



11333 N. Cedarburg Rd 60W
Mequon, WI 53092-1930
Phone: 262/236-2913
Fax: 262/242-9655

www.ci.mequon.wi.us

PUBLIC WORKS

**Tree Board Committee
Wednesday, March 16, 2016
North Conference Room
Mequon City Hall
6:30 PM
AGENDA**

1. Call to Order, Roll Call
2. Approval of the February 10, 2016 Tree Board Meeting
Action Requested: Approve Minutes
3. Street Tree Plan for Highlander Estates
Action Requested: Review and Approve
4. Arbor Day Discussion, April 24, 2016
Action Requested: Discussion
5. Tree Preservation Policy and Ordinance
Action Requested: Discussion
6. New Business
7. Adjourn

Dated: March 7, 2016

/s/ Pam Adams/Chairman

Notice is hereby given that a quorum of other governmental bodies may be present at this meeting to present, discuss and/or gather information about a subject over which they have decision making responsibility, although they will not take formal action thereto at this meeting.

Persons with disabilities requiring accommodations for attendance at this meeting should contact the City Clerk's Office at 262-236-2914, twenty-four (24) hours in advance of the meeting.

MEQUON TREE BOARD MINUTES
CITY OF MEQUON
WISCONSIN

The meeting was called to order on February 10, 2016, at 10:00 a.m. Present were Chairperson Pam Adams and Members Clair Krause, Carol Bangs, Kerry Mattingly and Suzanne Schiesel. Also present were Mequon City Forester Ken Baker and Kevin Anderson from the Neumann Company.

The following matters were considered by the Committee and action taken as indicated. It is respectfully requested that this report be accepted and the recommendations made herein be approved.

1. Approval of the December 16, 2015 Tree Board minutes

Action:

Chairperson Adams motioned to approve the minutes, Member Mattingly seconded, and the motion passed by a 5-0 vote.

2. Street Tree Plan for Highlander Estates

Discussion:

Forester Baker commented that he did not think there were enough trees for the City of Mequon Policy Manual for Tree Protection and Preservation to be applicable. The developer stated that he did not think it was necessary to plant trees inside the cul du sac. Forester Baker and the Members agreed.

Member Mattingly asked the developer to limit the use of Crimson King Maple due to the conditions of the soil. There were concerns over the amount of the same species on the road, and the Committee would like to see it lowered. The developer will bring back an updated plan to the Committee with the changes. Members Mattingly and Bangs offered their help.

The owner discussed planting trees in the subdivision when the houses are sold, the landscaping of the homes, and committing monies in an escrow account for trees. Forester Baker commented that this was a Planning Commission policy, and the members agreed to discuss this at a future meeting.

3. New Business

Discussion:

Members would like to discuss the tree list and policy. Members Mattingly and Bangs presented a street tree list that would recommend tree species according to different soil types.

4. Adjourn

Chairperson Adams motioned to approve the meeting at 11:15 a.m., Member Krause seconded the motion, and it passed by a 5-0 vote.

Respectfully submitted,

MEQUON TREE BOARD



March 03, 2016

Submitted via email to:

The City of Mequon
11333 North Cedarburg
Mequon, WI 53092

Attn: Ken Baker, City Forester

**Re: Street Tree Planting Request
Highlander Estates**

Dear Ken:

As you are aware, Neumann Companies, Inc. has submitted an updated Street Tree and Open Space plan to the Tree Board for review and approval. To follow-up on this submission, we are hereby requesting a modification in the timing of when the Street Trees would be planted in the subdivision. Matt Neumann and I spoke with Kim Tollefson and Jac Zader on this subject and they stated the initial step would be to make a request to the Tree Board. Therefore, we are submitting this request to modify the timing of planting the Street Trees for the Highlander Estates subdivision.

To clarify the scope of this request, our intent is to install other plantings and hardscape, other than Street Trees, concurrent with the subdivision construction. Construction of the monument sign at the main entrance should begin in late March and the entrance landscaping and open space landscaping will be installed after the roadways and walking pathways are completed. Our request is only to modify the Street Tree planting method and timing. We feel this modification will provide for healthier trees, less damage and stress on the trees that occurs during home construction and should eliminate the need to relocate trees due to conflicts with driveways.

Our proposal is as outlined below:

- Install Street Trees twice a year; once in the spring (late April) and a second planting in the fall (late September)
- Plantings would occur for each home site that has an installed driveway
- The landscape contractor and Neumann Companies will coordinate with the City Forester prior to installation so that proper inspections can occur
- Any modifications to the planting locations will be as approved by the City Forester at the time of planting; the overall quantity of Street Trees will not change
- If after three (3) years from the recording of the final plat there are Street Trees that are not installed, we will install the balance of the street trees at the spring or fall planting period immediately after this 3-year period



- Neumann Companies will place a Letter of Credit or cash bond with the City in an amount that will insure adequate funds are available for installation of the Street Trees should we fail to fulfill our obligations
- A reduction in the 25% guarantee amount will not be requested more than once a year
- The 14-month guarantee period will be tracked by Neumann Companies on a lot-by-lot basis; Neumann Companies will update the spreadsheet twice a year based on the planting periods and will provide a copy to the City upon each update
- The obligation to install the Street Trees will remain with the Developer and will not be a responsibility of the builders or home owners

We have discussed this planting strategy with landscapers and home builders and the feedback is that this process will improve the overall tree health, eliminate the burden on builders for protecting the trees during construction, keep the need for City inspections to a minimum and greatly reduce the burden of trying to plant and maintain an entire subdivision of new Street Trees in a single planting.

I look forward to discussing this request with the Tree Board at our meeting in March. Feel free to contact me with any questions you may have on this proposal.

Sincerely,

A handwritten signature in black ink, appearing to read "Kevin Anderson", written over a light blue horizontal line.

Kevin Anderson
kevin@neumanncompanies.com
262-825-8068 (cell)

Cc: Kim Tollefson
Jac Zader



DEVELOPED BY
NEUMANN
 CONSULTANTS
 NEUMANN CONSULTANTS, INC.
 1400 W. HILL STREET
 HOVELAND, WI 53072



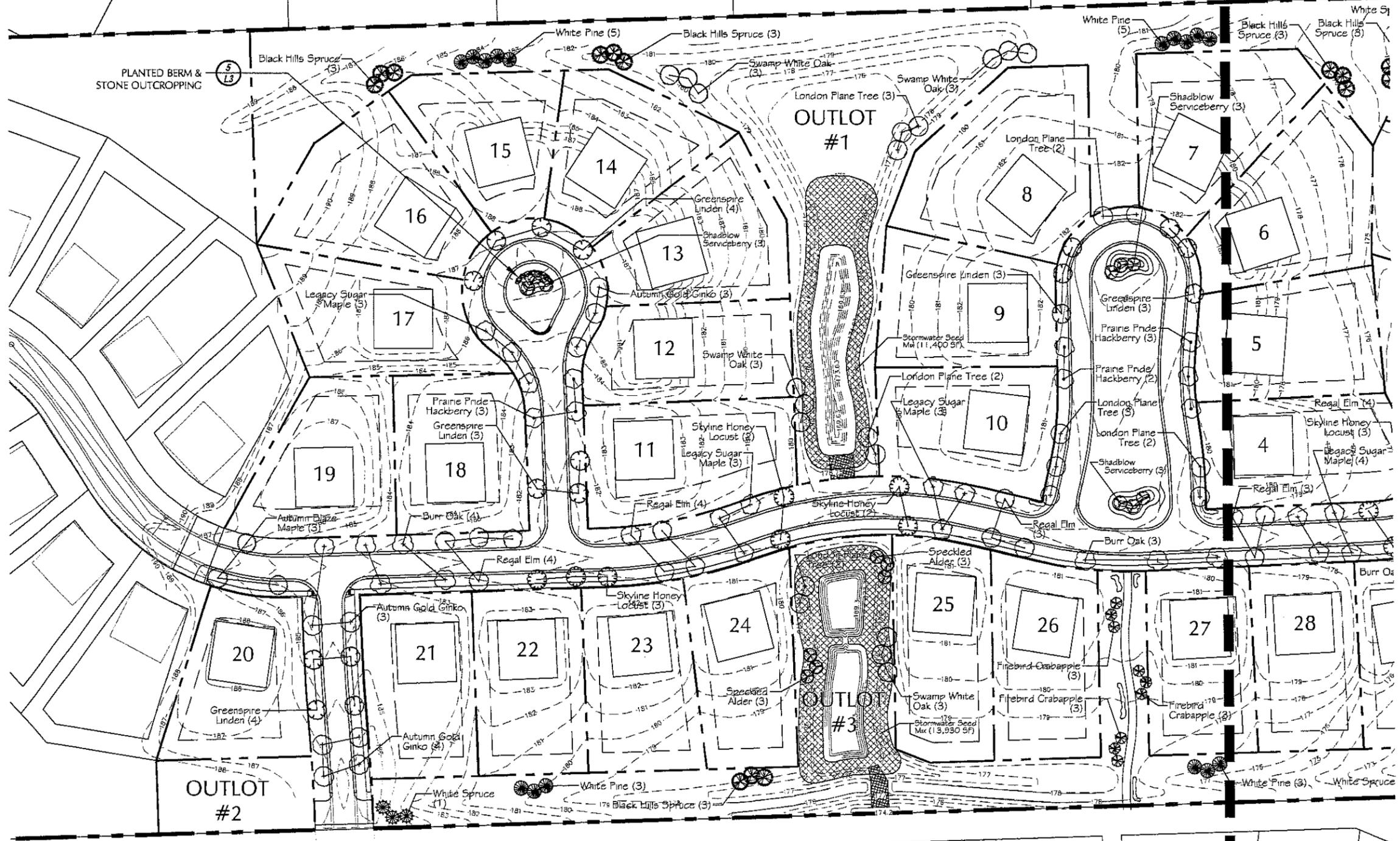
THE HIGHLANDER ESTATES
 MEQUON, WISCONSIN
 PLANNED SINGLE FAMILY
 RESIDENTIAL CLUSTER DEVELOPMENT

