#### **1107-14 F. Replacement (Subdivision Ordinance)**

**3. Mitigation Alternatives.** In the event removal limits are exceeded and required replacement cannot occur on-site, the subdivider may mitigate the tree loss via one (1) of the following alternatives as determined by the city:

A) Cash Payment. The subdivider may mitigate the tree loss via cash payment to the city. Such payment shall equal the product of the total required caliper inches to be replaced multiplied by the fee per diameter inch as set forth by the City Fee Schedule. The cash payment shall be utilized for city forestry projects as determined by the city.

B) Off-Site Planting. The subdivider may plant replacement trees upon either property located within the city which is either under the control of the subdivider or owned by the City of Montrose.

There are alternative models for tree replacement if the Planning Commission and City Council believe changes are appropriate. These alternatives include:

- Require replacement based on tree crown cover removed. This approach requires – rather than an individual tree survey – a calculation of the existing tree crown cover removed from a project area, and a replacement of the crown cover with an appropriate number of trees to be planted in the subdivision. Some ordinances in this respect require planting of larger trees to grow and replace the lost crown more quickly.

- Require replacement per the current formulas, but cap the total amount of replacement at a fixed number of trees per acre of disturbed land. This approach uses the same process as the current code does, but suggests a maximum replanting requirement, such as 60 caliper inches of replanting per acre of disturbed land. In this model, a development that loses trees to grading and/or building areas would plant an additional 6-10 trees per lot – a feasible planting plan for most lots in an attempt to reforest the area under development.
- Keep the process currently in place, but recast the replacement requirement to number of trees being removed, rather than calculating the caliper inches lost. In this method, developers replace tree for tree, although obviously, replacement trees will be much smaller than those being removed.

Mr. Grittman stated a final consideration for the Planning Commission discussion would be to increase the replanting size from 2.5 caliper inches to a larger size, including the possibility that a percentage of replacement would be required to be in tree-spaded specimens for more immediate landscape impact.

Mr. Grittman continued that there may be other aspects of the ordinance that would be of interest to the Commission for discussion, such as tree species allowed to be planted for a landscape plan. Mr. Grittman stated that the commission will be prepared to have that discussion, with any changes to be scheduled for a public hearing at a subsequent meeting.

Mr. Grittman asked the commissioners if they had any questions or comments regarding his report. Commission Chair Smallwood stated that one of the options includes adding “quickly growing trees” to the new development, but that this might not always be a good option as they will quickly grow tall and then fall over and not fully develop into a mature tree. Commission Member Neiberger brought up the issue of undesirable trees such as Elm and Ash because of diseases and infestation risks. Mr. Grittman stated that there are several trees they would not allow or recommend to be planted based on those types of factors, but many trees have at least some type of issue including tree root issues, diseases, infestations, growth issues, etc. Mr. Grittman stated that many city codes have protections of certain trees as well as regulations against certain trees.

Commissioner Fraumann stated that he believes the current ordinance allows developers to keep some trees that might be considered weed trees or undesirable trees. Commissioner Fraumann also brought some internet links forward and led the discussion to the difference in tree quality versus quantity. The links Commissioner Fraumann brought forward were as follows: National Tree Benefit Calculator ([www.arborday.org/calculator](http://www.arborday.org/calculator)) a site to rank particular tree varieties by benefit; Tree Growth Rate ([www.arborday.org/trees/treeguide/growth](http://www.arborday.org/trees/treeguide/growth)) which breaks trees down to faster growing trees versus slower growing trees; Best trees for sidewalks and tree grates ([www.reliance-foundry.com/blog/best-trees-for-streets-and-tree-grates](http://www.reliance-foundry.com/blog/best-trees-for-streets-and-tree-grates)) which breaks trees down by their root systems and which trees would be more or less damaging to surrounding infrastructure; and the Tree Value Calculator ([www.treeplantation.com/tree-value-calculator.html](http://www.treeplantation.com/tree-value-calculator.html)) which Commission Fraumann stated could be used to determine a value of trees, but might lead to “cherry picking” lumber or specific trees in an area. Commissioner Fraumann stated these online tools may be useful to look at for future discussion at the public hearing and to help determine what types of trees to allow in a landscape plan. Brief discussion was had regarding these tools and if they may be helpful for the commission members to take a look at in order to help amend the current ordinance. Mr. Grittman stated that the commission should probably take a look at the list of tree species allowed by ordinance for a landscape plan at the same time they are reviewing the tree replacement subdivision ordinance. Mr. Grittman stated that any diseased, damaged or undesirable trees at risk for both of those are not counted toward the number of trees removed, those undesirable trees are allowed to be taken down with no penalty.

