

February 22, 2023

To: Eric Waggoner
Director, Lake County Planning, Building & Development Department

Krista Barkley Braun
Planning & Zoning Manager, Lake County Planning, Building & Development Department

From: Sarah Surroz
Director of Lake County Programs, Openlands

Re: Market Conditions and Amendments to Landscaping Sections of the
Lake County Unified Development Ordinance

Our market analysis indicates the nursery industry can accommodate these changes, and this will not present a financial hardship to developers.

Please consider the following information on market conditions as you shape amendments to the Unified Development Ordinance, Section 151.167, Landscaping. We applaud the preliminary work we have seen as it will strengthen Lake County's resilience to climate change, protect its valuable ecosystems, and support new developments that are aesthetically pleasing and financially sensible. We value Lake County's investments in trees and shrubs because they provide shade, absorb stormwater, sequester carbon, create oxygen, support wildlife, boost mental health, increase property values, and filter air pollution. This effort by Lake County staff and elected officials is particularly important and appreciated because Lake County supports the state's highest concentration of water resources, native remnant ecosystems, Illinois Nature Preserves, and threatened and endangered species. For these reasons, Lake County is a priority landscape for Openlands.

Specifically, we support amendment efforts underway to:

1. **Increase the diversity of tree and shrub species used.** We recommend each species represent no more than 20 percent of a project's plantings, no matter the project size.
2. **Increase the presence of species native to Illinois.** We recommend each project be comprised of 75 percent cultivars and 25 percent straight native species. Cultivars, by definition, include cultivated natives that are marketed as natives. Whether native or cultivated, we believe there should be no requirement for any plants to be locally grown.
3. **Improve the survival rates of new tree plantings by allowing the use of smaller sizes.** We recommend 1.5-inch caliper sizes be allowed for canopy and ornamental trees, and heights of 6-feet and 8-feet be allowed for ornamental and evergreen trees, respectively.
4. **Improve the survival rates and health of new plantings** by continuing to advance efforts that aid landscape architects and designers as they select species for the various growing conditions within each project, and that aid installation and maintenance teams as they plant, mulch, water, and prune trees and shrubs.

5. **Eliminate the use of invasive species in new plantings** by prohibiting the use of Callery pear (*Pyrus calleryana*), Norway maple (*Acer platanoides*), Amur maple (*Acer ginnala*), multiflora rose (*Rosa multiflora*), burning bush (*Euonymus alatus*), and barberry (*Berberis thunbergii*).

Does the nursery industry have the inventory needed to support such amendments?

Openlands' market analysis, though limited in scope, indicates the nursery industry can indeed accommodate these changes, and they will not present a financial hardship to developers. Multiple local and national sources state that the green industry has experienced significant market gains since 2020 and this trend is projected to remain upward for at least five years. A 2022 poll of 1,600 industry leaders nationwide suggests the pandemic and advances in technology are driving revenue growth while labor shortages present the largest barrier. Regions undergoing high rates of residential construction are seeing corresponding growth in green industry services, and lawn and garden remodeling projects are popular in many parts of the country, including Lake County, as people increasingly invest in private oases that feature tranquil outdoor spaces. These trends have indeed placed a high demand on the inventory of many nurseries, but the overall supply remains robust due, in part, to advances in technology and horticulture.

Amendments that allow for smaller sized trees will reduce costs for developers and allow inventory to come to market more quickly. In addition, greater collaboration is underway within the landscaping profession. For instance, the Illinois Landscape Contractors Association has expanded its scope in the past five years by absorbing outside organizations such as the Midwest Ecological Landscape Association, Landscape Design Association and, in 2023, the Illinois Green Industry Association. This unification within the industry streamlines communications and services in ways that advance collaboration.

Is the inventory of native species sufficient?

Our findings indicate inventory is sufficient, especially if our recommendation is accepted that would continue to allow developers to purchase from nurseries nationwide. At the February 2023 landscaping industry tradeshow for Illinois and Wisconsin, held in Schaumburg, 59 of the 256 exhibitors were growers. We queried each and then evaluated their availability lists. Overall, growers reported an increase in demand for native species, and many said they are increasing the number of native species in their inventory. Fifty-three of the growers currently offer at least one straight native species. Of those, 25 offer a significant number of straight native species and seven offer almost exclusively straight native species. Regarding trends, 30 reported an increase in demand for native species with 12 of those reporting the increase to be significant. Program presentations and additional queries of tradeshow participants revealed high interest in native species within the industry, echoing overall findings of our 2022-23 market analysis. As more requests for native species are received, the market responds.

Would an ordinance amendment result in higher costs to developers?

Though many factors contribute to the cost of plant procurement, including choice of species, developers could immediately realize two general financial benefits: 1) smaller trees cost less than larger trees, and 2) native species cost less than trademarked or patented cultivars (including nativars, each of which is trademarked or patented). However, operational and shipping costs would likely increase if a buyer needed to increase the number of nurseries used.

Scenario Testing

To test market cost and availability, Openlands applied the above-described amendment concepts to three representative planting plans recently approved by Lake County. In each scenario – small, medium, and large – with all project identifiers removed to protect anonymity, we analyzed the impact of the

amendment on the original pre-amendment lists, then substituted species and sizes as needed to meet the hypothetical post-amendment minimum requirements, and, lastly, obtained cost estimates from a variety of nurseries. Results are presented in the attached spreadsheet.

Results lead to our suggestion to consider that *Section E.2.e. Species Mix* could perhaps be modified to state, “No single plant species shall represent more than 20% of the total plantings.” This would achieve the intended goal of species diversity while removing the complexity of using various project sizes to determine percentages of species per plant type. It would also reduce the number of instances in which a landscape designer would be challenged to create an aesthetic plan that uses many different species once each. The Large Project scenario best represents this issue. On the attached spreadsheet, the alternative approach is presented as Option 2, showing that costs may increase or decrease depending on the nursery used.

Further Actions to Aid in Success of Lake County’s Landscaping Ordinance Goals

Openlands offers continued assistance to Lake County with the strengthening of resources that support ordinance goals. Several of these include:

- List of nurseries that offer native trees and shrubs (underway)
- Tool for designers and buyers that suggests native species substitutions for cultivars
- Various resources that empower installation and maintenance teams to plant and care for trees and shrubs using best practices

Thank you for consideration of this information and thank you again for all your work on behalf of this effort.

SMALL PROJECT - A 50-tree project with 9 or less canopy trees and no shrubs

PRE-AMENDMENT PLANTING LIST							
Symbol	Latin Name	Common Name	Size	Cost/Unit	Qty	Cost/Species	
Canopy Trees							
AFR	ACER X FREEMANNI 'AUTUMN BLAZE'	AUTUMN BLAZE FREEMAN	2.5" BB	\$ 275.00	4	\$ 275.00	
LIT	LIRIODENDRON TULIPIFERA	TULIP TREE	3" BB	1	1		
QBI	* QUERCUS BICOLOR	SWAMP WHITE OAK	3" BB	1	1		
QMA	* QUERCUS MACROCARPA	BUR OAK	3" BB	1	1		
Evergreen Trees							
JUV	* JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	8" BB	8	8		
PAS	PICEA ABIES	NORWAY SPRUCE	8" BB	7	7		
POM	PICEA OMORIKA	SERBIAN SPRUCE	8" BB	8	8		
PPU	PICEA PUNGENS	COLORADO SPRUCE	8" BB	7	7		
TSU	TSUGA CANADENSIS	CANADIAN HEMLOCK	8" BB	7	7		
Ornamental Trees							
AC	* AMELANCHIER CANADENSIS	SHADBLow SERVICEBERRY	6" BB	3	3		
MF	MALUS 'FLORIBUNDA'	JAPANESE CRABAPPLE	6" BB	3	3		
MP	MALUS 'PRAIRIFIRE'	PRAIRIE CRABAPPLE	6" BB	3	3		
* Native species							