REV.	DATE	COMMENTS
1	11/11/15	REVISED
2	02/19/16	REVISED

SCALE: 1:50
 DESIGNED BY: NP
 DRAWN BY: DF
 CHECKED BY: NP
 DATE: 09/22/15

L-1

MATCHLINE -- L-1
 MATCHLINE -- L-2



1 WEST LANDSCAPE PLAN:
 SCALE: 1" = 50'-0"

* REFER TO SHEET L-2
 FOR PLANT SCHEDULE

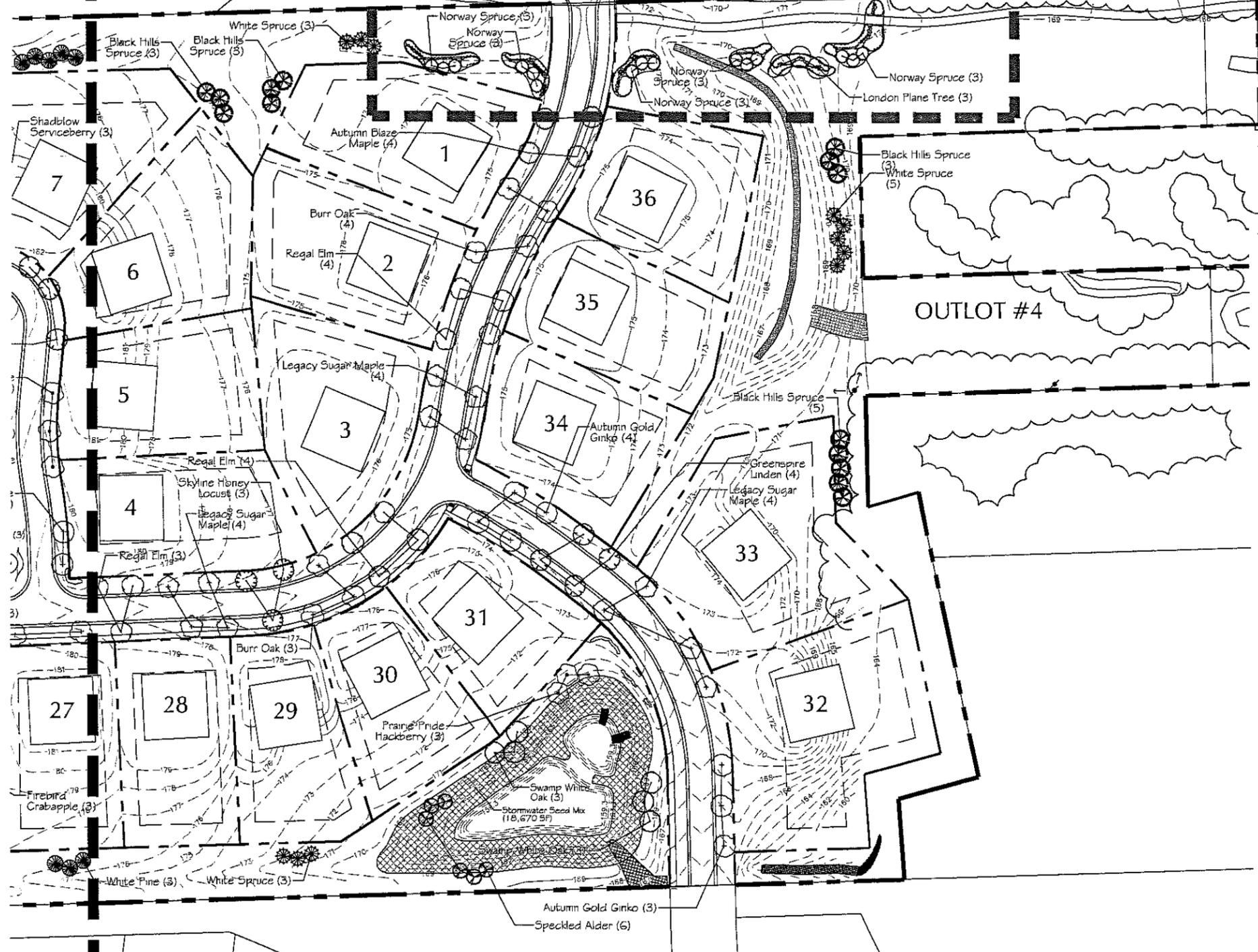
MATCHLINE -- L-1
MATCHLINE -- L-2

SEE "MAIN ENTRY ENLARGEMENT" ON SHEET L-3

KNIGHTSBRIDGE DRIVE

WAUWATOSA ROAD

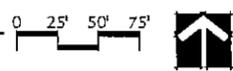
NOTES:
ALL TREE SPECIES ARE IN ACCORDANCE WITH THE VILLAGE OF MEQUON TREE BOARD'S SUGGESTED SPECIES.
STREET TREE SPACING VARIES BUT OCCURS ON AN AVERAGE DISTANCE OF 35'-0" ON-CENTER.
TREES HAVE BEEN PLACED TO AVOID ANTICIPATED DRIVEWAY ACCESS TO EACH LOT.



PLANT SCHEDULE:

STREET TREES:	QTY:	COMMON NAME / BOTANICAL NAME:	SIZE:
	7	Autumn Blaze Maple / <i>Acer freemanii</i> 'Autumn Blaze'	3" cal.
	21	Legacy Sugar Maple / <i>Acer saccharum</i> 'Legacy'	3" cal.
	11	Prairie Pride Hackberry / <i>Celtis occidentalis</i> 'Prairie Pride'	3" cal.
	17	Autumn Gold Ginkgo / <i>Ginkgo biloba</i> 'Autumn Gold'	3" cal.
	10	Skyline Honey Locust / <i>Gleditsia triacanthos inermis</i> 'Skyline'	3" cal.
	17	London Plane Tree / <i>Platanus x acerifolia</i>	3" cal.
	18	Swamp White Oak / <i>Quercus bicolor</i>	3" cal.
	14	Burr Oak / <i>Quercus macrocarpa</i>	3" cal.
	21	Greenaspire Linden / <i>Tilia cordata</i> 'Greenaspire'	3" cal.
	22	Regal Elm / <i>Ulmus carpinifolia</i> 'Regal'	3" cal.
	15	Norway Spruce / <i>Picea abies</i>	6' ht.
	14	White Spruce / <i>Picea glauca</i>	12' ht.
	23	Black Hills Spruce / <i>Picea glauca</i> 'Densata'	12' ht.
	18	White Pine / <i>Pinus strobus</i>	12' ht.
	12	Speckled Alder / <i>Alnus incana</i>	10' ht.
	9	Shadblow Serviceberry / <i>Amelanchier canadensis</i>	6' ht.
	9	Firebird Crabapple / <i>Malus sargenti</i> 'Firebird'	12' ht.
	369	Summer Beauty Allium / <i>Allium x 'Summer Beauty'</i>	1st 12" o.c.
	385	Feather Reed Grass / <i>Celestinegralis x acutiflora</i> 'Karl Foerster'	3 gal 24" o.c.
	97	Stella de Oro Daylily / <i>Hemerocallis x 'Stella de Oro'</i>	1st 12" o.c.
	213	Walker's Low Calamintha / <i>Nepeta racemosa</i> 'Walker's Low'	2 gal 24" o.c.
	44,000 of (1.01 AC)	Classen Stormwater Seed Mix:	170 lbs / Acre
		33% Spring Oats	51.51 lbs
		24% Alfa-Kenucky 31 Tall Fescue	41.21 lbs
		19% Fats Pucinnellia Oats	32.72 lbs
		13% Perennial Ryegrass	22.42 lbs
		7% Side Oats Grama	12.12 lbs
		4% Alfalfa Clover	6.57 lbs
		3% Little Blue Stem	771.70 lbs

1 EAST LANDSCAPE PLAN:
SCALE: 1" = 50'-0"



DEVELOPED BY:
NEUMANN
CORPORATION
MEQUON, WISCONSIN

teska
associates
627 Grove Street
Evanston, Illinois
50201-4474

THE HIGHLANDER ESTATES
MEQUON, WISCONSIN
PLANNED SINGLE FAMILY
RESIDENTIAL CLUSTER DEVELOPMENT

REV.	DATE	COMMENTS
1	11/11/15	REVISED
2	02/19/16	REVISED

SCALE: 1:50
DESIGNED BY: NP
DRAWN BY: DF
CHECKED BY: NP
DATE: 09/22/15

L-2



DEVELOPED BY:
NEUMANN
 LANDSCAPE ARCHITECTS INC.
 NEUMANN LANDSCAPE ARCHITECTS INC.
 627 GROVE STREET
 EVANSTON, ILLINOIS
 60201-4474

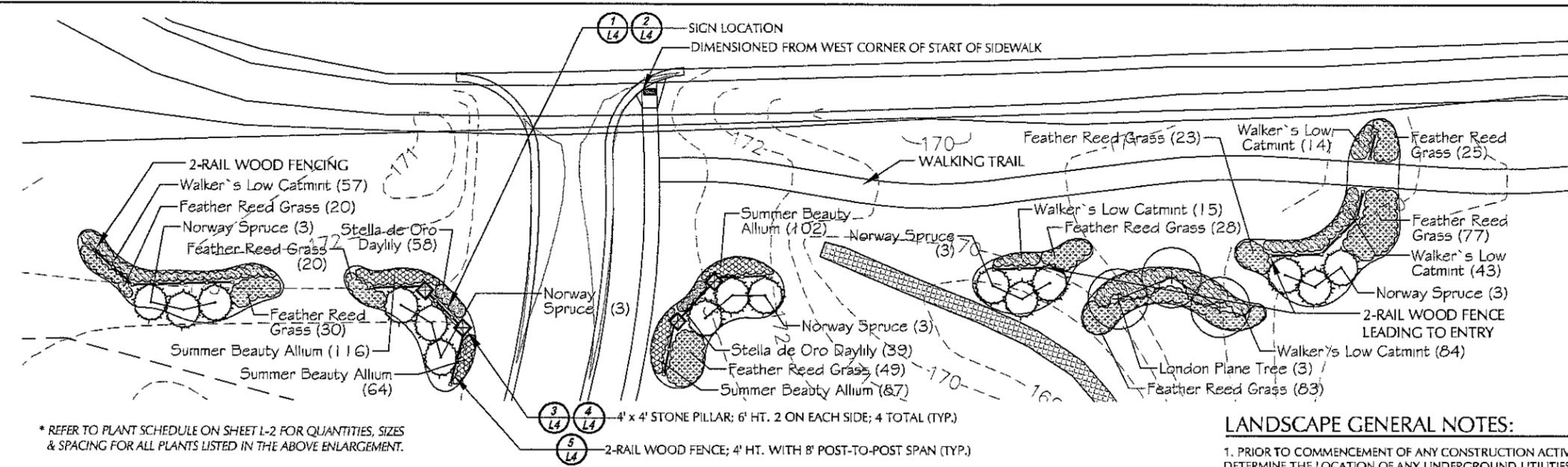


THE HIGHLANDER ESTATES
 MEQUON, WISCONSIN
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 RESIDENTIAL CLUSTER DEVELOPMENT

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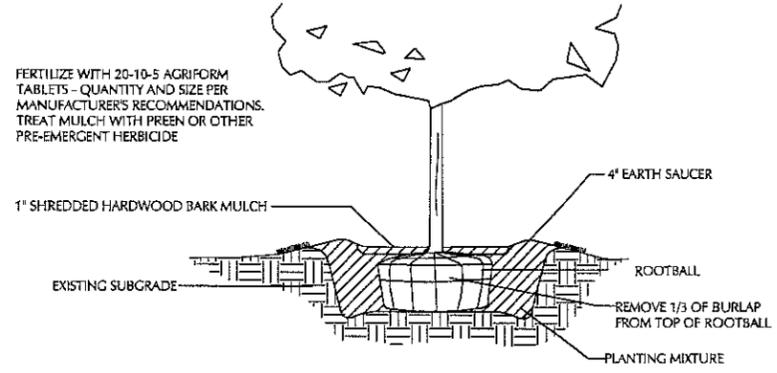
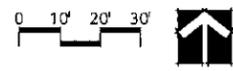
SCALE:	VARIABLES
DESIGNED BY:	NP
DRAWN BY:	DF
CHECKED BY:	NP
DATE:	09/22/15

SHEET:
L-3

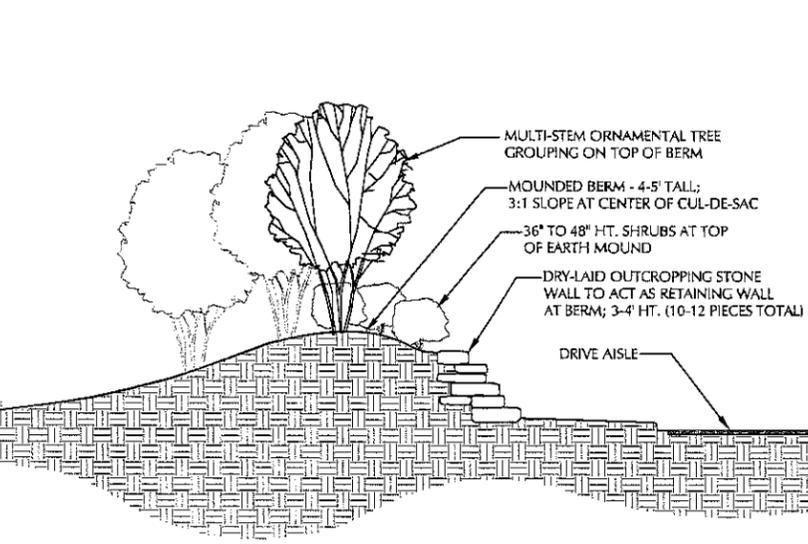


* REFER TO PLANT SCHEDULE ON SHEET L-2 FOR QUANTITIES, SIZES & SPACING FOR ALL PLANTS LISTED IN THE ABOVE ENLARGEMENT.