Mr. Grittman asked the commission members which option they would favor out of the three proposed, and stated many cities are moving toward the crown or canopy area because it is easier and does not require a complete tree inventory or measuring caliper inches. The commissioners discussed the differences between the options and how the ordinance currently stands. Mr. Grittman stated the trend is that cities are moving towards the crown cover method as developers can plot the crown cover and their software will tell them exactly how many trees to plant in order to replace that crown cover.

Commissioner Neiberger asked how the landscape plans and requirements are monitored and if the city monitors the landscape requirements. Mr. Grittman stated that the landscape plan is reviewed during the plat process and then monitored for completion during construction.

Mr. Grittman stated that he is looking for direction from the planning commission on whether or not they would like to continue the discussion on tree preservation with a proposed ordinance amendment and public hearing. Commissioner Cuff stated that he likes the crown cover method with a stipulation on which types of trees can be planted. The Commissioners all agreed that the ordinance needs to be changed and agreed they liked the crown cover method, but may want to see some options side-by-side to compare how the amended ordinance would appear. Commissioner Fraumann stated he liked the crown cover option as well and would like to look at the trees that would be the most beneficial and most likely to survive and thrive. Mr. Grittman stated that it can be a complicated issue to determine which trees should be planted in what areas because soil quality can vary so much from one place to another, even within different parts of Montrose. Mr. Grittman stated he has a plan on how to present the information to the planning commission in October for a public hearing and will incorporate updating the tree species list as well as updating the tree replacement requirement either with a cap or a different method.

#### B. Updates from City Planner

Mr. Grittman stated that city staff had a concept meeting for a very large development with hundreds of houses and acres to the south of Montrose. Mr. Grittman stated that the developer is in the early stages of putting a plat plan together and one of the major issues that staff and the developer will have to work together on if the plat is approved is the waste water treatment plant is nearly at capacity. Mr. Grittman stated that there is currently a facility study that is going on to update the waste water plant, but that will take some time to get the plant fully updated and the city will have to be careful regarding a phasing plan for this large of a development in order to ensure the city is able to serve the development with sanitary sewer service. Mr. Grittman stated that what will likely happen is that staff will have to measure actual flow to the waste water facility as estimates for flow will tend to be a bit high.

#### 8. NEXT MEETING

A. Wednesday, October 12, 2022 to be held at the Montrose Community Center – 7:00 p.m.

#### 9. ADJOURNMENT

**Commissioner Henry motioned to adjourn the meeting at 8:08 p.m. Commissioner Fraumann seconded the motion. Motion carried 5-0**

ATTEST:

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Charles Smallwood  
Planning and Zoning Chair  
City of Montrose

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Jessica Bonniwell  
City Administrator  
City of Montrose



# NORTHWEST ASSOCIATED CONSULTANTS, INC.

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## MEMORANDUM

TO: Montrose Planning Commission  
FROM: Stephen Grittman  
DATE: October 6, 2022  
MEETING DATE: October 12, 2022  
RE: Montrose – Tree Replacement Regulations  
FILE NO: 273.02

At the September Planning Commission meeting, the Commission discussed a variety of topics related to the current tree preservation standards of the City's Subdivision Ordinance. It was noted that the City's tree preservation and replacement requirements are particularly difficult to comply with, especially in areas of dense woodland. The proposed changes, identified in the attached table-form ordinance amendment, propose to modify the current practice of measuring all "caliper inches" of trees (now more often referred to as "diameter at breast height" (DBH), defined as 54 inches above natural grade), replacing that standard with a per-foot measurement of existing tree crown cover, and requiring one tree per 2,000 square feet of excess removal.

The ordinance continues the practice of exempting 50% of the tree removal in a subdivision due to the requirements of street and utility construction, building pad grading, and stormwater/grading requirements. Beyond that threshold, the replacement requirements would kick in. For each 2,000 square feet of tree crown removed beyond 50% on the plan approved as a part of the subdivision or development permit review, the subdivider would be required to plant one replacement tree of at least 3" in DBH – increased from the current 2-1/2 inch size.

The 2,000 square foot area is determined to be an average coverage of a modestly mature shade tree. Planting more than this would result in an unhealthy woodland, but it is also designed to allow the eventual reforestation of the site as trees grow to full maturity.

The proposed ordinance sets up a process for measuring the crown canopy (based on aerial photos in the past five years), and then requires the applicant to prepare a removal plan and replacement plan as a part of that review process. If an applicant removes more trees than permitted as a part of the plan, the requirement would be for replacement at a similar rate, but with trees that are at least 6" in DBH, with a concurrent requirement for tree space installation. The options for replacement planting in public spaces, or paying a fee for excess planned removal is retained in the proposed code.