COST SCENARIO - PRE-AMENDMENT							
NURSERY A							
Symbol	Latin Name	Common Name	Size	Cost/Unit	Qty	Cost/Species	
Canopy Trees							
AFR	ACER X FREEMANNI 'AUTUMN BLAZE'	AUTUMN BLAZE FREEMAN	2.5" BB	\$ 275.00	4	\$ 275.00	
LIT	LIRIODENDRON TULIPIFERA	TULIP TREE	3" BB	\$ 365.00	1	\$ 365.00	
QBI	* QUERCUS BICOLOR	SWAMP WHITE OAK	2.5" BB	\$ 320.00	1	\$ 320.00	
QMA	* QUERCUS MACROCARPA	BUR OAK	3" BB	\$ 405.00	1	\$ 405.00	
Evergreen Trees							
JUV	* JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	7" BB	\$ 240.00	8	\$ 1,920.00	
PAS	PICEA ABIES	NORWAY SPRUCE	8" BB	\$ 385.00	7	\$ 2,695.00	
POM	PICEA OMORIKA	SERBIAN SPRUCE	7" BB	\$ 295.00	8	\$ 2,360.00	
PPU	PICEA PUNGENS 'GLOBOSA'	COLORADO SPRUCE	8" BB	\$ 425.00	7	\$ 2,975.00	
TSU	TSUGA CANADENSIS	CANADIAN HEMLOCK	7" BB	\$ 475.00	7	\$ 3,325.00	
Ornamental Trees							
AC	* AMELANCHIER CANADENSIS	SHADBLow SERVICEBERRY	6" BB	\$ 200.00	3	\$ 600.00	
MF	MALUS 'FLORIBUNDA'	JAPANESE CRABAPPLE	1.5" BB	\$ 185.00	3	\$ 555.00	
MP	MALUS 'PRAIRIFIRE'	PRAIRIE CRABAPPLE	1.5" BB	\$ 140.00	3	\$ 420.00	
* Native species (13 native plants)							
						Subtotal	\$ 16,155.00
						8% Discount	\$ 1,292.00
						Total	\$ 14,863.00

NURSERY B							
Symbol	Latin Name	Common Name	Size	Cost/Unit	Qty	Cost/Species	
Canopy Trees							
AFR	ACER X FREEMANNI 'AUTUMN BLAZE'	AUTUMN BLAZE FREEMAN	2" BB	\$ 245.00	4	\$ 245.00	
LIT	LIRIODENDRON TULIPIFERA	TULIP TREE	15 GAL	\$ 145.25	1	\$ 145.25	
QBI	* QUERCUS BICOLOR	SWAMP WHITE OAK	3" BB	\$ 230.00	1	\$ 230.00	
QMA	* QUERCUS MACROCARPA	BUR OAK	3" BB	\$ 255.00	1	\$ 255.00	
Evergreen Trees							
JUV	* JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	6" BB	\$ 130.00	8	\$ 1,040.00	
PAS	PICEA ABIES	NORWAY SPRUCE	7" BB	\$ 210.00	7	\$ 1,470.00	
POM	PICEA OMORIKA	SERBIAN SPRUCE	7" BB	\$ 210.00	8	\$ 1,680.00	
PPU	PICEA PUNGENS 'DENSATA'	COLORADO SPRUCE	7" BB	\$ 140.00	7	\$ 980.00	
TSU	TSUGA CANADENSIS	CANADIAN HEMLOCK	10 GAL	\$ 100.00	7	\$ 700.00	
Ornamental Trees							
AC	* AMELANCHIER CANADENSIS	SHADBLow SERVICEBERRY	6" BB	\$ 130.00	3	\$ 390.00	
MF	MAGNOLIA STELLATA 'JANE'	MAGNOLIA JANE	10 GAL	\$ 140.00	3	\$ 420.00	
MP	MALUS 'PRAIRIFIRE'	PRAIRIE CRABAPPLE	15 GAL	\$ 104.50	3	\$ 313.50	
* Native species (13 native plants)							
						Subtotal	\$ 8,358.75

NURSERY C							
Symbol	Latin Name	Common Name	Size	Cost/Unit	Qty	Cost/Species	
Canopy Trees							
AFR	ACER X FREEMANNI 'JEFFERSON'	AUTUMN BLAZE FREEMAN	2" BB	\$ 199.00	1	\$ 199.00	
LIT	LIRIODENDRON TULIPIFERA	TULIP TREE	3" BB	\$ 250.00	1	\$ 250.00	
QBI	* QUERCUS BICOLOR	SWAMP WHITE OAK	3" BB	\$ 295.00	1	\$ 295.00	
QMA	* QUERCUS MACROCARPA	BUR OAK	3" BB	\$ 220.00	1	\$ 220.00	
Evergreen Trees							
JUV	* JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	8" BB	\$ 225.00	8	\$ 1,800.00	
PAS	PICEA ABIES	NORWAY SPRUCE	8" BB	\$ 365.00	7	\$ 2,555.00	
POM	PICEA OMORIKA	SERBIAN SPRUCE	8" BB	\$ 320.00	8	\$ 2,560.00	
PPU	PICEA PUNGENS	COLORADO SPRUCE	8" BB	\$ 320.00	7	\$ 2,240.00	
TSU	TSUGA CANADENSIS	CANADIAN HEMLOCK	7" BB	\$ 375.00	7	\$ 2,625.00	
Ornamental Trees							
AC	* AMELANCHIER CANADENSIS	SHADBLow SERVICEBERRY	6" BB	\$ 225.00	3	\$ 675.00	
MF	MALUS 'FLORIBUNDA'	JAPANESE CRABAPPLE	2"	\$ 130.00	3	\$ 390.00	
MP	MALUS 'PRAIRIFIRE'	PRAIRIE CRABAPPLE	6" BB	\$ 140.00	3	\$ 420.00	
* Native species (13 native plants)							
						Subtotal	\$ 14,229.00

NURSERY D							
Symbol	Latin Name	Common Name	Size	Cost/Unit	Qty	Cost/Species	
Canopy Trees							
AFR	ACER X FREEMANNI 'AUTUMN BLAZE'	AUTUMN BLAZE FREEMAN	3" BB	\$ 250.00	1	\$ 250.00	
LIT	LIRIODENDRON TULIPIFERA	TULIP TREE	3" BB	\$ 300.00	1	\$ 300.00	
QBI	* QUERCUS BICOLOR	SWAMP WHITE OAK	3" BB	\$ 330.00	1	\$ 330.00	
QMA	* QUERCUS MACROCARPA	BUR OAK	3" BB	\$ 250.00	1	\$ 250.00	
Evergreen Trees							
JUV	* JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	5.4" BB	\$ 190.00	8	\$ 1,520.00	
PAS	PICEA ABIES	NORWAY SPRUCE	8" BB	\$ 295.00	7	\$ 2,065.00	
POM	PICEA OMORIKA	SERBIAN SPRUCE	7.8" BB	\$ 320.00	8	\$ 2,560.00	
PPU	PICEA PUNGENS	COLORADO SPRUCE	5.4" BB	\$ 195.00	7	\$ 1,365.00	
TSU	TSUGA CANADENSIS	CANADIAN HEMLOCK	6.8" BB	\$ 245.00	7	\$ 1,715.00	
Ornamental Trees							
AC	* AMELANCHIER CANADENSIS	SHADBLow SERVICEBERRY	6" BB	\$ 195.00	3	\$ 585.00	
MF	MALUS 'FLORIBUNDA'	JAPANESE CRABAPPLE	6.8" BB	\$ 210.00	3	\$ 630.00	
MP	MALUS 'PRAIRIFIRE'	PRAIRIE CRABAPPLE	6.8" BB	\$ 210.00	3	\$ 630.00	
* Native species (13 native plants)							
						Subtotal	\$ 12,200.00