1 MAIN ENTRY ENLARGEMENT:
 SCALE: 1" = 20'-0"

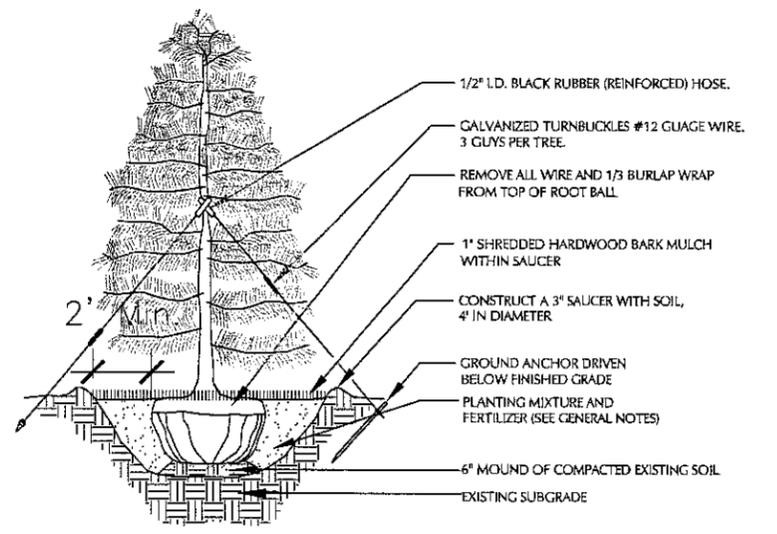


4 DECIDUOUS TREE PLANTING DETAIL:
 NOT TO SCALE



5 PLANTED BERM & OUTCROPPING SECTION:
 NOT TO SCALE

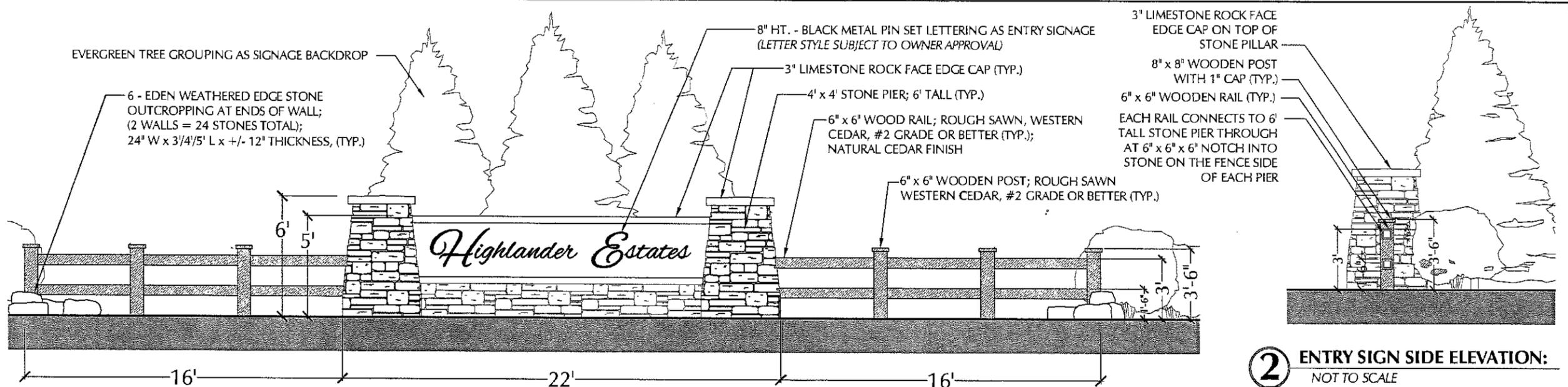
2 DECIDUOUS TREE PLANTING DETAIL:
 NOT TO SCALE



3 EVERGREEN TREE PLANTING DETAIL:
 NOT TO SCALE

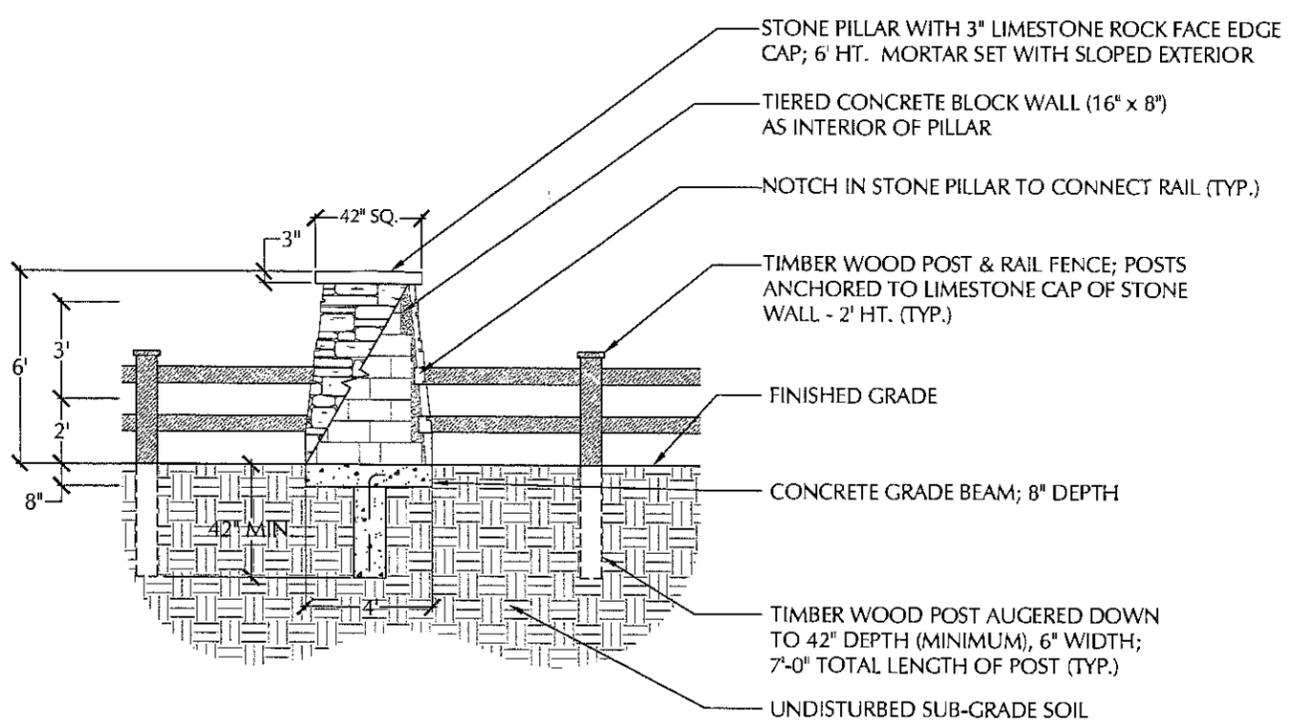
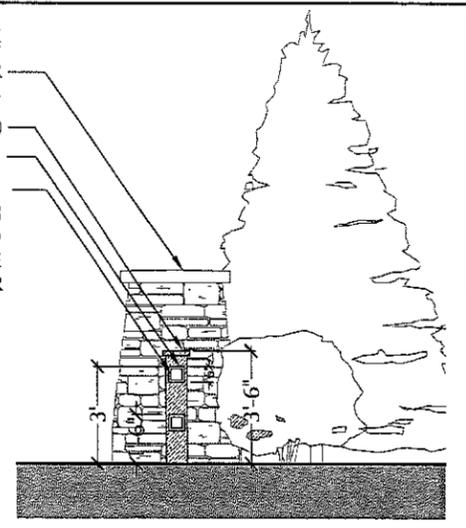
LANDSCAPE GENERAL NOTES:

- PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES, CONTRACTOR SHALL NOTIFY J.U.L.I.E. TO DETERMINE THE LOCATION OF ANY UNDERGROUND UTILITIES, WHICH MAY AFFECT PROPOSED SITE WORK. CONTRACTOR SHALL NOTIFY THE OWNER/LANDSCAPE ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES, OBSTACLES AND/OR PROBLEMS.
- VERIFICATION OF DIMENSIONS AND GRADES, BOTH EXISTING AND PROPOSED, SHALL BE THE CONTRACTOR'S RESPONSIBILITY PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR SHALL NOTIFY THE OWNER/LANDSCAPE ARCHITECT OF ANY DISCREPANCIES.
- ALL SURFACE DRAINAGE SHALL BE DIRECTED AWAY FROM STRUCTURES. SURFACE DRAINAGE SHALL BE DIRECTED TO EXISTING CATCH BASINS DESIGNATED FOR THE COLLECTION OF SURFACE RUN-OFF.
- PLANT MATERIAL SIZES SHOWN ON PLANT SCHEDULE ARE MINIMUM ACCEPTABLE SIZES. ALL PLANT MATERIAL SHALL BE OF SPECIMEN QUALITY. NO 'PARK GRADE' MATERIAL WILL BE ACCEPTED.
- ALL PLANT MATERIAL SHALL BE OBTAINED FROM AN APPROVED SOUTHEASTERN WISCONSIN NURSERY WITH HEAVY CLAY SOILS.
- ALL PLANT MATERIAL SHALL CONFORM TO AMERICAN STANDARD FOR NURSERY STOCK AS SPONSORED BY THE AMERICAN ASSOCIATION OF NURSERYMEN AND APPROVED BY THE AMERICAN NATIONAL STANDARDS INSTITUTE, INC. (ANSI).
- IF SPECIFIED SPECIES AND/OR QUALITY OF PLANTS ARE NOT AVAILABLE AT THE TIME OF ORDERING, THE LANDSCAPE ARCHITECT, AT HIS/HER DISCRETION, MAY SUBSTITUTE SIMILAR PLANTS WITH THE SAME WHOLESALE VALUE.
- ALL PLANTS TO BE BALLED IN BURLAP (B&B) OR CONTAINER GROWN (CG) AS SPECIFIED IN PLANT SCHEDULE. ALL NYLON/PLASTIC ROOT WRAPPING MATERIAL AND METAL WIRE BASKETS SHALL BE REMOVED.
- SOIL TO BE USED FOR THE PLANTING MEDIUM FOR THE PROJECT SHALL BE FERTILE, WELL-DRAINED, OF UNIFORM QUALITY, FREE OF STONES OVER 1" IN DIAMETER, STICKS, OILS, CHEMICALS, PLASTER, CONCRETE AND OTHER DELETERIOUS MATERIAL.
- ALL LANDSCAPE MATERIALS SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE CITY CODES AND ORDINANCES.
- ALL LANDSCAPE MATERIALS SHALL BE INSTALLED IN CONFORMANCE WITH THE ACCEPTED INDUSTRY'S STANDARD 'BEST PRACTICE' TECHNIQUES AS IDENTIFIED BY THE WISCONSIN LANDSCAPE CONTRACTORS ASSOCIATION (WLCA).
- THE OWNER AND/OR LANDSCAPE ARCHITECT RESERVES THE RIGHT TO REJECT ANY PLANT MATERIAL IN POOR CONDITION/ FORM OR NOT INSTALLED ACCORDING TO 'BEST PRACTICE' TECHNIQUES.
- THE LANDSCAPE CONTRACTOR SHALL PREPARE PLANTING BEDS BY ADDING SOIL AMENDMENTS TO TOPSOIL MIX IN THE FOLLOWING QUANTITIES: TOPSOIL MIX FOR TREES & SHRUBS SHALL BE THREE (3) PARTS TOPSOIL, ONE (1) PART PEAT, AND ONE (1) PART SAND. TOPSOIL MIX FOR PERENNIALS & GROUNDCOVER SHALL BE THREE (3) PARTS TOPSOIL, ONE (1) PART SAND, AND TWO (2) PARTS COMPOST.
- ALL TREES, SHRUBS AND GROUNDCOVER TO RECEIVE 1" OF SHREDDED HARDWOOD MULCH.
- CONTRACTOR SHALL WATER PLANTS IMMEDIATELY AFTER PLANTING. FLOOD PLANTS TWICE DURING FIRST TWENTY-FOUR HOURS AFTER PLANTING. ALL PLANTS ARE TO BE REGULARLY WATERED UNTIL THE FALL SEASON; CONTRACTOR SHALL PROVIDE AN ESTIMATED MONTHLY COST OF WATERING DURING THIS DURATION.
- ALL ROAD AND WALK SURFACES SHALL BE KEPT CLEAR OF MUD AND DEBRIS AT ALL TIMES.
- CONTRACTOR SHALL REPAIR IN KIND ANY AREAS DAMAGED AS A RESULT OF LANDSCAPE OPERATIONS.
- GUARANTEE SPECIFICATIONS ARE AS FOLLOWS: THE CONTRACTOR SHALL PROVIDE THE OWNER WITH A BONDED WRITTEN ONE-YEAR WARRANTY AGREEMENT BEGINNING ON THE FIRST DAY OF THE OWNERS' POSSESSION. THIS AGREEMENT SHALL PROVIDE FOR THE REPLACEMENT OF DEAD OR DYING PLANT MATERIAL. THE CONTRACTOR SHALL PROVIDE THE OWNER WITH A TYPEWRITTEN LIST OF SPECIFIC MAINTENANCE INSTRUCTIONS FOR EACH TYPE OF PLANT INSTALLED WITH THE WRITTEN AGREEMENT AND BOND.
- CITY FORESTER SHALL BE REQUIRED TO RECEIVE NOTIFICATION PRIOR TO THE INSTALLATION OF ANY OR ALL STREET TREES AND IS TO BE PRESENT ON-SITE DURING INSTALLATION TO CONDUCT PROPER INSPECTION.