The material further amends a portion of the current landscape section of the zoning ordinance, replacing the current tree planting list (which is outdated) with reference to the American Nursery Stock standards, and the DNR's invasives list. Certain trees are then added to the prohibited category based on common objectionable traits (usually soft wood, regular branch breakage, and other problems). The materials also explicitly exempt these undesirable species from the allowed removal list, such that those species, and otherwise dead or diseased trees, are not necessarily calculated as a part of the crown area.

There are a variety of other related changes to ensure internal consistency with the intent of the regulations. The material has been presented in a table format, with the section reference, the existing text, the re-lined text as proposed, and explanatory comments and notes in the last column.

The Planning Commission's meeting will include a public hearing on the material and the hearing has been noticed. With comment, the Commission has the following optional actions:

1. Recommend that the Council adopt the ordinance amendments, with changes as recommended by the Commission and/or staff.
2. Recommend that the Council not adopt these changes, and direct staff to follow another approach to tree preservation.
3. Recommend that the item be tabled and direct staff to research additional materials for Commission consideration.

Final Note. Commission members offered a separate option for considering tree preservation based on a "Tree Benefit Calculator" that would factor in different aspects of tree growth and forestation. These benefits include livelihood, longevity, wildlife habitat, growth rate, and other factors. This approach is an intriguing concept. However, when researching options for integrating this approach into ordinance form and local process, we were not able to find a format that would avoid an overly complex process for review. The current proposal actually includes a short form of this process, by identifying certain trees as acceptable, and others as not.

However, adding additional criteria seemed to have the effect of multiplying both the analysis and review process for the developer and the city. Our concern lay primarily with the ability of the city to reasonable implement a system of this sort. As the current system is already complex, it was our approach to work toward more simplicity. As such, we have proposed the attached material in the interest of getting the most benefit, while minimizing expense and complexity that would have the effect of actually reducing the effectiveness of the Code.

If the Commission would like to investigate this approach more thoroughly, we can do so at an upcoming meeting after additional research.

Section Reference	Existing Language	Proposed Red-lined Language	Comments and Notes
<b>1020- 6: TREE PRESERVATION</b> (Zoning Ord.)	<p>Prior to the issuance of building permits for all new and/or expanded multiple-family residential, commercial, industrial, and institutional uses, a tree preservation plan shall be submitted. The plan and its implementation shall be in accordance with the requirements as outlined in the Subdivision Ordinance and shall be subject to the review and approval of the City Engineer and Zoning Administrator. The City may exempt an applicant from the submission of a tree preservation plan upon demonstration by the applicant that such a plan is not considered relevant to the site in question.</p>	<p>The Zoning Ordinance requires the Tree Preservation process and standards to apply to Zoning actions (such as at building permit, or during the processing of a Zoning Permit such as a Conditional Use Permit, Variance, PUD, or other).</p>	
<b>1107.14: TREE INVENTORY, PRESERVATION AND REPLACEMENT:</b> (Subdivision Ordinance)	<p><b>1107.14: TREE INVENTORY, PRESERVATION AND REPLACEMENT:</b> The following requirements for protecting significant trees, as defined in Section 1101.02 of this Ordinance, shall be imposed upon all new subdivisions.</p> <p><b>A. Tree Protection.</b> Subdividers shall protect a minimum of fifty (50) percent of the total inches of existing significant trees on the property. If two (2) or more trees are preserved on any lot in the front yard, the landscape plan requirements of two (2) two and one half (2 ½) caliper inch trees is waived for that specific lot.</p>	<p><b>A. Tree Protection.</b> <u>For any Subdivision of four (4) or more lots, subdividers shall protect a minimum of fifty (50) percent of the existing tree crown cover total inches of existing significant trees on the property. Tree crown cover shall be measured from the most extensive covering based on either certificate of survey or aerial photos taken within the past 5 years, whichever shows the</u></p>	<p>This section is modified to specify that we are applying these requirements to plats of reasonably significant size. A small property owner who is doing a minor lot split would not be subject to these requirements, which follows likely current practice, even though technically, the code would apply to any subdivision as now written.</p>