POST-AMENDMENT IMPACT - OPTION 1 - Diversity percentage based on project size							
DIVERSITY OF SPECIES REQUIREMENT							
No species shall represent more than 25% of total plantings for each 'plant type'							
Canopy Trees - 1							
No single species can be used more than 1 time (25 percent of 4 is 1)							
No change needed							
Evergreen Trees - 1							
No single species can be used more than 9 times (25 percent of 37 is 9.25)							
No change needed							
Ornamental Trees - 2							
No single species can be used more than 2 times (25 percent of 9 is 2.25)							
2 additional species are needed, with quantities adjusted.							
NATIVE SPECIES REQUIREMENT							
25 percent of all plants shall be native species.							
At least 13 plants must be native. 13 plants on the original list are native.							
To continue to meet the native requirement, 13 plants must remain native.							

COST SCENARIO - POST-AMENDMENT - OPTION 1							
NURSERY A							
Symbol	Latin Name	Common Name	Size	Cost/Unit	Qty	Cost/Species	
Canopy Trees							
AFR	ACER X FREEMANNI 'AUTUMN BLAZE'	AUTUMN BLAZE FREEMAN	1.5" BB	\$ 165.00	1	\$ 165.00	
LIT	LIRIODENDRON TULIPIFERA	TULIP TREE	1.5" BB	\$ 220.00	1	\$ 220.00	
QBI	* QUERCUS BICOLOR	SWAMP WHITE OAK	1.5" BB	\$ 205.00	1	\$ 205.00	
QMA	* QUERCUS MACROCARPA	BUR OAK	1.5" BB	\$ 205.00	1	\$ 205.00	
Evergreen Trees							
JUV	* JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	7" BB	\$ 240.00	8	\$ 1,920.00	
PAS	PICEA ABIES	NORWAY SPRUCE	8" BB	\$ 385.00	7	\$ 2,695.00	
POM	PICEA OMORIKA	SERBIAN SPRUCE	7" BB	\$ 295.00	8	\$ 2,360.00	
PPU	PICEA PUNGENS 'GLOBOSA'	COLORADO SPRUCE	8" BB	\$ 425.00	7	\$ 2,975.00	
TSU	TSUGA CANADENSIS	CANADIAN HEMLOCK	8" BB	\$ 475.00	7	\$ 3,325.00	
Ornamental Trees							
AC	* AMELANCHIER CANADENSIS	SHADBLow SERVICEBERRY	6" BB	\$ 200.00	2	\$ 400.00	
MF	MALUS 'FLORIBUNDA'	JAPANESE CRABAPPLE	1.5" BB	\$ 165.00	2	\$ 330.00	
MP	MALUS 'PRAIRIFIRE'	PRAIRIE CRABAPPLE	1.5" BB	\$ 140.00	2	\$ 280.00	
*	MAGNOLIA STELLATA 'ROYAL REDBUD'	ROYAL STAR MAGNOLIA	6" BB	\$ 270.00	2	\$ 540.00	
*	CERCIS CANADENSIS	REDBUD	6" BB	\$ 220.00	1	\$ 220.00	
* Native species (13 native plants)							
						Subtotal	\$ 15,840.00
						8% Discount	\$ 1,267.00
						Total	\$ 14,573.00

NURSERY B							
Symbol	Latin Name	Common Name	Size	Cost/Unit	Qty	Cost/Species	
Canopy Trees							
AFR	ACER X FREEMANNI 'AUTUMN BLAZE'	AUTUMN BLAZE FREEMAN	1.5" BB	\$ 157.50	1	\$ 157.50	
LIT	LIRIODENDRON TULIPIFERA	TULIP TREE	15 GAL	\$ 145.25	1	\$ 145.25	
QBI	* QUERCUS BICOLOR	SWAMP WHITE OAK	15 GAL	\$ 144.50	1	\$ 144.50	
QMA	* QUERCUS MACROCARPA	BUR OAK	15 GAL	\$ 154.50	1	\$ 154.50	
Evergreen Trees							
JUV	* JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	6" BB	\$ 130.00	8	\$ 1,040.00	
PAS	PICEA ABIES	NORWAY SPRUCE	7" BB	\$ 210.00	7	\$ 1,470.00	
POM	PICEA OMORIKA	SERBIAN SPRUCE	7" BB	\$ 210.00	8	\$ 1,680.00	
PPU	PICEA PUNGENS 'DENSATA'	COLORADO SPRUCE	7" BB	\$ 140.00	7	\$ 980.00	
TSU	TSUGA CANADENSIS	CANADIAN HEMLOCK	10 GAL	\$ 100.00	7	\$ 700.00	
Ornamental Trees							
AC	* AMELANCHIER CANADENSIS	SHADBLow SERVICEBERRY	6" BB	\$ 130.00	2	\$ 260.00	
MF	MAGNOLIA STELLATA 'JANE'	MAGNOLIA JANE	10 GAL	\$ 140.00	2	\$ 280.00	
MP	MALUS 'PRAIRIFIRE'	PRAIRIE CRABAPPLE	15 GAL	\$ 104.50	2	\$ 209.00	
*	CERCIS CANADENSIS	REDBUD	6" BB	\$ 140.00	2	\$ 280.00	
*	Ostrya virginiana	IRONWOOD	15 GAL	\$ 144.50	1	\$ 144.50	
* Native species (15 native plants)							
						Subtotal	\$ 8,135.25

NURSERY C							
Symbol	Latin Name	Common Name	Size	Cost/Unit	Qty	Cost/Species	
Canopy Trees							
AFR	ACER X FREEMANNI 'JEFFERSON'	AUTUMN BLAZE FREEMAN	2" BB	\$ 165.00	1	\$ 165.00	
LIT	LIRIODENDRON TULIPIFERA	TULIP TREE	2" BB	\$ 199.00	1	\$ 199.00	
QBI	* QUERCUS BICOLOR	SWAMP WHITE OAK	2" BB	\$ 169.00	1	\$ 169.00	
QMA	* QUERCUS MACROCARPA	BUR OAK	2" BB	\$ 195.00	1	\$ 195.00	
Evergreen Trees							
JUV	* JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	8" BB	\$ 225.00	8	\$ 1,800.00	
PAS	PICEA ABIES	NORWAY SPRUCE	8" BB	\$ 365.00	7	\$ 2,555.00	
POM	PICEA OMORIKA	SERBIAN SPRUCE	7" BB	\$ 320.00	8	\$ 2,560.00	
PPU	PICEA PUNGENS	COLORADO SPRUCE	8" BB	\$ 320.00	7	\$ 2,240.00	
TSU	TSUGA CANADENSIS	CANADIAN HEMLOCK	7" BB	\$ 375.00	7	\$ 2,625.00	
Ornamental Trees							
AC	* AMELANCHIER CANADENSIS	SHADBLow SERVICEBERRY	6" BB	\$ 225.00	2	\$ 450.00	
MF	MALUS 'FLORIBUNDA'	JAPANESE CRABAPPLE	2"	\$ 130.00	2	\$ 260.00	
MP	MALUS 'PRAIRIFIRE'	PRAIRIE CRABAPPLE	6" BB	\$ 140.00	2	\$ 280.00	
*	CARPINUS CAROLINIANA	AMERICAN HORNBEAM	6"	\$ 165.00	2	\$ 330.00	
*	CERCIS CANADENSIS	REDBUD	6"	\$ 164.00	1	\$ 164.00	
* Native species (15 native plants)							
						Subtotal	\$ 14,032.00