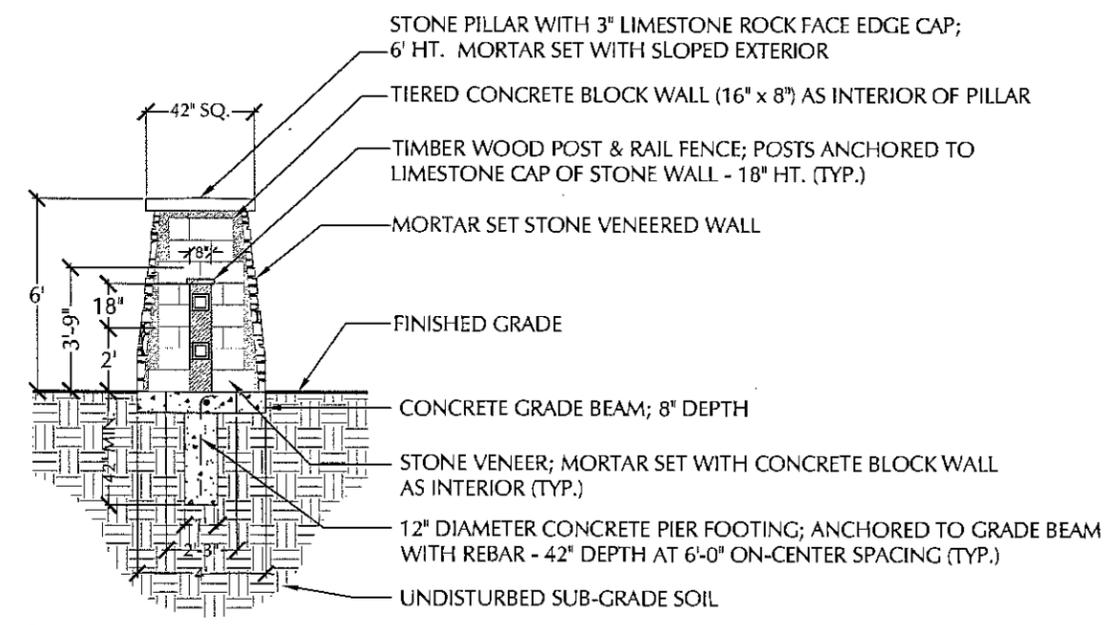


1 ENTRY SIGN FRONT ELEVATION:
NOT TO SCALE

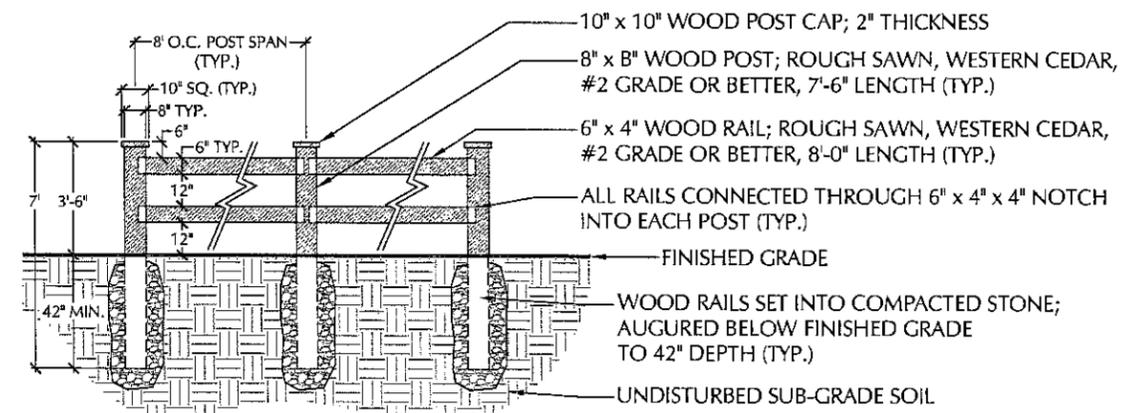
2 ENTRY SIGN SIDE ELEVATION:
NOT TO SCALE



3 STONE PILLAR & WALL FRONT SECTION:
NOT TO SCALE



4 STONE PILLAR & WALL SIDE SECTION:
NOT TO SCALE



5 WOOD FENCE SECTION:
NOT TO SCALE

STONE OUTCROPPING:
*AT MAIN ENTRY, WITHIN RIGHT-OF-WAY AT CONNECTION POINTS, & MOUNDED BERM AT END OF CUL-DE-SAC

LURVEY'S SUPPLY 'EDEN WEATHERED EDGE':

- 220 LF; STACKED 2-3' TALL (MAX.);
- STONES TYPICALLY SIZED: 24" W x 3 1/4' L

WOOD FENCE MATERIALS:
* POSTS & RAILS TO BE RAW SAWN, WESTERN RED CEDAR, #2 GRADE OR BETTER

POSTS (30 TOTAL):
12 - 8" x 8"; 7'-0" HT.; TO BE USED AT ENTRY; TO BE NOTCHED INTO STONE PIER AT ENTRY
18 - 8" x 8"; 7'-0" HT.; TO BE USED AS STAND-ALONG FENCING; 4' HT. ABOVE GRADE; AUGURED DOWN TO 42" DEPTH

RAILS (320 LF TOTAL):
6" x 6" (x 8' SUGGESTED LENGTH) 40 RAILS AT 8' LENGTH (= 320 FT.)

CAPS: 30 TOTAL - 2" SQUARE AT 1" THICKNESS; TO BE ANCHORED TO TOP OF ALL POSTS



THE HIGHLANDER ESTATES
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PLANNED SINGLE FAMILY
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SCALE: VARIES
DESIGNED BY: NP
DRAWN BY: DF
CHECKED BY: NP
DATE: 09/22/15

SHEET:
L-4

DON'S COPY
11 24 16

OZAUKEE COUNTY LAND AND WATER MANAGEMENT DEPARTMENT 20160327

TREE, SHRUB, AND PRAIRIE GRASS & WILDFLOWER SEED ORDER FORM

<http://www.co.ozaukee.wi.us/LandWaterManagement/Index.htm>

EVERGREENS	Price Per 25		# Bundles	Total \$ Amt		Size	Age Yr
BALSAM FIR	\$30.00	x	=			12-16"	2-3
NORWAY SPRUCE	\$22.00	x	7	154.00		7-15"	2-2
WHITE CEDAR	\$27.00	x	=			12-16"	2-3
WHITE PINE	\$23.00	x	=			7-15"	2-2
WHITE SPRUCE	\$23.00	x	7	161.00		7-15"	2-2
DECIDUOUS TREES							
AMERICAN BEECH	\$36.00	x	7	252.00		18-24"	2-0
BIGTOOTH ASPEN	\$34.00	x	=			18-24"	1-0
BLACK CHERRY	\$27.00	x	=			2-3'	1-0
BUR OAK	\$25.00	x	7	175.00		18-24"	1-0
HACKBERRY	\$29.00	x	=	203.00		2-3'	1-0
NORTHERN RED OAK	\$29.00	x	=			2-3'	1-0
PAPER BIRCH	\$29.00	x	=			2-3'	1-0
QUAKING ASPEN	\$33.00	x	7	231.00		18-24"	1-0
RED MAPLE	\$29.00	x	=			2-3'	1-0
RIVER BIRCH	\$29.00	x	=			2-3'	1-0
SHAGBARK HICKORY	\$43.00	x	=			12-18"	2-0
SILVER MAPLE	\$28.00	x	=			2-3'	1-0
SUGAR MAPLE	\$32.00	x	=			18-24"	2-0
SWAMP WHITE OAK	\$25.00	x	=			18-24"	1-0
TAMARACK	\$29.00	x	=			18-30"	3-0
WHITE OAK	\$25.00	x	=			18-24"	1-0
WILDLIFE SHRUBS							
AMERICAN ELDERBERRY	\$27.00	x	2	54.00		2-3'	1-0
GRAY DOGWOOD	\$23.00	x	=			18-24"	1-0
HAZELNUT	\$31.00	x	=			2-3'	1-0
HIGHBUSH CRANBERRY	\$27.00	x	=			18-24"	1-0
NANNYBERRY	\$27.00	x	=			18-24"	1-0
SERVICEBERRY	\$23.00	x	=			18-24"	1-0

VARIETY PACKS	Price per 25		# Bundles	Total \$ Amt
URBAN PACKET- 5 Each: Highbush Cranberry, Paper Birch, White Spruce, White Pine, Gray Dogwood	\$28.00	x		
WILDLIFE PACKET- 5 Each: White Cedar, Nannyberry, Hazelnut, White Spruce, Bur Oak	\$28.00	x		

SUBTOTAL of Trees and Shrubs Ordered (tax is included) \$

PRAIRIE GRASS AND WILDFLOWER SEED

	PRAIRIE GRASS & WILDFLOWER SEED	.25 acre coverage	# pkts	.50 acre coverage	# pkts	1.0 acre coverage	# pkts	Total # Seed Packets	Total \$ Amt
1	Low Prairie Super Diversity Mix	\$375.00		\$535.00		\$1210.00			
2	Tall Prairie Super Diversity Mix	\$325.00		\$560.00		\$1045.00			
3	Wet Prairie Mix	\$190.00		\$310.00		\$575.00			
4	Premium Nesting Cover	\$190.00		\$290.00		\$550.00			
5	Mesic Mix II (Moderate Soil Moisture)	\$70.00		\$110.00		\$200.00			
6	Wildflower Enhancement Mix	\$50.00		\$80.00		\$140.00			

SUBTOTAL of Seed Packets Ordered (tax is included) \$

PROGRAM EXTRAS

	Price Each		# Ordered	Total \$ Amt
BLUEBIRD HOUSE (Peterson Style)	\$25.00	x	=	
BLUEBIRD HOUSE (NABS Style)	\$15.00	x	=	
RAIN BARREL	\$50.00	x	=	

SUBTOTAL of Program Extras (tax is included) \$

GRAND TOTAL - ALL PURCHASES \$ \$1,230.00



**Order Deadline:
February 29, 2016**

All requests for trees, shrubs, and prairie grass & wildflower seed **must** adhere to the terms below.