		<p><u>greater cover. If two (2) or more trees are preserved on any lot in the front yard, the landscape plan requirements of two (2) two and one half (2 ½) caliper inch trees is waived for that specific lot.</u> As described in this Section, the remaining crown cover may be thinned to remove dead, diseased, or dying trees, trees which are invasive or undesirable as identified by the Minnesota Department of Natural Resources or the City of Montrose.</p>	
	<b>B. Tree Inventory/Preservation Plan</b>	<p><b>B. Tree Inventory/Preservation Plan.</b> All subdividers shall submit a tree inventory/preservation plan for review and approval as part of the development process. All tree plans shall be prepared by a licensed land surveyor and a forester or a landscape architect and include the following:</p> <ol style="list-style-type: none"> <li>1. The location of all existing significant trees on the property. Each tree shall be identified by a unique identification number. <i><u>by a unique identification number. The extent of the tree crown cover, pre-development, based on the methods identified in Section 1107.14. A.</u></i></li> <li>2. The significant trees proposed to be protected as part of the development. Significant trees intended for removal shall be clearly distinguishable from those intended for preservation. Proposed lot lines, building pads, driveways, streets, easements, and any areas in which tree disruption is anticipated shall be shown.</li> <li>3. All required plantings, including:           <ol style="list-style-type: none"> <li>a. All trees for landscaping, screening, or other requirements. Identify areas where existing trees are being proposed to meet requirements, and</li> <li>b. If the development intends to remove greater than fifty (50) percent of the existing</li> </ol> </li> </ol>	<p>This section converts the submission requirement from an individual tree inventory to an analysis of the crown cover. The submitter must identify the greatest extent of crown cover from either survey data or aerial photo data from the past five years.</p> <p>The purpose of the five-year span is to avoid cases where a property owner may intentionally remove tree cover just prior to then submitting a subdivision request. The five year period should cover most circumstances, but avoid long past removals that occurred for farming or other purposes.</p> <p>The text retains the 50% removal allowance, which is an inevitable consequence of any development activity due to street construction, building pad preparation, and necessary grading to manage stormwater. Beyond the 50% threshold, the replacement requirements kick in, just as with the current ordinance standards. The change is to how we measure and calculate replacement requirements.</p> <p>a. All trees for landscaping, screening, or other requirements. Identify areas where existing trees are being proposed to meet requirements, and</p> <p>b. If the development intends to remove greater than fifty (50) percent of the existing</p>