NURSERY D							
Symbol	Latin Name	Common Name	Size	Cost/Unit	Qty	Cost/Species	
Canopy Trees							
AFR	ACER X FREEMANNI 'AUTUMN BLAZE'	AUTUMN BLAZE FREEMAN	1.5" BB	\$ 160.00	1	\$ 160.00	
LIT	LIRIODENDRON TULIPIFERA	TULIP TREE	1.5" BB	\$ 185.00	1	\$ 185.00	
QBI	* QUERCUS BICOLOR	SWAMP WHITE OAK	1.25" BB	\$ 165.00	1	\$ 165.00	
QMA	* QUERCUS MACROCARPA	BUR OAK	1.25" BB	\$ 165.00	1	\$ 165.00	
Evergreen Trees							
JUV	* JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	5.4" BB	\$ 190.00	8	\$ 1,520.00	
PAS	PICEA ABIES	NORWAY SPRUCE					

LAKE COUNTY LIND - Section 151.162 LANDSCAPING
MEDIUM PROJECT - A-97-plant project of 23 trees and 62 shrubs with 9 or less canopy trees

Symbol	Latin Name	Common Name	Size	Cost/Unit	Qty	Cost/Species
Evergreen Trees						
Ac	Abies concolor	Concolor Fir	6" Ht BB	\$ 335.00	1	\$ 335.00
Pa	Pinus abies 'Vegetans'	Common Norway Spruce	7" Ht BB	\$ 340.00	5	\$ 1,700.00
Ps	Pinus strobus	Eastern White Pine	7" Ht BB	\$ 350.00	5	\$ 1,750.00
Deciduous Trees						
Ap	Acer glaberrimum 'Columnar'	Columnar Norway Maple	7" Cal BB	\$ 270.00	2	\$ 540.00
Ab	Ambelochia x glabriflora 'Autumn Brilliance'	Autumn Brilliance Serviceberry	7" Ht BB	\$ 200.00	2	\$ 400.00
Cb	Carolinia baileyana 'Frans Fontan'	Frans Fontan Hornbeam	7" Cal BB	\$ 180.00	2	\$ 360.00
Mt	Malus 'Satanmar'	Sugar Tree Crabapple	7" Cal BB	\$ 200.00	2	\$ 400.00
Qr	Quercus robur 'Pyramidalis'	Pyramidal English Oak	7" Cal BB	\$ 240.00	2	\$ 480.00
Shrubs						
Ca	Chaetochloa 'Steeven Condit'	Steeven Condit Sumacswamp	24" Ht Cont	\$ 40.00	10	\$ 400.00
Fm	Fothergilla major 'Mt. Airy'	Mt. Airy Fothergilla	24" Ht Cont	\$ 40.00	11	\$ 440.00
Hs	Hieracium 'Little Henry'	Little Henry Sweetgum	24" Ht Cont	\$ 40.00	12	\$ 480.00
Ph	Phlox aromatica 'Sis-Low'	Sis-Low Fragrant Sumac	24" Ht Cont	\$ 40.00	11	\$ 440.00
Tm	Taxus x media 'Thurstonii'	Thurston Tree	24" Spr. BB or Cont	\$ 75.00	10	\$ 750.00
Subtotal \$ 14,587.00						
5% Discount \$ 729.35						
Total \$ 13,857.65						

Symbol	Latin Name	Common Name	Size	Cost/Unit	Qty	Cost/Species
Evergreen Trees						
Ac	Abies concolor	Concolor Fir	6" Ht BB	\$ 335.00	1	\$ 335.00
Pa	Pinus abies 'Vegetans'	Common Norway Spruce	7" Ht BB	\$ 340.00	5	\$ 1,700.00
Ps	Pinus strobus	Eastern White Pine	7" Ht BB	\$ 350.00	5	\$ 1,750.00
Deciduous Trees						
Ap	Acer glaberrimum 'Autumn Lustre'	Autumn Lustre Norway Maple	7" Cal BB	\$ 165.00	2	\$ 330.00
Ab	Ambelochia x glabriflora 'Autumn Brilliance'	Autumn Brilliance Serviceberry	7" Ht BB	\$ 200.00	2	\$ 400.00
Cc	Carolinia caroliniana 'Fire King'	Fire King Hornbeam	7" Cal BB	\$ 180.00	2	\$ 360.00
Mt	Malus 'Satanmar'	Sugar Tree Crabapple	7" Cal BB	\$ 200.00	2	\$ 400.00
Qr	Quercus robur 'Pyramidalis'	Pyramidal English Oak	7" Cal BB	\$ 240.00	2	\$ 480.00
Shrubs						
Ca	Chaetochloa 'Steeven Condit'	Steeven Condit Sumacswamp	24" Ht Cont	\$ 40.00	10	\$ 400.00
Fm	Fothergilla major 'Mt. Airy'	Mt. Airy Fothergilla	24" Ht Cont	\$ 40.00	11	\$ 440.00
Hs	Hieracium 'Little Henry'	Little Henry Sweetgum	24" Ht Cont	\$ 40.00	12	\$ 480.00
Ph	Phlox aromatica 'Sis-Low'	Sis-Low Fragrant Sumac	24" Ht Cont	\$ 40.00	11	\$ 440.00
Tm	Taxus x media 'Thurstonii'	Thurston Tree	24" Spr. BB or Cont	\$ 75.00	10	\$ 750.00
Subtotal \$ 14,587.00						
5% Discount \$ 729.35						
Total \$ 13,857.65						

Symbol	Latin Name	Common Name	Size	Cost/Unit	Qty	Cost/Species
Evergreen Trees						
Ac	Abies concolor	Concolor Fir	6" Ht BB	\$ 295.00	1	\$ 295.00
Pa	Pinus abies 'Vegetans'	Common Norway Spruce	7" Ht BB	\$ 270.00	5	\$ 1,350.00
Ps	Pinus strobus	Eastern White Pine	7" Ht BB	\$ 280.00	5	\$ 1,400.00
Deciduous Trees						
Ap	Acer glaberrimum 'Autumn Lustre'	Autumn Lustre Norway Maple	7" Cal BB	\$ 210.00	2	\$ 420.00
Ab	Ambelochia x glabriflora 'Autumn Brilliance'	Autumn Brilliance Serviceberry	7" Ht BB	\$ 210.00	2	\$ 420.00
Cc	Carolinia caroliniana	American Hornbeam	7" Cal BB	\$ 200.00	2	\$ 400.00
Mt	Malus 'Satanmar'	Sugar Tree Crabapple	7" Cal BB	\$ 200.00	2	\$ 400.00
Qr	Quercus x macro 'Lone'	Royal Palmier Columnar Hybrid Oak	7" Cal BB	\$ 250.00	2	\$ 500.00
Shrubs						
Ca	Chaetochloa 'Steeven Condit'	Steeven Condit Sumacswamp	24" Ht Cont	\$ 40.00	10	\$ 400.00
Fm	Fothergilla major 'Mt. Airy'	Mt. Airy Fothergilla	24" Ht Cont	\$ 40.00	11	\$ 440.00
Hs	Hieracium 'Little Henry'	Little Henry Sweetgum	24" Ht Cont	\$ 40.00	12	\$ 480.00
Ph	Phlox aromatica 'Sis-Low'	Sis-Low Fragrant Sumac	24" Ht Cont	\$ 40.00	11	\$ 440.00
Tm	Taxus x media 'Thurstonii'	Thurston Tree	24" Spr. BB or Cont	\$ 75.00	10	\$ 750.00
Subtotal \$ 8,794.00						
5% Discount \$ 439.70						
Total \$ 8,354.30						