Order trees and shrubs in multiples of 25. Orders of fewer than 25 of a single species **will not be accepted**. Delivery date is approximately mid-April. You will be notified by postcard.

Any order not picked up on the specified delivery date will be disposed of...stock is perishable. No refunds.

Payment in full must accompany order.

Please make checks payable to
OZAUKEE COUNTY
Mail with the order form to
Ozaukee County
LWM Dept.
P.O. Box 994
Port Washington, WI
53074-0994



NABS Style

COMMON COUNCIL

OF THE

CITY OF MEQUON

AN ORDINANCE NO. 93-789

To Create Section 4.52 of the Mequon Code of Ordinances

THE COMMON COUNCIL OF THE CITY OF MEQUON DO ORDAIN AS FOLLOWS:

SECTION I. Section 4.52 of the Mequon Code of Ordinances is hereby created to read as follows:

(1) PURPOSE AND INTENT

1. Trees and woodlands help to reduce storm water runoff and erosion, replenish ground water supplies, preserve and enhance nesting areas for birds and other wildlife which in turn assist in the control of insects, provide wildlife habitats, ameliorate air pollution, enhance and preserve air quality, assist in maintaining symbiotic relationships between plants and animals, moderate climate, reduce noise and glare, protect and increase property values and provide people with the opportunities for scientific, educational and recreational pursuits;
2. A substantial part of pre-settlement Mequon consisted of Southern Mesic Forest ("Old Growth Forest"). Most Old Growth Forest has been destroyed and the portions of Old Growth Forest which remain are now part of a disappearing ecosystem. Preservation is essential, because regeneration of forest of this caliber can take 150 years, provided that conditions exist within which the forest was originally formed;
3. It is declared a matter of public policy that preservation of intact remnants of Old Growth Forest and preservation and/or replacement of trees during the land development/building construction process in the City of Mequon is a public benefit and is desired in the interest of preserving the health, safety, welfare and prosperity of the people;
4. While allowing for the reasonable improvement of land within the City of Mequon, it is the intent of this ordinance to provide for the preservation of Old Growth Forest and to provide standards for the preservation/replacement of other trees and woodlands in the City of Mequon, as an important public resource enhancing the quality of life and the general welfare of the City, in furtherance of this policy.

43-789

(2) DEFINITIONS.

All words in this ordinance shall have their customary dictionary definition except as specifically defined herein. The words "shall" and "must" are mandatory, and the words "may" and "should" are permissive.

Lot: A portion of platted territory measured, set apart, and subdivided as a distinct parcel having its principal frontage upon a street and shown upon a plat or subdivision or a resubdivision approved by the Mayor and Common Council of the City of Mequon.

Building Activity Area: That buildable area of a lot in which construction and building activities are to be limited and hence shall be the smallest possible area of a lot or parcel of land within which building activity may take place, including the entire area affected by building and grading activities related to the proposed construction, to be determined with maximum regard for existing mature trees; excepting therefrom any flood plain, wetland, conservancy or similarly designated unbuildable lands.

Professional Forester: A recognized and qualified professional in the field of forestry, botany, horticulture or arboriculture retained by the City of Mequon for the purpose of administration and enforcement of the Tree Preservation Ordinance.

Landscape Plan: A plan which identifies the Building Activity Area, limits of land disturbance, an inventory of existing plant material within the Protected Zone, areas of tree preservation and methods of tree protection within the Protected Zone of the development site, as well as all areas of (re)planting. Within the (re)planting areas, the common and botanical names of the proposed species, the number of plants of each species, the size of all plant materials, the proposed location of all plant materials, and any unique features of the plant materials shall be indicated. The landscape plan shall be a scaled drawing at not less than 1" = 20'.

Protected (Protective) Zone: All lands in the City of Mequon, including but not limited to those that fall outside of the Building Activity Area of a lot, all areas of the lot required to remain in open space and all areas required as landscaping strips according to provisions of the City of Mequon zoning code, or conditions of zoning/site plan approval. The protected zone shall include the required offset, setback and other designated unbuildable areas such as wetland, woodlands, flood plain and conservancy areas within the City of Mequon.

Tree: Any self supporting woody plant having a well-defined stem, a more or less well-defined crown and which has attained a height of at least eight feet with a trunk of not less than three (3) inches diameter at breast height (DBH), or a cluster of main stems having an aggregate diameter of not less than three (3) inches DBH, (measured at a point four and one-half (4 1/2) feet above the ground). Containerized Trees and nursery stock Trees kept for resale in licensed commercial nurseries are exempt from the provisions of this ordinance.

Specimen Tree(s) or stand: Any tree or grouping of trees which has been determined to be of a high value by a Professional Forester because of its species, size, age, historic significance or other professional criteria and has been so designated in the administrative guidelines promulgated and published by the Department of Community Development.

(3) APPLICABILITY.

Except as otherwise noted herein, the terms of this ordinance shall apply to any land disturbing activity conducted within the City of Mequon for which a permit is required pursuant to Section 4.085(6) of the zoning code including without limitation such activity within a primary environmental corridor¹, secondary environmental corridor², or isolated natural areas, but excluding existing platted lots, except the removal of specimen trees from such existing platted lots. No land disturbance permit or control plan approval shall be granted by the City Engineer and/or City Building Inspector under Section 4.085(6) of the zoning code without prior notification from the Department of Community Development that the proposed land disturbance/development project is in conformance with the provisions of this ordinance. Provisions of this ordinance shall not apply to those projects initiated by the City, as determined by the Common Council on a case by case basis, where the public good and/or health and welfare are at stake (i.e. installation of sanitary sewer, public roads and/or drainage improvements).

(4) PERMIT PROCEDURE:

- (a) Where any part or all of the land proposed to be disturbed (as evidenced in an application pursuant to Section 4.085(6) of the zoning code) is situated within the area described in Section (3) above, a Landscape Plan and all other documentation as required below shall be submitted to the Department of Community Development.

¹ As designated by the Southeastern Wisconsin Regional Planning Commission (SEWRPC) on a map entitled "Mequon-Thiensville Sanitary Sewer Service Area - Map 5, dated September 1980.

² Ibid

- (b) Each Landscape Plan shall be reviewed by the Department of Community Development and the Professional Forester for conformance to the provisions of the Ordinance and either approved, returned for revisions, or denied within 30 days of receipt. If denied, the reasons for denial shall be annotated on the landscaping plan or otherwise stated in writing. The Professional Forester chosen by the City of Mequon Department of Community Development to review plans, administer and enforce this Ordinance on a case-by-case basis shall bill the City his/her costs (if any) for such service on an hourly basis. Such costs shall, in turn, be reimbursed to the City of Mequon by the land disturbance permit applicant(s) prior to issuance thereof.
- (c) Issuance of the land disturbance permit shall constitute an approval of the required Landscape Plan in accordance with the regulations of this Ordinance.

(5) REMOVAL OF TREES AND REPLACEMENT LANDSCAPING.

- (a) Trees are not to be removed in any Protected Zone except as provided in this section (5) of this ordinance. Documentation requesting removal shall be submitted to the Planning Commission or Architectural Board as part of the application for a land disturbance permit.
- (b) When no trees are present in the Protected Zone or when it is proposed that any portion of the Protected Zone be disturbed, it shall be the responsibility of the owner/developer to landscape said areas (where improvements are not constructed), with trees or other plant materials subject to zoning regulations or, in lieu thereof, administrative standards established by the Department of Community Development.
- (c) Notwithstanding any of the other requirements of this ordinance, it shall be unlawful to remove, injure, destroy, or undertake any procedure the result of which is to cause the death or substantial destruction of any Specimen tree without the express written permission of the Professional Forester or his representative. Administrative Standards shall be promulgated and published by the Department of Community Development working with Professional Forester for the identification, preservation and protection of Specimen trees.
- (d) Authorization for the removal of a Tree may be granted for the following reasons:
 - 1. The tree is dead or dying; or
 - 2. The tree is diseased; or

3. The tree is damaged or injured to the extent that it is likely to die or become diseased; or
 4. Removal of the tree is consistent with good forestry practice and will enhance the health of remaining trees within the immediate vicinity; and/or
 5. In furtherance of the purpose and intent of this ordinance, where removal will avoid or alleviate an unreasonable economic hardship. That removal of trees will allow greater building density or a larger number of lots on a proposed building site or development does not constitute unreasonable economic hardship.
- (e) The owner/developer shall replace, in accordance with the administrative guidelines published and promulgated by the Department of Community Development, a tree so removed in each of the following instances:
1. In the event the removal of the tree is authorized to avoid or alleviate an economic hardship;
 2. In the event a tree is damaged or injured by other than natural causes to the extent that it is likely to die or become diseased, or it constitutes a hazard to persons or property.

The owner/developer may not be required to replace the tree, if the Professional Forester determines that removal of the tree is consistent with good forestry practice, or in the event the removal of such tree will enhance the health of remaining trees within the immediate vicinity.

(6) TREE BOARD

The Mayor shall appoint a Tree Board consisting of five (5) citizen members. Recommendations for the board members shall be submitted to the Mayor by the Recreational and Open Space Citizen's Advisory Committee. Board members shall be confirmed by the Common Council. The Tree Board shall:

- a) Assist in evaluating needs, in setting goals, and in determining the achievement of the policies and goals of this ordinance;
- b) Provide leadership in the development of the understanding of the objectives and methods of tree protection and preservation, and in the planting of trees in the City of Mequon;
- c) Promote public education and awareness;

- d) Assist and confer with the Professional Forester on the implementation of this ordinance; and
- e) Assist the Department of Community Development in the development and maintenance of the administrative guidelines to be promulgated and published as part of this ordinance.

Terms of the Tree Board members shall be of three years starting on the first day of May in the year of adoption of this ordinance.

(7) ENFORCEMENT.

It shall be the duty of the Department of Community Development or its authorized representative to enforce this Ordinance. The Department of Community Development or authorized representative shall have the authority to revoke, suspend or void any land disturbance permit and shall have the authority to suspend all work on a site or portion thereof for violation of this Ordinance.

(8) VIOLATIONS AND PENALTY.

Any person, firm or corporation violating any of the provisions of this Ordinance may be subject to a forfeiture of not less than \$500.00 per violation together with the costs of such action. Each day during which any violation of the provisions of this ordinance shall occur or continue shall be a separate offense. If, as a result of the violation of any provision of this ordinance, the injury, mutilation, or death of a tree, shrub, or other plant is caused, the cost of repair or replacement of such tree, shrub, or other plant shall be borne by the party in violation. The replacement value of trees and shrubs shall be determined in accordance with the latest revision of a *Guide to the Professional Evaluation of Landscape Trees, Specimen Shrubs, and Evergreens*, as published by the International Society of Arboriculture.

(9) APPEAL.

Any person aggrieved or affected by any decision of the Professional Forester relating to the application of this ordinance may appeal to the City of Mequon Board of Appeals which shall have the authority to waive or modify the provisions of this ordinance where it would further the public interest and uphold the purpose of this ordinance as put forth in Section 4.52(1).

(10) SEVERABILITY.

If any section, clause, provision, or portion of this ordinance is adjudged unconstitutional or invalid by a court of competent

Sec. 58-563. - Findings.