<p>significant trees, the location and size of replacement trees.<sup>3</sup></p> <p>4. The final tree design of all lots showing the significant trees intended for preservation and any required plantings.</p>	<p>5. A matrix listing the unique identification number for the significant tree, the species or common name, the proposed lot and block on which the tree resides, the size in diameter inches, and an indicator as to whether the tree is intended for removal or preservation. The matrix shall be sorted by lot and block number and conclude with a tabulation of the following:</p> <ul style="list-style-type: none"> <li>a. Total number and caliper inches of significant trees on site.</li> <li>b. Total number and caliper inches of significant trees proposed for removal.</li> <li>c. Total number and caliper inches of significant trees proposed for preservation.</li> <li>d. Calculation of the percentage proposed for removal.</li> <li>e. If the percentage for removal exceeds fifty (50) percent, the number of caliper inches which exceed the allowed removal.</li> </ul>	<p>b. If the development intends to remove greater than fifty (50) percent of the existing <del>significant trees</del> <u>tree crown cover</u>, the location and size of replacement trees.<sup>3</sup></p> <p>4. The final tree design of all lots showing the <del>significant trees</del> <u>tree covers</u> intended for preservation and any required plantings.</p> <p>5. A matrix listing the unique identification number for the significant tree, the species or common name, the proposed lot and block on which the tree resides, the size in diameter inches, and an indicator as to whether the tree is intended for removal or preservation. The matrix shall be sorted by lot and block number and conclude with a tabulation of the following:—A plan showing the following:</p> <ul style="list-style-type: none"> <li>a. Total <del>number-and-caliper-inches-of</del> <u>significant-tree</u> crown cover on site <u>by square feet</u>.</li> <li>b. Total <del>number-and-caliper-inches-of</del> <u>significant-tree</u> crown cover proposed for removal.</li> <li>c. Total <del>number-and-caliper-inches-of</del> <u>significant-trees-tree</u> crown cover proposed for preservation.</li> <li>d. Calculation of the percentage proposed for removal.</li> <li>e. If the percentage for removal exceeds fifty (50) percent, the <del>number-of</del><u>caliper inches-area of</u> <u>tree crown cover</u> which exceeds <u>s</u> the allowed removal.</li> </ul>
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	<p><b>C. Tree Preservation Plan Updates.</b> Tree Preservation Plans may need to be updated throughout the construction of developments due to changes in the grading plans and other construction related events. Additionally, a finalized plan shall be submitted by the subdivider upon completion of a development to verify all requirements have been met. Tree Preservation Plan updates shall be subject to the following requirements:</p> <ol style="list-style-type: none"> <li>1. Updated inventories shall require that all significant trees on the site are examined by a forestry specialist, and that all impacted trees are identified. Impacted trees shall be identified as removed on the updated inventory.</li> <li>2. Updated inventories shall be subject to the same requirements and submitted in the same format as the original inventory called for by this section.</li> <li>3. For lots that have obtained a certificate of occupancy, the updated inventory shall reflect the trees on the lots as identified on a final tree survey or other approved method.</li> <li>4. If an updated inventory indicates that actual removal will exceed the planned removal as approved with the development, the subdivider shall be required to provide additional replacement trees as outlined by this section.</li> <li>5. If the revised inventory indicates fewer trees have been removed than planned, the subdivider shall receive a credit for the</li> </ol>	<p><b>C. Tree Preservation Plan Updates.</b> Tree Preservation Plans may need to be updated throughout the construction of developments due to changes in the grading plans and other construction related events. Additionally, a finalized plan shall be submitted by the subdivider upon completion of a development to verify all requirements have been met. Tree Preservation Plan updates shall be <u>provided as required by the City Administrator or representative thereof.. subject to the following requirements:</u></p> <p><u>1. Updated inventories shall require that all significant trees on the site are examined by a forestry specialist, and that all impacted trees are identified. Impacted trees shall be identified as removed on the updated inventory.</u></p> <p><u>2. Updated inventories shall be subject to the same requirements and submitted in the same format as the original inventory called for by this section.</u></p> <p><u>3. For lots that have obtained a certificate of occupancy, the updated inventory shall reflect the trees on the lots as identified on a final tree survey or other approved method.</u></p> <p><u>4. If an updated inventory indicates that actual removal will exceed the planned removal as approved with the development, the subdivider shall be required to provide additional replacement trees as outlined by this section.</u></p>	This section is mostly deleted, as the process is overly detailed (and thus, rarely followed). Instead, the language would specify that updates to the tree preservation process would occur on an as-needed basis determined by the City Administrator (and most likely, by the City's inspector charged with monitoring development construction).
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	<p>additional inches preserved. Said credit may only be used towards planned future removal of trees. Under no circumstances shall this credit be used to eliminate required plantings as part of the development, nor can said credits be used to avoid existing obligations to ongoing or completed construction.</p> <p><b>5.-If the revised inventory indicates fewer trees have been removed than planned, the subdivider shall receive a credit for the additional inches preserved. Said credit may only be used towards planned future removal of trees. Under no circumstances shall this credit be used to eliminate required plantings as part of the development, nor can said credits be used to avoid existing obligations to ongoing or completed construction.</b></p>	No change	
<b>D. Protection During Development.</b>	<p><b>D. Protection During Development.</b> The subdivider shall be responsible for all trees on a site until a certificate of occupancy is granted and for trees on the remainder of the property until all improvements are accepted. A tree protection plan shall be provided, as described below:</p> <ol style="list-style-type: none"> <li>1. Installation of snow fencing or polyethylene laminar safety netting at the drip line or critical root zones of groups of trees to be saved.</li> <li>2. Installation of signage at all tree protection areas that instruct workers to stay out.</li> <li>3. Installation of erosion control measures.</li> <li>4. Tree protection measures shall be kept in place and in good condition until all grading and construction activity has ceased.</li> <li>5. Prevention of soil chemistry change due to concrete wash out and leakage or spillage of toxic materials such as fuels or paints.</li> </ol>		
<b>E. Protection Timeline.</b>	<p><b>E. Protection Timeline.</b> Trees identified on the tree preservation plan shall be protected</p>	No change.	