Symbol	Latin Name	Common Name	Size	Cost/Unit	Qty	Cost/Species
Evergreen Trees						
Ac	Abies concolor	Concolor Fir	6" Ht BB	\$ 350.00	1	\$ 350.00
Pa	Pinus abies 'Vegetans'	Common Norway Spruce	7" Ht BB	\$ 270.00	5	\$ 1,350.00
Ps	Pinus strobus	Eastern White Pine	7" Ht BB	\$ 280.00	5	\$ 1,400.00
Deciduous Trees						
Ap	Acer glaberrimum 'Columnar'	Columnar Norway Maple	7" Cal BB	\$ 280.00	2	\$ 560.00
Ab	Ambelochia x glabriflora 'Autumn Brilliance'	Autumn Brilliance Serviceberry	7" Ht BB	\$ 200.00	2	\$ 400.00
Cb	Carolinia baileyana 'Frans Fontan'	Frans Fontan Hornbeam	7" Cal BB	\$ 180.00	2	\$ 360.00
Mt	Malus 'Satanmar'	Sugar Tree Crabapple	7" Cal BB	\$ 200.00	2	\$ 400.00
Qr	Quercus robur 'Pyramidalis'	Pyramidal English Oak	7" Cal BB	\$ 240.00	2	\$ 480.00
Shrubs						
Ca	Chaetochloa 'Steeven Condit'	Steeven Condit Sumacswamp	24" Ht Cont	\$ 40.00	10	\$ 400.00
Fm	Fothergilla major 'Mt. Airy'	Mt. Airy Fothergilla	24" Ht Cont	\$ 40.00	11	\$ 440.00
Hs	Hieracium 'Little Henry'	Little Henry Sweetgum	24" Ht Cont	\$ 40.00	12	\$ 480.00
Ph	Phlox aromatica 'Sis-Low'	Sis-Low Fragrant Sumac	24" Ht Cont	\$ 40.00	11	\$ 440.00
Tm	Taxus x media 'Thurstonii'	Thurston Tree	24" Spr. BB or Cont	\$ 75.00	10	\$ 750.00
Subtotal \$ 10,589.00						
5% Discount \$ 529.45						
Total \$ 10,059.55						

Symbol	Latin Name	Common Name	Size	Cost/Unit	Qty	Cost/Species
Evergreen Trees						
Ac	Abies concolor	Concolor Fir	6" Ht BB	\$ 400.00	1	\$ 400.00
Pa	Pinus abies 'Vegetans'	Common Norway Spruce	7" Ht BB	\$ 400.00	5	\$ 2,000.00
Ps	Pinus strobus	Eastern White Pine	7" Ht BB	\$ 200.00	5	\$ 1,000.00
Deciduous Trees						
Ap	Acer glaberrimum 'Columnar'	Columnar Norway Maple	7" Cal BB	\$ 280.00	2	\$ 560.00
Ab	Ambelochia x glabriflora 'Autumn Brilliance'	Autumn Brilliance Serviceberry	7" Ht BB	\$ 200.00	2	\$ 400.00
Cb	Carolinia baileyana 'Frans Fontan'	Frans Fontan Hornbeam	7" Cal BB	\$ 180.00	2	\$ 360.00
Mt	Malus 'Satanmar'	Sugar Tree Crabapple	7" Cal BB	\$ 200.00	2	\$ 400.00
Qr	Quercus robur 'Pyramidalis'	Pyramidal English Oak	7" Cal BB	\$ 240.00	2	\$ 480.00
Shrubs						
Ca	Chaetochloa 'Steeven Condit'	Steeven Condit Sumacswamp	24" Ht Cont	\$ 40.00	10	\$ 400.00
Fm	Fothergilla major 'Mt. Airy'	Mt. Airy Fothergilla	24" Ht Cont	\$ 40.00	11	\$ 440.00
Hs	Hieracium 'Little Henry'	Little Henry Sweetgum	24" Ht Cont	\$ 40.00	12	\$ 480.00
Ph	Phlox aromatica 'Sis-Low'	Sis-Low Fragrant Sumac	24" Ht Cont	\$ 40.00	11	\$ 440.00
Tm	Taxus x media 'Thurstonii'	Thurston Tree	24" Spr. BB or Cont	\$ 75.00	10	\$ 750.00
Subtotal \$ 12,309.00						
5% Discount \$ 615.45						
Total \$ 11,693.55						

Symbol	Latin Name	Common Name	Size	Cost/Unit	Qty	Cost/Species
Evergreen Trees						
Ac	Abies concolor	Concolor Fir	6" Ht BB	\$ 335.00	1	\$ 335.00
Pa	Pinus abies 'Vegetans'	Common Norway Spruce	7" Ht BB	\$ 340.00	5	\$ 1,700.00
Ps	Pinus strobus	Eastern White Pine	7" Ht BB	\$ 350.00	5	\$ 1,750.00
Deciduous Trees						
Ap	Acer glaberrimum 'Autumn Lustre'	Autumn Lustre Norway Maple	7" Cal BB	\$ 165.00	2	\$ 330.00
Ab	Ambelochia x glabriflora 'Autumn Brilliance'	Autumn Brilliance Serviceberry	7" Ht BB	\$ 200.00	2	\$ 400.00
Cc	Carolinia caroliniana 'Wisconsin Red'	Wisconsin Red Hornbeam	7" Cal BB	\$ 180.00	2	\$ 360.00
Mt	Malus 'Satanmar'	Sugar Tree Crabapple	7" Cal BB	\$ 200.00	2	\$ 400.00
Qr	Quercus muhlenbergii	Chinquapin Oak	7" Cal BB	\$ 230.00	2	\$ 460.00
Shrubs						
Ca	Chaetochloa 'Steeven Condit'	Steeven Condit Sumacswamp	24" Ht Cont	\$ 40.00	10	\$ 400.00
Fm	Fothergilla major 'Mt. Airy'	Mt. Airy Fothergilla	24" Ht Cont	\$ 40.00	11	\$ 440.00
Hs	Hieracium 'Little Henry'	Little Henry Sweetgum	24" Ht Cont	\$ 40.00	12	\$ 480.00
Ph	Phlox aromatica 'Sis-Low'	Sis-Low Fragrant Sumac	24" Ht Cont	\$ 40.00	11	\$ 440.00
Tm	Taxus x media 'Thurstonii'	Thurston Tree	24" Spr. BB or Cont	\$ 75.00	10	\$ 750.00
It	Hypericum perforatum	St. John's Wort	6" Gal	\$ 83.00	4	\$ 332.00
Subtotal \$ 10,855.00						
5% Discount \$ 542.75						
Total \$ 10,312.25						