The common council finds that:

- (1) Trees and shrubs are proven producers of oxygen, a necessary element for human survival;
- (2) Trees and shrubs appreciably reduce the ever-increasing environmentally dangerous carbon dioxide content of the air and play a vital role in purifying the air we breathe;
- (3) Trees and shrubs transpire considerable amounts of water each day and thereby purify the air much like the air-washer devices used on commercial air conditioning systems;
- (4) Trees and shrubs have an important role in neutralizing waste water passing through the ground from the surface to groundwater tables and lower aquifers;
- (5) Trees and shrubs, through their root system, stabilize the groundwater tables and play an important and effective part in soil conservation, erosion control and flood control;
- (6) Trees and shrubs are an invaluable physical, aesthetic and psychological counterpoint to the urban setting, making urban life more comfortable by providing shade and cooling the air and land, reducing noise levels and glare and breaking the monotony of human developments on the land, particularly parking areas;
- (7) Trees and shrubs have an important impact on the desirability of land and therefore on property values;
- (8) Screening between two lots lessens the transmission of noise, dust and glare from one lot to another;
- (9) Screening can lessen the visual pollution that may otherwise occur within an urbanized area. Even minimum screening can provide an impression of separation of spaces and more extensive screening can entirely shield one use from the visual assault of an adjacent use;
- (10) Screening can establish a greater sense of privacy from visual or physical intrusion, the degree of privacy varying with the intensity of the screening;
- (11) Establishing and maintaining architectural standards will tend to maintain a high character of community development and protect real estate from impairment and destruction of value;
- (12) Architectural standards will tend to prevent or minimize discordant and unsightly surroundings;
- (13) Architectural standards will protect and perpetuate a pleasant and inviting view for the enjoyment, environmental and cultural enrichment of the citizens of the community and its visitors;
- (14) Architectural standards will foster civic pride in the beauty of the community and enhance the community's aesthetic and economic vitality;
- (15) The provisions of this part are necessary to safeguard the public health, safety and welfare.

(Code 1957, § 3.14(2))

Sec. 58-564. - Landscaping, screening, berming and ponds.

- (a) *Street trees.* The developer shall provide for the planting or retention of street trees on both sides of all new roadways and, where deemed appropriate by the planning commission for aesthetic purposes, along existing roadways adjacent to the development. Such trees shall have an average

trunk dimension of three inches at a point six inches above the grade. To insure proper planting and growth, the trees shall be balled, burlapped and staked in accordance with city specifications. Such trees shall be provided at a rate of not less than one tree every 30 feet of new roadway frontage and located within the road right-of-way at a point two feet from the right-of-way line unless otherwise required by the planning commission. The species of trees shall be subject to planning commission approval and should be selected from an established list of street trees supplied by the Mequon tree board. Planting of native species shall be encouraged. The city reserves the right to retain the services of a qualified consultant to verify proper installation and health of required landscaping.

- (b) *Retention of existing trees.* See tree preservation regulations in Chapter 84 and the City of Mequon Policy Manual for Tree Protection and Preservation.
- (c) *Parking lot landscaping.* Off street parking lots with more than ten stalls shall have at least ten percent of the interior parking area landscaped. The species of landscape plantings are subject to planning commission approval, or park board approval if the landscaping is to be located within a public park or preserve.
- (d) *Parking lot shading.* Landscaping in and around parking lots shall be designed, planted and maintained so that a minimum of 30 percent of the parking area will be shaded during summer growth within ten years of planting.
- (e) *Screening.* The following requirements apply:
 - (1) Every development shall provide sufficient screening to shield adjacent properties from any adverse external effects of that development and/or to shield the development from the negative impacts of adjacent uses, streets or railroads.
 - (2) Where a non-residential or multifamily residential site adjoins a single-family residential site, a solid wall or fence, vine covered fence or compact vegetative screen not less than 4½ nor more than six feet in height, shall be located adjoining the property line except in a required front yard.
 - (3) In non-residential or multifamily residential developments a landscaping area at least 25 feet in depth between the abutting ultimate road right-of-way and parking/driveway areas will be planted with materials suitable for screening or ornamenting the site, whichever is appropriate.
 - (4) A compact landscaping hedgerow or undulating berm, not more than three feet in height, shall be located directly adjacent to commercial and multi-family residential parking and driveway areas facing public roads. Hedges shall be a minimum of two feet in height when measured immediately after planting and shall be maintained so as to form a continuous, unbroken, solid, visual screen within a maximum of one year after time of planting. This landscaping buffer is intended to screen the view of parked cars and asphalt from pedestrian and motorist view.
 - (5) Dumpsters shall be located and screened in accordance with city approval.
- (f) *Landscaping standards.* The following standards apply to commercial or multi-family residential sites.
 - (1) The undeveloped area of any commercial or multi-family residential site (exclusive of areas under roof or pavement) shall be landscaped with approved living trees, shrubs, vines, flowers, grass and ground covers and may include water bodies, crushed rock, sand, wood chips, landscaping furniture and ornamental pieces.

- (2) At least one tree and two shrubs shall be planted for each 1,000 square feet or portion thereof of the area to be landscaped. Each required tree shall have an initial caliper of no less than two inches and a height of at least seven feet.
- (3) No tree as measured from its center shall be located within five feet of a vehicular accessway, bike trail or public sidewalk or within ten feet of a street light, stop sign, fire hydrant, street sign or directional sign.
- (4) All landscaping material located within a sight distance triangle shall be two feet or less in height or have a clearance of eight feet beneath the lowest branch or projection.
- (5) No permanent impervious surfacing or sub-surfacing shall be located around the base of any tree or shrub which may impede growth of said plant.
- (6) Landscaping plans for development proposals shall be designed and stamped by a licensed landscaped architect. This requirement may be waived for minor alteration or improvement plans that, in the discretion of the department of community development, do not require the services of such a professional.

Additionally, the department of community development and/or planning commission may require the applicant to pay an additional administrative fee for the city to contract with a landscape architect to review and comment on the applicant's proposed landscape plan.

- (g) *Landscaping installation.* All landscaping shall be installed in a sound workmanship manner and according to accepted good planting procedures with quality plant materials. A qualified representative of the city shall inspect all landscaping and no certificates of occupancy or similar authorization will be issued unless the landscaping meets the requirements herein provided or the appropriate escrow is established in compliance with section 58-110 for future installation of the required landscaping.
- (h) *Landscaping maintenance.* The owner and/or agent, if any, shall be jointly and severably responsible for the maintenance of all landscaping in good condition so as to present a healthy, neat and orderly appearance that shall be kept free from refuse and debris. All landscaping areas shall be provided with a readily available water supply. The developer or property owner of an industrial, institutional, park, commercial or multi-family residential site shall promptly replace any landscaping which has died or is damaged beyond repair. The replacement planting shall be the same size and quality as in the approved landscaping plan. The site's landscaping shall be maintained perpetually in accordance with the approved landscaping plan on file in the department of community development or department of parks. The planning commission shall require the developer to establish an escrow account equal to 25 percent of the initial landscape contract cost to insure that landscaping that dies within three years of planting will be replaced by the developer. Note: This escrow amount is in addition to the escrow account required by section 58-110, and will be returned after three years.
- (i) *Berm requirements.* The construction of earth berms shall be permitted subject to the following:
 - (1) The berm shall not exceed 4½ feet in vertical height, shall be located at least ten feet from a side or rear lot line and five feet from the road right-of way. The offset requirements from a side or rear lot line may be waived in the case of the joint construction of a berm by adjacent property owners.
 - (2)

An earth berm exceeding 4½ feet in vertical height shall be permitted only after approval of the planning commission, or park board if the berm is proposed within a City owned park or preserve, as to the height and location and landscaping of the berm. Neighbors adjacent to and across the street from the proposed berm shall be notified of the proposal prior to review by the planning commission, or park board if appropriate.

- (3) All berms shall be constructed such that the width of the base of the berm shall be no less than three times the vertical height of a berm. The vertical height of a berm shall be measured from an average of the existing ground grades on either side of the berm.
 - (4) A cover growth of city approved plant material or mulching containing no noxious weeds shall be immediately established over the entire berm to prevent erosion or unsightly conditions.
 - (5) In addition to a cover growth of plant material, all berms shall have landscape plantings spaced randomly to help visually break up the continuous line of the berm. Berm and landscape plans for commercial, multi-family, condominium and subdivision development shall be approved by the planning commission. Berm plans for single-family residential lots shall be approved by the building inspector. Berm plans proposed within a city owned park or preserve shall be approved by the park board.
 - (6) If the construction of a berm requires more than 250 cubic yards of fill to be brought to the site, a filling permit shall be obtained from the city engineering department.
 - (7) Ground covers used in lieu of grass in whole or in part shall be planted in such a manner as to present a finished appearance and provide reasonably complete coverage within three months after planting.
- (j) *Pond requirements.* The construction of new ponds or enlargement of existing ponds shall be subject to the following: Note: Pond standards shall be periodically reviewed by the public safety committee to determine what, if any, amendments are necessary.
- (1) The property owner shall submit a pond plan that identifies maximum pond size, maintenance plan, pond depth, and pond overflow point for engineering department review and approval.
 - (2) A four-foot-wide safety shelf with a depth of 12 inches shall be constructed.
 - (3) The pond shall be lined with materials to avoid slippage.
 - (4) The pond shall be set back no less than 30 feet from the property line.
 - (5) The pond slope shall be no steeper than five feet horizontal to one foot vertical.

(Code 1957, § 3.14(3); Ord. No. 96-878, 5-14-1996; Ord. No. 97-910, 2-11-1997; Ord. No. 98-952, 7-14-1998; Ord. No. 2007-1202, § IV, 6-12-2007; Ord. No. 2008-1238, § I, 4-8-2008)

FORESTRY

The City of Mequon's urban forest is managed by a part time City Forester, Ken Baker (262-512-1297). Serving in a professional capacity, the City Forester selects and maintains trees for the City nursery, which will be planted on City streets and in City parks; helps builders and homeowners preserve or prevent damage to specimen trees. City of Mequon Policy for Tree Protection and Preservation Guidelines. Street Tree Approval Process and Street Tree List; provides advice to citizens and City departments regarding trees. Tree work on City land is performed by the Department of Public Works and private contractors.

The Mequon Tree Board, established in 1993, is a volunteer board, appointed by the Mayor and approved by the Common Council. The mission of the Tree Board is to advise the Common Council regarding the creation of an urban forest of high quality mature trees, and to assure tree protection and preservation in the City. City of Mequon Policy for Tree Protection and Preservation Administrative Guidelines. Street Tree Approval Process and Street Tree list.

Duties of the Tree Board:

1. Review street tree plans for residential subdivisions.
2. Planning and staffing an annual Arbor Day celebration and continuing to be a member of Tree City USA.
3. Promoting public awareness and education of the value of urban trees.
4. Giving insight into applying for Urban Forestry Grants. Past grants include:
 - a) Street Tree Inventory
 - b) Management Plan
 - c) Tree Planting Projects
 - d) Tree Maintenance Training
 - e) Mequon's Invasive Species Brochure

To: Mequon Public Welfare Committee

From: Wanda Davies; Chair Mequon Tree Board

Re: Assessment of Tree Board Role and Duties

The duties of the Tree Board as defined by the enabling ordinance is attached. The ordinance was written primarily to protect specimen trees and the old growth forests of Mequon. As the Tree Board has evolved, little of our time and attention is spent on these matters as Ken Baker, our City Forester, is generally able to make the necessary judgments in this regard.

We now place more of our efforts on street trees, of which no direct mention is made in the ordinance. The Tree Board does feel that, given the evolving nature of our responsibilities, clear mention of street tree responsibility should be in the ordinance. The only oblique mention is in duty (b) "... and in the planting of trees in the City of Mequon." and (e) "... the development and maintenance of the ... Administrative Standards...". The Administrative Guidelines are quite clear on the role of the Tree Board. In the section on "Street Tree Approval Process for Residential Subdivisions" item 2 says, "... a street tree/landscape plan... will be submitted to the Tree Board for a recommendation. Thereafter, the developer may proceed to the Planning Commission for final approval."

The Tree Board feels strongly that this procedure should be followed. The board has the expertise of landscape architects and designers which are not present in the Department of Community Development or the Planning Commission. Furthermore the Board has a sense of the entirety of the City street forest and the species diversity, the aesthetics, and the maintenance issues that are relevant. In the interest of timely approval of plans, in the past the Board has occasionally provided its recommendation by stopping by individually at City Hall to review plans. Thus plans are able to be presented to the Planning Commission in a timely manner.