	<p>throughout the development and construction process. The City's enforcement of the tree preservation plan shall cease upon the issuance of a certificate of occupancy.</p>	<p><b>F. Replacement Rate.</b></p> <p><b>1. Replacement Rate.</b> Planned, unplanned and unauthorized tree removal shall be replaced on a caliper inch per caliper inch basis in accordance with the following rates:</p> <p>a. Planned Removal Authorized by City. Trees planned for removal beyond the allowed fifty (50) percent shall be subject to a required replacement as defined by this section. For every tree planned to be lost beyond the allowed fifty (50) percent, cumulative replacement shall be required at a rate of one and one-half (<math>1\frac{1}{2}</math>) caliper inches for every one (1) caliper inch of tree loss.</p> <p>b. Unplanned Removal Authorized by City. In the event a tree tagged for preservation is identified for removal in conjunction with a permitted activity, cumulative replacement shall be one and one half (<math>1\frac{1}{2}</math>) caliper inches for every one (1) caliper inch of tree loss. The tree inventory shall be updated to reflect the change.</p> <p><b>1. Replacement Rate.</b> Planned, unplanned and unauthorized tree removal shall be replaced on <del>a caliper inch per caliper inch basis in accordance with the following rates:</del></p> <p>a. Planned Removal Authorized by City. Trees planned for removal beyond the allowed fifty (50) percent shall be subject to a required replacement as defined by this section. For every <del>tree-2,000 square feet of crown cover, or part thereof,</del> planned to be lost beyond the allowed fifty (50) percent, cumulative replacement shall be required at a rate of <del>one-and-one-half-(1½)caliper inches for every one (1) caliper inch of tree loss one newly planted tree of no less than three (3) inches of diameter at breast height (DBH).</del></p> <p>b. Unplanned Removal Authorized by City. In the event <del>a tree-tagged tree crown cover identified</del> for preservation is identified for removal in conjunction with a permitted activity, cumulative replacement shall be <del>one-and-one-half-(1½)caliper inches for every one (1) caliper inch of tree loss one tree of no less than three (3) inches of diameter at breast height (DBH) for each 2,000 square feet of crown cover lost, or part thereof.</del> The tree inventory shall be updated to reflect the change.</p> <p>This section converts the replacement rate from "caliper inches" to square feet of existing tree crown cover. One tree (required to be at least 3" in size – increased from 2-1/2") is required to be planted for each 2,000 square feet of tree crown cover removed beyond the 50% threshold. 2,000 square feet would be the natural spread of a modestly mature deciduous tree in healthy growing conditions. A large solo specimen would eventually grow to cover more than this, but the intent is to replace an approximation of the forest canopy, thus, an expectation is that replacement trees will eventually merge their crown covers, but not as densely as a natural forest.</p>
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	c. Unauthorized Removal. In the event a tree identified for preservation is removed without authorization, cumulative replacement shall be <del>two-(2)-eighth-inches for every-one-(1)-eighth-inch-of-tree-less-one tree of no less than six (6) inches of diameter at breast height (DBH) for each 2,000 square feet of crown cover lost, or part thereof.</del> Such trees shall be planted from the <u>inventory of a state-licensed nursery via tree spade</u> . The tree inventory shall be updated to reflect the change.	This section is amended to require a 6" tree as replacement for unauthorized removal when a developer removes trees that were required to be preserved. The 6" tree would be required to be planted by tree spade. The intent is to create a more immediate impact in cases of unauthorized removal.
	<p><b>2. Replacement Type.</b> Replacement trees shall be subject to the following requirements:</p> <p>a. Deciduous Trees: Diameter not less than <del>two-and-one-half-(2½)three (3)</del> inches <u>of diameter at breast height</u> (measured at <del>thirty-six (36) fifty-four (54)</del> inches from <u>natural grade</u>).</p> <p>b. Coniferous Trees: Not less than six (6) feet in height.</p> <p>c. Replacement trees shall be from the list of species identified in Section 1120-4.B of the Montrose Zoning Ordinance (Required Landscaping).</p> <p>d. No more than twenty-five (25) percent of total replacement trees may be of the same species. No fewer than twenty-five (25) percent of total replacement trees may be of either coniferous or deciduous trees.</p> <p>e. Replacement trees shall not be placed on easements or street rights-of-way. Prior to planting replacement trees, the subdivider shall submit for City review and approval, the locations of the replacement trees.</p>	<p>As noted above, the required replacement trees are increased here from 2-1/2 inches to 3 inches, and evergreen replacement trees increased from 6 feet to 8 feet.</p> <p>These measures are two-fold: (1) encourage developers to preserve trees as a design principle, and (2) require replacement plantings that will make a more immediate impact on the landscape in cases where tree removal occurs.</p> <p><del>(6)eight (8)</del> feet in height.</p> <p>c. Replacement trees shall be from the list of species identified in Section 1120-4.B of the Montrose Zoning Ordinance (Required Landscaping).</p> <p>d. No more than twenty-five (25) percent of total replacement trees may be of the same species. No fewer than twenty-five (25) percent of total replacement trees may be of either coniferous or deciduous trees.</p> <p>e. Replacement trees shall not be placed on easements or street rights-of-way. Prior to planting replacement trees, the subdivider shall submit for City review and approval, the locations of the replacement trees.</p>