Symbol	Latin Name	Common Name	Size	Cost/Unit	Qty	Cost/Species
Evergreen Trees						
Ac	Abies concolor	Concolor Fir	6" Ht BB	\$ 335.00	1	\$ 335.00
Pa	Pinus abies 'Vegetans'	Common Norway Spruce	7" Ht BB	\$ 340.00	5	\$ 1,700.00
Ps	Pinus strobus	Eastern White Pine	7" Ht BB	\$ 350.00	5	\$ 1,750.00
Deciduous Trees						
Ap	Acer glaberrimum 'Autumn Lustre'	Autumn Lustre Norway Maple	7" Cal BB	\$ 165.00	2	\$ 330.00
Ab	Ambelochia x glabriflora 'Autumn Brilliance'	Autumn Brilliance Serviceberry	7" Ht BB	\$ 200.00	2	\$ 400.00
Cc	Carolinia caroliniana 'Wisconsin Red'	Wisconsin Red Hornbeam	7" Cal BB	\$ 180.00	2	\$ 360.00
Mt	Malus 'Satanmar'	Sugar Tree Crabapple	7" Cal BB	\$ 200.00	2	\$ 400.00
Qr	Quercus muhlenbergii	Chinquapin Oak	7" Cal BB	\$ 230.00	2	\$ 460.00
Shrubs						
Ca	Chaetochloa 'Steeven Condit'	Steeven Condit Sumacswamp	24" Ht Cont	\$ 40.00	10	\$ 400.00
Fm	Fothergilla major 'Mt. Airy'	Mt. Airy Fothergilla	24" Ht Cont	\$ 40.00	11	\$ 440.00
Hs	Hieracium 'Little Henry'	Little Henry Sweetgum	24" Ht Cont	\$ 40.00	12	\$ 480.00
Ph	Phlox aromatica 'Sis-Low'	Sis-Low Fragrant Sumac	24" Ht Cont	\$ 40.00	11	\$ 440.00
Tm	Taxus x media 'Thurstonii'	Thurston Tree	24" Spr. BB or Cont	\$ 75.00	10	\$ 750.00
It	Hypericum perforatum	St. John's Wort	6" Gal	\$ 83.00	4	\$ 332.00
Subtotal \$ 10,855.00						
5% Discount \$ 542.75						
Total \$ 10,312.25						

Symbol	Latin Name	Common Name	Size	Cost/Unit	Qty	Cost/Species
Evergreen Trees						
Ac	Abies concolor	Concolor Fir	6" Ht BB	\$ 295.00	1	\$ 295.00
Pa	Pinus abies 'Vegetans'	Common Norway Spruce	7" Ht BB	\$ 270.00	5	\$ 1,350.00
Ps	Pinus strobus	Eastern White Pine	7" Ht BB	\$ 280.00	5	\$ 1,400.00
Deciduous Trees						
Ap	Acer glaberrimum 'Autumn Lustre'	Autumn Lustre Norway Maple	7" Cal BB	\$ 210.00	2	\$ 420.00
Ab	Ambelochia x glabriflora 'Autumn Brilliance'	Autumn Brilliance Serviceberry	7" Ht BB	\$ 210.00	2	\$ 420.00
Cc	Carolinia caroliniana	American Hornbeam	7" Cal BB	\$ 200.00	2	\$ 400.00
Mt	Malus 'Satanmar'	Sugar Tree Crabapple	7" Cal BB	\$ 200.00	2	\$ 400.00
Qr	Quercus muhlenbergii	Chinquapin Oak	7" Cal BB	\$ 215.00	2	\$ 430.00
Shrubs						
Ca	Chaetochloa 'Steeven Condit'	Steeven Condit Sumacswamp	24" Ht Cont	\$ 40.00	10	\$ 400.00
Fm	Fothergilla major 'Mt. Airy'	Mt. Airy Fothergilla	24" Ht Cont	\$ 40.00	11	\$ 440.00
Hs	Hieracium 'Little Henry'	Little Henry Sweetgum	24" Ht Cont	\$ 40.00	12	\$ 480.00
Ph	Phlox aromatica 'Sis-Low'	Sis-Low Fragrant Sumac	24" Ht Cont	\$ 40.00	11	\$ 440.00
Tm	Taxus x media 'Thurstonii'	Thurston Tree	24" Spr. BB or Cont	\$ 75.00	10	\$ 750.00
It	Hypericum perforatum	St. John's Wort	6" Gal	\$ 72.50	4	\$ 290.00
Subtotal \$ 7,238.00						
5% Discount \$ 361.90						
Total \$ 6,876.10						

Symbol	Latin Name	Common Name	Size	Cost/Unit	Qty	Cost/Species
Evergreen Trees						
Ac	Abies concolor	Concolor Fir	6" Ht BB	\$ 350.00	1	\$ 350.00
Pa	Pinus abies 'Vegetans'	Common Norway Spruce	7" Ht BB	\$ 270.00	5	\$ 1,350.00
Ps	Pinus strobus	Eastern White Pine	7" Ht BB	\$ 280.00	5	\$ 1,400.00
Deciduous Trees						
Ap	Acer glaberrimum 'Columnar'	Columnar Norway Maple	7" Cal BB	\$ 280.00	2	\$ 560.00
Ab	Ambelochia x glabriflora 'Autumn Brilliance'	Autumn Brilliance Serviceberry	7" Ht BB	\$ 200.00	2	\$ 400.00
Cb	Carolinia caroliniana 'Wisconsin Red'	Wisconsin Red Hornbeam	7" Cal BB	\$ 180.00	2	\$ 360.00
Mt	Malus 'Satanmar'	Sugar Tree Crabapple	7" Cal BB	\$ 200.00	2	\$ 400.00
Qr	Quercus muhlenbergii	Chinquapin Oak	7" Cal BB	\$ 230.00	2	\$ 460.00
Shrubs						
Ca	Chaetochloa 'Steeven Condit'	Steeven Condit Sumacswamp	24" Ht Cont	\$ 40.00	10	\$ 400.00
Fm	Fothergilla major 'Mt. Airy'	Mt. Airy Fothergilla	24" Ht Cont	\$ 40.00	11	\$ 440.00
Hs	Hieracium 'Little Henry'	Little Henry Sweet				

LAKE COUNTY UDO - Section 151.167 LANDSCAPING
LARGE PROJECT - AN 84-plant project of 52 trees and 32 shrubs with more than 20 canopy trees.

Symbol	Latin Name	Common Name	Size	Cost/Unit	Qty.	Cost/Species
PRE-AMENDMENT PLANTING LIST						
Canopy Trees						
ACF	Acer x freemanii 'Autumn Blaze'	Autumn Blaze Freeman Maple	2.5'	BB	2	8
ACF	Acer x freemanii 'Autumn Blaze'	Autumn Blaze Freeman Maple	4.5'	BB	8	36
AES	Aesculus arifolia 'Autumn Splendor'	Autumn Splendor Horsechestnut	4.5'	BB	3	13.5
CEC	Celtis occidentalis 'Prairie Pride'	Prairie Pride Common Hackberry	1.5'	BB	3	4.5
CEC	Celtis occidentalis 'Prairie Pride'	Prairie Pride Common Hackberry	4.5'	BB	3	13.5
QUIL	Quercus bicolor	Swamp White Oak	4.5'	BB	7	31.5
QUIL	Quercus rubra	Red Oak	4.5'	BB	7	31.5
Ornamental Trees						
ACI	Acer incanum	Paperbark Maple	8'	BB/CLUMP	3	24
CER	Cercis canadensis	Eastern Redbud	8'	BB/CLUMP	3	24
MAS	Magnolia stellata 'Janet'	Star Magnolia	8'	BB/CLUMP	3	24
MFP	Malus 'Prairie Fire'	Prairie Fire Crabapple	8'	BB/CLUMP	3	24
Evergreen Trees						
PGD	Picea glauca 'Demaris'	Black Hills Spruce	8'	BB	3	24
PA	Picea abies	Norway Spruce	8'	BB	3	24
PC	Picea pungens	Colorado Green Spruce	8'	BB	3	24
Shrubs						
ICD	Cornus sericea 'Iceant'	Iceant Redosier Dogwood	3'	BB	10	30
JAC	Juniperus chinensis 'Kallia's Compacta'	Kallia's Compact Juniper	2.5'	BB	6	18
SMV	Sorbus aucuparia 'Miss Kim'	Miss Kim Dwarf Lilac	1.5'	BB	11	16.5
VIOL	Viburnum dentatum 'Christrom'	Christrom Arrowwood Viburnum	3'	BB	6	18
*Native species						

POST-AMENDMENT IMPACT - OPTION 1 - Diversity percentage based on project size
 DIVERSITY OF SPECIES REQUIREMENT
 No species shall represent more than 25% of total plantings for each 'plant type'
 Canopy Trees: 4 additional species are needed, with quantities adjusted.
 No single species can be used more than 4 times (15% of 31 is 4.65)

Ornamental Trees
 No single species can be used more than 2 times (15% of 12 is 1.8)
 2 additional species are needed, with quantities adjusted.
Evergreen Trees
 No single species can be used more than 1 time (15% of 9 is 1.35)
 5 additional species are needed, with quantities adjusted.