The question of our staff liaison has been raised. Because we deal with both initial planting of street trees, and advocate for proper maintenance we deal with several City departments. Therefore, although we may have one official liaison, we will work with more than one individual. Our liaison should keep us aware of new subdivisions and issues relating to street trees and specimen trees. For this reason it is logical that the liaison should be in the Department of Community Development.

In addition our liaison must have the administrative skills necessary for the implementation of our annual Arbor Day celebration. The Arbor Day celebration is an event much appreciated by our citizens, and produced at very little City expense. The event also serves to increase the future value of our City forest through the citizen planting of trees. This positive impact on the quality of life for all citizens is substantial.

Our liaison also needs to have the skills necessary for grant writing and monitoring. Obtaining State DNR grants is a good way to stretch our City dollars. A valid question has been raised regarding grants and adequate controls on our liability for matching funds. The Tree Board agrees that controls are necessary, but views the actual administration of such controls to be a matter best dealt with by the City Administrator, or his designate.

The last question raised is whether our mandate should be changed, particularly with regard to conservation subdivisions. The Tree Board is willing to take on this responsibility, but does not feel strongly one way or the other.

Lastly we feel that five members is a good size for the Board; enough for a depth of knowledge, but not so many as to be unwieldy.

Thank-you for consideration of these matters. We hope to have several members available at your next meeting to answer any additional questions you may have.

DIVISION 5. TREE BOARD**Sec. 2-530. Creation.**

There is hereby created a tree board.

(Ord. No. 2001-1025, § I, 1-8-2002)

Sec. 2-531. Purpose.

The mission of the tree board is to advise the common council about creating an urban forest of high quality mature trees and assuring tree protection and preservation in the City of Mequon.

(Ord. No. 2001-1025, § I, 1-8-2002)

Sec. 2-532. Membership.

(a) The tree board shall consist of five citizen members. One member should be a certified landscape architect, arborist, or professional in a related field.

(b) Beginning May 1, 2002 one member shall be appointed for a one-year term, two members shall be appointed for a two-year term and two members shall be appointed for a three-year term. Thereafter, appointments shall be for three-year terms. Appointments shall be made by the mayor and confirmed by the common council. All vacancies on the tree board shall be filled by appointment of the mayor and confirmed by the common council and the appointee shall serve the balance of the three-year term.

(Ord. No. 2001-1025, § I, 1-8-2002)

Sec. 2-533. Chairman.

The board shall elect annually one member to serve as chairman and to preside over meetings. The committee may elect other officers, as it deems necessary.

(Ord. No. 2001-1025, § I, 1-8-2002)

Sec. 2-534. Quorum.

Three voting members shall constitute a quorum for the transaction of business.

(Ord. No. 2001-1025, § I, 1-8-2002)

Sec. 2-535. Meetings.

(a) The board shall hold regular meetings not less frequently than once every three months at a regularly scheduled time and place as determined by the committee.

(b) Written notice of all meetings shall be delivered to each board member at least 48 hours in

advance of said meeting, and shall inform of the time and purpose of the meeting.

(Ord. No. 2001-1025, § I, 1-8-2002)

Sec. 2-536. Duties.

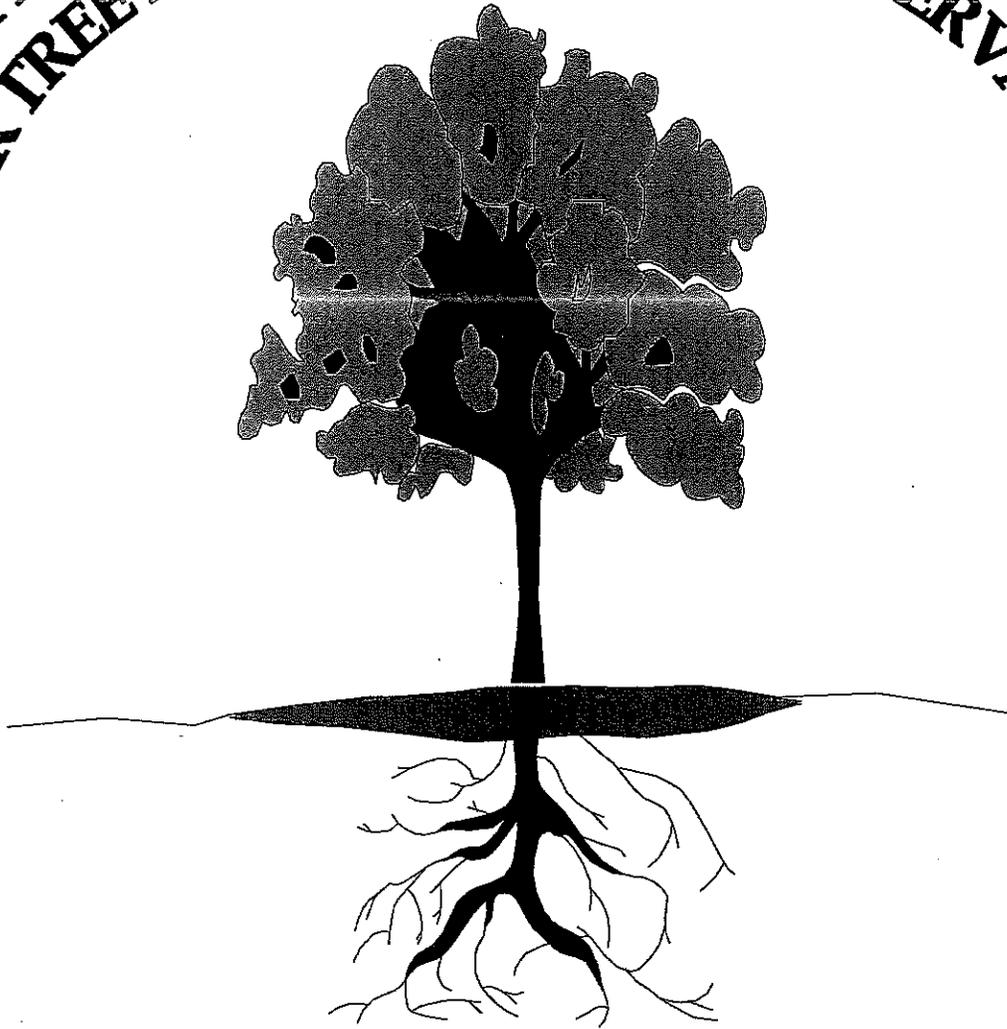
The tree board shall have the following powers and duties:

- (1) Assist in evaluating needs, in setting goals and in determining the achievement of the policies and goals of the tree preservation ordinance;
- (2) Provide leadership in the development of the understanding of the objectives and methods of tree protection and preservation, and in the planting of trees in the city;
- (3) Promote public education and awareness;
- (4) Assist and confer with the city forester on the implementation of the tree preservation ordinance;
- (5) Assist city staff in the development and maintenance of the tree preservation guidelines and administrative standards to be promulgated and published as part of the tree preservation ordinance.
- (6) Review and recommend to the planning commission developers' tree planting plans.
- (7) Identify and recommend the availability of grants.
- (8) Submit an annual report to the common council.

(Ord. No. 2001-1025, § I, 1-8-2002)

Secs. 2-537--2-565. Reserved.

**CITY OF MEQUON POLICY MANUAL
FOR TREE PROTECTION AND PRESERVATION**



Administrative Guidelines

Approved by Common Council February 19, 2007

Administrative Guidelines
CITY OF MEQUON POLICY MANUAL
FOR TREE PROTECTION AND PRESERVATION
&
STREET TREE REQUIREMENTS

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CITY OF MEQUON POLICY MANUAL
FOR TREE PROTECTION AND PRESERVATION

(1) PURPOSE AND INTENT

- (a) Trees and woodlands help to reduce storm water runoff and erosion, replenish ground water supplies, preserve and enhance nesting areas for birds and other wildlife which in turn assist in the control of insects, provide wildlife habitats, ameliorate air pollution, enhance and preserve air quality, assist in maintaining symbiotic relationships between plants and animals, moderate climate, reduce noise and glare, protect and increase property values and provide people with the opportunities for scientific, educational and recreational pursuits;
- (b) A substantial part of pre-settlement Mequon consisted of Southern Mesic Forest ("Old Growth Forest"). Most Old Growth Forest has been destroyed and the portions of Old Growth Forest which remain are now part of a disappearing ecosystem. Preservation is essential, because regeneration of forest of this caliber can take 150 years, provided that conditions exist within which the forest was originally formed;
- (c) It is declared a matter of public policy that preservation of intact remnants of Old Growth Forest and preservation and/or replacement of trees during the land development/building construction process in the City of Mequon is a public benefit and is desired in the interest of preserving the health, safety, welfare and prosperity of the people;
- (d) While allowing for the reasonable improvement of land within the City of Mequon, it is the intent of this ordinance to provide for the preservation of Old Growth Forest and to provide standards for the preservation/replacement of other trees and woodlands in the City of Mequon, as an important public resource enhancing the quality of life and the general welfare of the City, in furtherance of this policy.

(2) DEFINITIONS

All words in this ordinance shall have their customary dictionary definition except as specifically defined herein. The words "shall" and "must" are mandatory, and the words "may" and "should" are permissive.

Building Activity Area: The buildable area of a lot in where construction and building activities are limited to the smallest possible area on a lot or parcel. The building activity area includes the entire area affected by building and grading activities related to the proposed construction (including driveway and lateral construction) and shall be determined with maximum regard for existing mature trees. Lands designated floodplain, wetland, conservancy or similarly identified as unbuildable shall be excluded from this definition.

Caliper: The American Association of Nurserymen standard for trunk measurement of nursery stock. Caliper of the trunk shall be taken six (6) inches above the ground for up to and including four (4) inch caliper size, and twelve (12) inches above ground for larger sizes.

Canopy Drip Line: A vertical line extending from the outer surface of a tree's branch tips down to the ground.

City Forester: A recognized and qualified professional in the field of forestry, botany, horticulture or arboriculture retained by the City of Mequon and operating under the direction of the Tree Board for the purpose of administration and enforcement of the Tree Preservation Ordinance.

Diameter at Breast Height (DBH): A standard measure of tree size. A tree trunk diameter measured in inches at a height of four and one-half (4½) feet above the ground. If a tree splits into multiple trunks below the 4½-foot mark, then the trunk is measured at its most narrow point beneath the split.

Land Disturbance Activity: Any manmade change of the land surface including removal of a tree(s) or vegetative cover, excavating, filling, and grading, but not including agricultural land uses such as planting, growing, cultivating and harvesting of crops.

Lot, Platted: Any plot of land for residential, commercial, park or industrial use that has been subdivided through a subdivision plat, condominium plat or certified survey map.

Lot, Unplatted: Any plot of land that has yet to be subdivided through a subdivision plat, condominium plat or certified survey map.

Natural Areas: Any area found on a parcel of land that includes but may not necessarily be limited to one of the following: wooded areas (trees, shrubs, etc.), undisturbed areas, prairie grasses, wetlands and natural ecosystems.

Protected Zone: All lands in the City of Mequon that fall outside of the Building Activity Area of a lot, all areas of the lot required to remain in open space and all areas required to remain as landscaping strips according to provisions of the City of Mequon Zoning Code, or conditions of site plan approval. The protected zone shall include the required offset, setback and other designated unbuildable areas such as wetlands, woodlands, floodplain and conservancy areas within the City of Mequon.

Specimen Tree(s) or Stand: Any tree or grouping of trees which has been determined to be of a high value by the City Forester or his associate because of its species, size, age, historic significance or other professional criteria and has been so designated in the Tree Preservation Guidelines and Administrative Standards.