	shall submit for City review and approval, the locations of the replacement trees.	This section is modified to more directly refer to the City's fee schedule, and eliminate the language that could confuse the amount. Tree loss is defined as a part of the process – the fee schedule would create a required mitigation fee per square foot of crown loss, rather than per inch of tree size.
	<p><b>3. Mitigation Alternatives.</b> In the event removal limits are exceeded and required replacement cannot occur on-site, the subdivider may mitigate the tree loss via one (1) of the following alternatives as determined by the City:</p> <ul style="list-style-type: none"> <li>a. Cash Payment. The subdivider may mitigate the tree loss via cash payment to the City. Such payment shall equal the <del>product of the total required caliper inches to be replaced multiplied by the fee per diameter inch to be replaced</del> as set forth by the City fee schedule. The cash payment shall be utilized for City forestry projects as determined by the City.</li> <li>b. Off-Site Planting. The subdivider may plant replacement trees upon either property located within the City which is either under the control of the subdivider or owned by the City of Montrose.</li> </ul>	<p><b>3. Mitigation Alternatives.</b> In the event removal limits are exceeded and required replacement cannot occur on-site, the subdivider may mitigate the tree loss via one (1) of the following alternatives as determined by the City:</p> <ul style="list-style-type: none"> <li>a. Cash Payment. The subdivider may mitigate the tree loss via cash payment to the City. Such payment shall <del>equal the product of the total required caliper inches to be replaced multiplied by the fee per diameter inch to be replaced</del> as set forth by the City fee schedule. The cash payment shall be utilized for City forestry projects as determined by the City.</li> <li>b. Off-Site Planting. At the discretion of the City, the subdivider may plant replacement trees upon either property located within the City which is either under the control of the subdivider or owned by the City of Montrose.</li> </ul>
	<p><b>H. Prohibited Actions.</b></p> <ol style="list-style-type: none"> <li>1. No soil disturbance shall occur within the subdivision until the tree protection, preservation, replacement, and/or reforestation plan(s) are approved, financial securities have been submitted and development agreement approved, and tree protection measures are in place on site.<sup>8</sup></li> <li>2. Construction staging areas and areas for the storage of equipment and stockpiling of materials shall not be within tree protection areas.</li> </ol>	No changes to the Prohibited Actions section.

<p>3. Fill shall not be placed against tree trunks, under the drip line, or in critical root zones of trees to be saved.</p> <p>4. Pruning of oak trees shall not take place from April 1st through July 15th. If wounding of oak trees occurs, a non-toxic tree wound dressing shall be applied immediately. Excavators shall have a non-toxic tree wound dressing with them on the development site.</p>	<p>No changes to the Security section.</p>	
<p><b>I. Security for Tree Preservation and Replacement</b>. To ensure tree preservation and replacement efforts are successful, the following shall be required:</p>	<p><b>I. Security for Tree Preservation and Replacement</b>. To ensure tree preservation and replacement efforts are successful, the following shall be required:</p> <p>1. At the time of the development agreement, subdividers shall provide a financial security to the City to guarantee the protection of the significant trees intended for preservation through the development and construction process. The financial security shall be in an amount determined by the City Council and adopted by ordinance for each lot and outlet that has at least one (1) significant tree to be protected. This security may be returned upon completion of a tree inspection by the City prior to the issuance of a certificate of occupancy.</p> <p>2. Subdividers shall provide the City with a letter of credit, cash, or escrow, in favor of the City, in an amount of one hundred twenty-five (125) percent of the tree replacement/planting estimate.</p> <p>3. All replacement, reforestation, and other required plantings shall be planted during an ideal planting season for a particular species,</p>	

<p>unless otherwise authorized by the City. The subdivider shall submit a useable inventory of trees planted during an applicable planting season.</p> <p>4. All trees planted during a specified planting season shall be warranted through two complete growing seasons. The City shall inspect the trees listed in the subdivider's inventory from the previous year to ensure the health of the tree.</p> <p>5. As trees are declared healthy by the City upon inspection, the subdivider may request reductions to the security amount provided adequate funds remain equal to one hundred twenty-five (125) percent of the cost to complete remaining work.</p>	<p>1110.04: REQUIRED PRIVATE IMPROVEMENTS:</p> <p>A. As part of the final plat, the following private improvements shall be required where applicable to a new subdivision:</p>	<p><b>1110.04: REQUIRED PRIVATE IMPROVEMENTS:</b></p> <p>A. As part of the final plat, the following private improvements shall be required where applicable to a new subdivision:</p> <p>1. Where public sewer and water facilities are not available for extension into the proposed subdivision, the City may issue a permit allowing the use of individual water and sewer systems in accordance with City and State regulations, as may be amended. Where connection to the municipal sanitary sewer system is not feasible, the subdivider or the purchasers of individual lots shall install on-site sewage disposal facilities meeting the requirements of the City, County, Minnesota State Board of Health and the Minnesota Pollution Control Agency.</p>	
			<p><i>Adding a specific reference to the tree planting requirements for each lot, increasing the size to 3-inches-in-size, and specifying the requirements as being per unit, rather than per lot.</i></p>