Shrubs
 No single species can be used more than 4 times (15% of 32 is 4.8)
 4 additional species are needed, with quantities adjusted.

NATIVE SPECIES REQUIREMENT
 25% of all plants shall be native species.
 At least 21 plants must be native (25% of 84 is 21). 13 plants on the original list are native.
 8 additional plants must be native species.

Symbol	Latin Name	Common Name	Size	Cost/Unit	Qty.	Cost/Species
COST SCENARIO - PRE-AMENDMENT - OPTION 1						
Canopy Trees						
ACF	Acer x freemanii 'Autumn Blaze'	Autumn Blaze Freeman Maple	2.5'	BB	2	8
ACF	Acer x freemanii 'Autumn Blaze'	Autumn Blaze Freeman Maple	4.5'	BB	8	36
AES	Aesculus arifolia 'Autumn Splendor'	Autumn Splendor Horsechestnut	2.5'	BB	3	12
CEC	Celtis occidentalis 'Prairie Pride'	Prairie Pride Common Hackberry	1.5'	BB	3	4.5
CEC	Celtis occidentalis 'Prairie Pride'	Prairie Pride Common Hackberry	4.0'	BB	3	12
QUIL	Quercus bicolor	Swamp White Oak	4.0'	BB	7	28
QUIL	Quercus rubra	Red Oak	4.0'	BB	7	28
Ornamental Trees						
ACI	Acer incanum	Paperbark Maple	7'	BB/CLUMP	3	21
CER	Cercis canadensis	Eastern Redbud	8'	BB/CLUMP	3	24
MAS	Magnolia stellata 'Janet'	Jane Magnolia	7'	BB/CLUMP	3	21
MFP	Malus 'Prairie Fire'	Prairie Fire Crabapple	7'	BB/CLUMP	3	21
Evergreen Trees						
PGD	Picea glauca 'Demaris'	Black Hills Spruce	7'	BB	3	21
PA	Picea abies	Norway Spruce	8'	BB	3	24
PC	Picea pungens	Colorado Green Spruce	10'	BB	3	30
Shrubs						
ICD	Cornus sericea 'Iceant'	Iceant Redosier Dogwood	1.5 GAL	4	10	40
JAC	Juniperus chinensis 'Kallia's Compacta'	Kallia's Compact Juniper	1.5 GAL	3	9	27
SMV	Sorbus aucuparia 'Miss Kim'	Miss Kim Dwarf Lilac	15 GAL	3	11	33
VIOL	Viburnum dentatum 'Christrom'	Christrom Arrowwood Viburnum	3'	BB	6	18
*Native species (13 native plants)						
Subtotal						\$ 22,865.00
8% discount						\$ 2,097.20
Total						\$ 20,767.80

Symbol	Latin Name	Common Name	Size	Cost/Unit	Qty.	Cost/Species
COST SCENARIO - POST-AMENDMENT - OPTION 1						
Canopy Trees						
ACF	Acer x freemanii 'Autumn Blaze'	Autumn Blaze Freeman Maple	1.5'	BB	165	247.5
ACF	Acer x freemanii 'Autumn Blaze'	Autumn Blaze Freeman Maple	1.5'	BB	205	307.5
AES	Aesculus arifolia 'Autumn Splendor'	Autumn Splendor Horsechestnut	2.5'	BB	305	457.5
CEC	Celtis occidentalis 'Prairie Pride'	Prairie Pride Common Hackberry	1.5'	BB	15	22.5
CEC	Celtis occidentalis 'Prairie Pride'	Prairie Pride Common Hackberry	1.5'	BB	15	22.5
QUIL	Quercus bicolor	Swamp White Oak	1.5'	BB	15	22.5
QUIL	Quercus rubra	Red Oak	1.5'	BB	15	22.5
Ornamental Trees						
ACI	Acer incanum	Paperbark Maple	6'	BB/CL	445	2670
CER	Cercis canadensis	Eastern Redbud	6'	BB/CL	220	1320
MAS	Magnolia stellata 'Janet'	Jane Magnolia	6'	BB/CL	270	1620
MFP	Malus 'Prairie Fire'	Prairie Fire Crabapple	6'	BB/CL	140	840
Evergreen Trees						
PGD	Picea glauca 'Demaris'	Black Hills Spruce	7'	BB	302	2114
PA	Picea abies	Norway Spruce	8'	BB	385	2705
PC	Picea pungens	Colorado Green Spruce	10'	BB	425	3000
Shrubs						
ICD	Cornus sericea 'Iceant'	Iceant Redosier Dogwood	1.5 GAL	40	4	160
JAC	Juniperus chinensis 'Kallia's Compacta'	Kallia's Compact Juniper	1.5 GAL	32	2	96
SMV	Sorbus aucuparia 'Miss Kim'	Miss Kim Dwarf Lilac	15 GAL	195	4	780
VIOL	Viburnum dentatum 'Christrom'	Christrom Arrowwood Viburnum	3'	BB	38	114
*Native species (24 native plants)						
Subtotal						\$ 13,661.00
8% discount						\$ 1,292.88
Total						\$ 12,368.12

POST-AMENDMENT IMPACT - OPTION 2 - Diversity percentage NOT based on project size
 DIVERSITY OF SPECIES REQUIREMENT
 No single plant species shall represent more than 20% of total plantings.
 No changes necessary.

NATIVE SPECIES REQUIREMENT
 25% of all plants shall be native species.
 At least 21 plants must be native (25% of 84 is 21). 13 plants on the original list are native.
 8 additional plants must be native species.

Symbol	Latin Name	Common Name	Size	Cost/Unit	Qty.	Cost/Species
COST SCENARIO - POST-AMENDMENT - OPTION 2						
Canopy Trees						
ACF	Acer x freemanii 'Autumn Blaze'	Autumn Blaze Freeman Maple	1.5'	BB	165	247.5
ACF	Acer x freemanii 'Autumn Blaze'	Autumn Blaze Freeman Maple	1.5'	BB	205	307.5
AES	Aesculus arifolia 'Autumn Splendor'	Autumn Splendor Horsechestnut	2.5'	BB	305	457.5
CEC	Celtis occidentalis	Hackberry	2.5'	BB	305	457.5
QUIL	Quercus bicolor	Swamp White Oak	1.5'	BB	15	22.5
QUIL	Quercus rubra	Red Oak	1.5'	BB	15	22.5
Ornamental Trees						
ACI	Acer incanum	Paperbark Maple	6'	BB/CL	445	2670
CER	Cercis canadensis	Eastern Redbud	6'	BB/CL	220	1320
MAS	Magnolia stellata 'Janet'	Jane Magnolia	6'	BB/CL	270	1620
MFP	Malus 'Prairie Fire'	Prairie Fire Crabapple	6'	BB/CL	140	840
Evergreen Trees						
PGD	Picea glauca 'Demaris'	Black Hills Spruce	7'	BB	302	2114
PA	Picea abies	Norway Spruce	8'	BB	385	2705
PC	Picea pungens	Colorado Green Spruce	10'	BB	425	3000
Shrubs						
ICD	Cornus sericea 'Iceant'	Iceant Redosier Dogwood	1.5 GAL	40	4	160
JAC	Juniperus chinensis 'Kallia's Compacta'	Kallia's Compact Juniper	1.5 GAL	32	2	96
SMV	Sorbus aucuparia 'Miss Kim'	Miss Kim Dwarf Lilac	15 GAL	195	4	780
VIOL	Viburnum dentatum 'Christrom'	Christrom Arrowwood Viburnum	3'	BB	38	114
*Native species (29 native plants)						
Subtotal						\$ 15,744.00
8% discount						\$ 1,292.52
Total						\$ 14,451.48

Symbol	Latin Name	Common Name	Size	Cost/Unit	Qty.	Cost/Species
NURSERY B						
Canopy Trees						
ACF	Acer x freemanii 'Autumn Blaze'	Autumn Blaze Freeman Maple	3'	BB	245	735
ACF	Acer x freemanii 'Autumn Blaze'	Autumn Blaze Freeman Maple	4.5'	BB	275	825
AES	Aesculus arifolia	Ohio Buckeye	2.5'	BB	275	825
CEC	Celtis occidentalis	Hackberry	2.5'	BB	310	930
CEC	Celtis occidentalis	Hackberry	4.5'	BB	310	930
QUIL	Quercus bicolor	Swamp White Oak	3'	BB	230	690
QUIL	Quercus rubra	Red Oak	3'	BB	230	690
Ornamental Trees						
ACI	Acer incanum	Paperbark Maple	2.5'	BB	225	675
CER	Cercis canadensis	Eastern Redbud	8'	BB/CLUMP	180	540
MAS	Magnolia 'Janet'	Jane Magnolia	15 GAL	3	150	450
MFP	Malus 'Prairie Fire'	Prairie Fire Crabapple	2.5'	BB/CLUMP	285	855
Evergreen Trees						
PGD	Picea glauca 'Demaris'	Black Hills Spruce	7'	BB	210	630
PA	Picea abies	Norway Spruce	7'	BB	210	630
PC	Juniperus x 'IN Blue Saelet'	Juniper Star Power	7'	BB	165	495
Shrubs						
ICD	Cornus sericea 'Iceant'	Iceant Redosier Dogwood	1.5 GAL	17	10	170
JAC	Juniperus chinensis 'Sea Green'	Sea Green Juniper	3 GAL	20	5	100
SMV	Sorbus aucuparia 'Miss Kim'	Miss Kim Dwarf Lilac	1.5 GAL	21	11	231
VIOL	Viburnum dentatum 'Christrom'	Christrom Arrowwood Viburnum	1.5 GAL	27	6	162
*Native species (19 native species)						
Subtotal						\$ 31,842.75

Symbol	Latin Name	Common Name	Size	Cost/Unit	Qty.	Cost/Species
NURSERY B						
Canopy Trees						
ACF	Acer x freemanii 'Autumn Blaze'	Autumn Blaze Freeman Maple	1.5'	BB	157	235.5
AES	Aesculus arifolia	Ohio Buckeye	1.5'	BB	170	255
CEC	Celtis occidentalis	Hackberry	1.5'	BB	200	300
QUIL	Quercus bicolor	Swamp White Oak	1.5'	BB	144	216
QUIL	Quercus rubra	Red Oak	2'	BB	185	370
Ornamental Trees						
ACI	Acer incanum	Paperbark Maple	25 GAL	3	75	225
CER	Cercis canadensis	Eastern Redbud	6'	BB/CL	140	840
MAS	Magnolia x hobbsii 'Merrill'	Merrill Magnolia	15 GAL	3	150	450
MFP	Malus 'Prairie Fire'	Prairie Fire Crabapple	6'	BB/CL	140	840
Evergreen Trees						
PGD	Picea glauca 'Demaris'	Black Hills Spruce	7'	BB	210	630
PA	Picea abies	Norway Spruce	7'	BB	210	630
PC	Juniperus x 'IN Blue Saelet'	Juniper Star Power	7'	BB	165	495
Shrubs						
ICD	Cornus sericea 'Iceant'	Iceant Redosier Dogwood	1.5 GAL	17	10	170
JAC	Juniperus chinensis 'Sea Green'	Sea Green Juniper	3 GAL	20	5	100
SMV	Sorbus aucuparia 'Miss Kim'	Miss Kim Dwarf Lilac	1.5 GAL	21	11	231
VIOL	Viburnum dentatum 'Christrom'	Christrom Arrowwood Viburnum	1.5 GAL	27	6	162
*Native species (17 native plants)						
Subtotal						\$ 3,957.75

Symbol	Latin Name	Common Name	Size	Cost/Unit	Qty.	Cost/Species
NURSERY C						
Canopy Trees						
ACF	Acer x freemanii 'Autumn Blaze'	Autumn Blaze Freeman Maple	2.5'	BB	199	497.5
AES	Aesculus arifolia 'Autumn Splendor'	Autumn Splendor Horsechestnut	2'	BB	250	500
CEC	Celtis occidentalis	Hackberry	2'	BB	310	620
QUIL	Quercus bicolor	Swamp White Oak	2'	BB	195	390
QUIL	Quercus rubra	Red Oak	2'	BB	195	390
Ornamental Trees						
ACI	Acer incanum	Paperbark Maple	1.5'	BB/CL	140	210
CER	Cercis canadensis	Eastern Redbud	6'	BB/CL	140	840
MAS	Magnolia 'Janet'	Jane Magnolia	6'	BB/CL	140	840
MFP	Malus 'Prairie Fire'	Prairie Fire Crabapple	6'	BB/CL	140	840
Evergreen Trees						
PGD	Picea glauca 'Demaris'	Black Hills Spruce	7'	BB	180	540
PA	Picea abies	Norway Spruce	8'	BB	180	540
PC	Picea pungens	Colorado Green Spruce	8'	BB	180	540
Shrubs						
ICD	Cornus sericea 'Iceant'	Iceant Redosier Dogwood	1.5 GAL	19	10	190
JAC	Juniperus chinensis 'Sea Green'	Sea Green Juniper	3 GAL	20	5	100
SMV	Sorbus aucuparia 'Miss Kim'	Miss Kim Dwarf Lilac	1.5 GAL	21	11	231
VIOL	Viburnum dentatum 'Christrom'	Christrom Arrowwood Viburnum	1.5 GAL	27	6	162
*Native species (29 native plants)						
Subtotal						\$ 3,957.75

Symbol	Latin Name	Common Name	Size	Cost/Unit	Qty.	Cost/Species
NURSERY C						
Canopy Trees						
ACF	Acer x freemanii 'Autumn Blaze'	Autumn Blaze Freeman Maple	3'	BB	245	735
ACF	Acer x freemanii 'Autumn Blaze'	Autumn Blaze Freeman Maple	4.5'	BB	275	825
AES	Aesculus arifolia 'Autumn Splendor'	Autumn Splendor Horsechestnut	2.5'	BB	310	930
CEC	Celtis occidentalis	Hackberry	2.5'	BB	310	930
CEC	Celtis occidentalis	Hackberry	4.5'	BB	310	930
QUIL	Quercus bicolor	Swamp White Oak	3'	BB	230	690
QUIL	Quercus rubra	Red Oak	3'	BB	230	690
Ornamental Trees						
ACI	Acer incanum	Paperbark Maple	2'	BB/CLUMP	335	670
CER	Cercis canadensis	Eastern Redbud</				