	<p><u>2. Private Landscaping. For any single family or two-family parcel created under this Section, no fewer than two (2) new trees shall be planted per unit on each parcel. Said trees shall be no less than three (3) inches in diameter at breast height (DBH). For parcels created under this section for townhouses, multiple family residential, commercial, industrial, or institutional uses, the landscaping requirements shall be as listed in the Zoning Ordinance.</u></p> <p><b>NOTE:</b> These tree planting requirements are <u>IN ADDITION TO</u> any replacement tree planting required by the subdivision or development project.</p>	<p>This section replaces the plant list in the Landscaping section of the Zoning Ordinance with a better reference, the American Nursery Stock Standards, and prohibits planting of those trees on the DNR List of Invasive Species.</p> <p>The list also identifies those species that can be removed without penalty when doing a tree preservation plan, and which also can not be planted as a part of a required landscape plan.</p>																				
<b>1020-4: REQUIRED LANDSCAPING (Zoning Ordinance)</b>	<p>B. Design Standards and Criteria. All landscaping incorporated in the landscape plan shall conform to the following standards and criteria:</p> <p>1. Types Of New Trees: Trees suitable for complying with this Chapter shall include those specified below:</p> <table> <thead> <tr> <th>Botanical Name</th> <th>Common Name</th> </tr> </thead> <tbody> <tr> <td>Quercus (varieties)</td> <td>Oak</td> </tr> <tr> <td>Acer platanoides</td> <td>Norway Maple (and Schwedler, Varieties)</td> </tr> <tr> <td></td> <td>Emerald Queen, etc.)</td> </tr> <tr> <td>Acer saccharum</td> <td>Sugar Maple</td> </tr> <tr> <td>Celtis occidentalis</td> <td>Hackberry</td> </tr> <tr> <td>Betula (varieties)</td> <td>Birch</td> </tr> <tr> <td>Gleditsia triacanthos</td> <td>Honeylocust</td> </tr> <tr> <td></td> <td>(Imperial, Majestic, Skyline, Sunburst &amp; Thornless)</td> </tr> <tr> <td>Tilia cordata</td> <td>Little Leaf Linden and Varieties) Redmond, Greenspire, etc.</td> </tr> </tbody> </table>	Botanical Name	Common Name	Quercus (varieties)	Oak	Acer platanoides	Norway Maple (and Schwedler, Varieties)		Emerald Queen, etc.)	Acer saccharum	Sugar Maple	Celtis occidentalis	Hackberry	Betula (varieties)	Birch	Gleditsia triacanthos	Honeylocust		(Imperial, Majestic, Skyline, Sunburst & Thornless)	Tilia cordata	Little Leaf Linden and Varieties) Redmond, Greenspire, etc.	<p><u>1. 4. Types Of New Trees: Trees suitable for complying with this Chapter shall include those specified <u>below</u> <u>specified by the American Nursery Stock Standards as being suited for the local climate and soil conditions,</u> which are not listed as invasive according to the Minnesota Department of Natural Resources List of Invasive Plants, which are resistant to common disease and insect infestations, and which meet the intent of the landscaping and tree planting sections of the Zoning and Subdivision Ordinances.</u></p> <p><u>2. The following trees may be removed, thinned, or treated without penalty</u></p>
Botanical Name	Common Name																					
Quercus (varieties)	Oak																					
Acer platanoides	Norway Maple (and Schwedler, Varieties)																					
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	Tilia Americana Fraxinus Pennsylvanica Ginkgo biloba Gymnocladus dioicus	Basswood (American Linden) Green Ash (and Summit, Marshall's) Lanceolata (male Ginkgo Tree only) Kentucky Coffee Tree	<p>as they relate to tree preservation requirements, and such trees shall not be planted as a part of any required landscaping plan or tree replacement plan (exceptions may be made for varietals that have been developed specifically for disease and insect resistance at the discretion of the City):</p> <p>a. Boxelder (<u>Acer negundo</u>)  b. Elm Species (including Chinese, Siberian, American)  c. Cottonwood, Aspen and other Poplar species  d. Silver Maple (<u>Acer saccharinum</u>)  e. Black Willow (<u>Salix nigra</u>)  f. Green Ash species (<u>Fraxinus spp.</u>)</p>
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