Tree: Any self supporting woody plant having a well-defined stem, a well-defined crown and has attained a height of at least eight (8) feet with a trunk of not less than three (3) inches diameter at breast height (DBH). Or, a cluster of main stems having an aggregate diameter of not less than three (3) inches DBH. (Note: Containerized trees and nursery stock trees kept for resale in licensed commercial nurseries are exempt from the provisions of this policy.)

Tree Preservation Guidelines and Administrative Standards: Tree Preservation and Protection Standards and Guidelines that shall be established by the Mequon Tree Board and published by the Department of Community Development that shall be used by the City Forester or his associate, developers and residents of Mequon in identifying, preserving and protecting specimen and other trees. The guidelines shall also identify street tree planting requirements and policies along with tree planting specifications.

(3) AUTHORITY AND APPLICABILITY

Standards for tree preservation are established under the authority of the City of Mequon Tree Preservation Ordinance, adopted August 3, 1993, and revised May 15, 2003. This policy manual constitutes the administrative guidelines of said ordinance. Except as otherwise noted herein, the terms of this policy shall apply to all proposed land disturbance activity associated with subdivision, land division, residential, commercial, industrial and park development. All land disturbance activity, regardless of whether building permits and/or erosion control permits are required pursuant to Chapter 38-674 of the Zoning Code, shall be subject to this policy.

No building permit and/or erosion control permit shall be granted by the Engineering and/or Inspection Departments without prior consent from the Department of Community Development and/or City Forester or his associate that the proposed land disturbance/development project is in conformance with the provisions of this policy.

Provisions of this policy shall not apply to the following:

1. Platted lots, except with regard to removal and protection of specimen trees;
2. Projects initiated by the City, as determined by the Common Council on a case-by-case basis, where the public good and/or health and welfare are at stake (i.e., installation of sanitary sewer, public roads and/or drainage improvements).

(4) PERMITTING PROCEDURES

A. For development on existing residential platted lots

1. At the time in which an applicant applies for Architectural Board approval, the City Forester or his associate shall conduct a site inspection to determine if the proposed development on the lot will destroy and/or encroach upon any trees.
2. The City Forester or his associate must make an onsite inspection if any trees exceeding 5" DBH are present, no building permit shall be issued until the City Forester or his associate identifies those specimen trees located in the area of construction and 10' from the proposed construction. The City Forester or his associate shall also identify those specimen trees whose root zone would be damaged by proposed construction. Subsequently, the City Forester or his associate may suggest a modification and/or alternate location for site development in order to protect specimen trees wherever possible.
3. No specimen trees shall be removed from any lot, unless approved by the Planning Commission and with the City Forester's knowledge or his associate in accordance with Chapter 60 of the Tree Preservation Ordinance.
4. To protect the specimen trees, as identified by the City Forester or his associate, the developer/owner shall install snow fences no closer than ten (10) feet outside from the dripline of the specimen. Additionally, signs shall be posted informing the public and site workers that the area fence is a protected zone and the zone shall not be changed in the protected zone unless approved by the City Forester or his associate and Engineer.

5. There shall be no storage/parking of vehicles or equipment allowed in the protected zone, and it shall be the responsibility of the developer/owner/contractor to ensure compliance.
6. Drainage of the site shall be designed so that after construction is completed the same amount of water and rate of discharge will reach the trees as it did prior to construction.
7. After stipulations 1 thru 6 have been completed, the owner/developer/contractor shall contact the Building Inspector to arrange an inspection for site compliance. A building permit shall be issued only after the owner/developer has completed these requirements and the City Forester or his associate has inspected the site.
8. After the building permit is issued, the City Forester and/or his associate shall inspect the site periodically to make sure the aforementioned guidelines are being followed. If the site is found to be in violation, the City Forester or his associate will stop project work immediately, until the violations are corrected. If the developer/owner/contractor fails to correct the violations, the City Forester or his associate may issue a municipal citation.

B. For Existing Commercial, Industrial or Park Platted Lots

1. At the time in which an applicant applies for any Planning Commission or Park Board approval, it will be necessary to inform staff if there are any trees on the parcel. The City Forester or his associate shall be requested by City staff to inspect the designated site for specimen and/or other trees for the purpose of preservation if any trees exceeding 5" DBH are present. The City Forester or his associate shall also identify those specimen trees whose root zone would be damaged by proposed construction. Based upon the City Forester's or his associate inspection of a platted lot, the City Forester or his associate and Planning Commission, in the case of non-parkland, or the City Forester or his associate and Park Board, in the case of parkland, may require a plan modification and/or alternate location for site development if, in their opinion, it may preserve specimen trees in accordance with the Tree Preservation Ordinance. This recommendation shall be stated in writing.
2. No specimen trees shall be removed, unless approved by the Planning Commission and with the City Forester's or his associate's knowledge in accordance with Chapter 60 of the Tree Preservation Ordinance.
3. To protect the specimen trees, as identified by the City Forester or his associate, the developer/owner/contractor shall install snow fences no closer than ten (10) feet outside the dripline of the specimen. Additionally, signs shall be posted informing the public and site workers that the area fenced is a protected zone and the zone shall be left undisturbed. The grade shall not be changed in the protected zone unless approved by the City Forester or his associate and Engineer.
4. There shall be no storage/parking of vehicles or equipment allowed in the protected zone, and it shall be the responsibility of the developer/owner/contractor to ensure compliance.

5. Drainage of the site shall be designed so that after construction is completed the same amount of water and rate of discharge will reach the trees as it did prior to construction.
6. A building permit shall be issued only after the owner/developer/contractor has completed the aforementioned requirements and the City Forester or his associate has inspected the site.
7. After the building permit is issued, the City Forester or his associate shall inspect the site periodically to make sure the aforementioned guidelines are being followed. If the site is found to be in violation, the City Forester or his associate will stop project work immediately, until the violations are corrected. If the developer/owner/contractor fails to correct the violations, the City Forester or his associate may issue a municipal citation.

C. For Proposed Subdivisions, Condominiums and Land Divisions

1. The City Forester or his associate shall be requested by City staff to inspect the designated site for specimen and/or other trees for the purpose of preservation if any trees exceeding 5" DBH are present.

Based upon staff's inspection and review of development plans, the City Forester or his associate and Planning Commission, in the case of non-parkland, or the City Forester or his associate and Park Board, in the case of parkland, as applicable, may suggest a development modification and/or alternate location for site development if, in their opinion, it may preserve trees in accordance with the Tree Preservation Ordinance. This recommendation shall be in writing.

2. Prior to preliminary plat or land division approval, the developer must submit a landscape plan (see Exhibit I for an example). The location of all specimen trees shall be exactly indicated on the plan, and the plan shall further identify all natural areas and wetlands within the proposed subdivision, condominium and land division. With the plan, the following additional information shall be provided:
 - (a) A list of species, including trees and shrubs, shall be identified that are present in each natural area;
 - (b) Tree sizes shall be identified in each natural area by indicating the approximate average DBH and the range of DBH sizes found in each natural area;
 - (c) If the species existing within the different natural areas throughout the proposed subdivision and land division are found to differ from one another substantially, a separate species list and DBH measurements shall be provided for each natural area.
3. No specimen trees or other substantial trees, as identified by the City Forester or his associate or Planning Commission, shall be removed in accordance with Chapter 60 of the Tree Preservation Ordinance unless specifically approved by the Planning Commission.

4. To protect and preserve the trees, as identified on the landscape plan or by the Planning Commission, the owner/developer/contractor shall install snow fences no closer than ten (10) feet outside the outer dripline of the tree. Additionally, signs shall be posted informing the public and site workers that the area fenced is a protected zone and the zone shall be left undisturbed. The grade shall not be changed in the protected zone unless approved by the City Forester or his associate and Engineer.
5. There shall be no storage/parking of vehicles or equipment allowed in the protected zone, and it shall be the responsibility of the developers/owner to ensure compliance.
6. Drainage of the site shall be designed so that after construction, the same amount of water and rate of discharge will reach the trees as it did prior to construction.
7. A building permit/erosion control permit shall be issued only after the owner/developer/contractor has completed the aforementioned requirements and the City Forester or his associate has inspected the site.
8. After the building permit/erosion control permit is issued, the City Forester or his associate shall inspect the site periodically to make sure the aforementioned guidelines are being followed. If the site is found to be in violation, the City Forester or his associate will stop project work immediately, until the violations are corrected. If the developer/owner/contractor fails to correct the violations, the City Forester or his associate may issue a municipal citation.

(5) REMOVAL OF TREES AND REPLACEMENT LANDSCAPING

- A. It shall be unlawful to remove, injure, destroy, or undertake any procedure that may cause the death or substantial destruction of any specimen tree located anywhere on **any land in the City of Mequon** without the express written permission of the City Planning Commission.
- B. The Planning Commission may require the owner/developer to additionally landscape with trees and/or plant materials within the protected zone, in accordance with the Zoning Code.
- C. No trees shall be removed in the protected zone of an **unplatted lot** except as provided in Section (5) of this policy. Documentation requesting removal shall be submitted to the Planning Commission in the case of non-parkland, or the Park Board in the case of parkland, as applicable, as part of a landscape plan, in accordance with these Tree Preservation Guidelines prior to preliminary plat or land division approval.
- D. If a specimen tree is proposed to be removed in the buildable area on **any land in the City of Mequon**, the City Forester or his associate shall review the site for any alternative located for driveway, building and/or other construction in order to preserve the specimen trees.
 1. If it is found that construction cannot occur on the **existing platted lot** without removal of the specimen tree, the City Planning Commission, with City Forester's or his associate's knowledge in the case of non-parkland, or City Forester or his associate and Park Board, in the case of parkland, as applicable, may allow the

tree(s) to be removed, in accordance with the purpose and intent of the Tree Preservation Ordinance and this policy that permits reasonable improvement of land. If necessary, the City Forester or his associate may recommend the homeowner/developer seek setback and/or offset variances at the Board of Appeals in order to preserve specimen trees.

2. If it is found that construction cannot occur on **the unplatted lot**, without removal of specimen or any other tree(s), the Planning Commission **may** require reconfiguration of the proposed lot lines of a proposed subdivision/condominium plat or certified survey map in an effort to preserve trees. The Planning Commission and City Forester or his associate may authorize the removal of specimen and other trees on **unplatted lands**. When authorization is granted a landscape plan shall provide for tree removal, tree replacement and additional tree planting that results in an overall improvement in the environmental condition and aesthetic character of the proposed subdivision/land.
- E. Authorization for the removal of any specimen tree located on **any land in the City of Mequon** may be granted for the following reasons:
1. The tree is dead or dying; or
 2. The tree has a disease which may spread and threaten other trees; or
 3. The tree is damaged or injured to the extent that it is likely to die or become diseased; or
 4. Where removal will avoid or alleviate unreasonable difficulty or hardship. However, tree removal requested for the purpose of allowing greater building density shall not constitute unreasonable difficulty or hardship; or
 5. As determined by the Planning Commission with the Forester's knowledge in the case of non-parkland or City Forester or his associate and Park Board in the case of parkland, as applicable, in accordance with Chapter 60.
- F. The owner/developer shall replace any specimen tree removed in each of the following instances, as directed by the City Forester or his associate and Planning Commission in the case of non-parkland or City Forester or his associate and Park Board in the case of parkland or Board of Appeals, as applicable:
1. In the event the removal of the tree is authorized by the Planning Commission to avoid or alleviate a practical difficulty or unnecessary hardship;
 2. In the event the tree is damaged or injured by other than natural causes to the extent that it is likely to die or become diseased, or it constitutes a hazard to persons or property;
 3. In the event the tree is unlawfully removed in violation with this policy.
- G. Where replacement is required, the City Forester or his associate will direct the size and type of tree to be planted. The total DBH of all replacement trees shall be 75% of the total DBH of the removed specimen trees. The City Forester or his associate shall select replacement species after considering the species removed and those present on the lot. Strong preference shall be given to Wisconsin native species. For example, if a tree measuring 20" in DBH is removed, then eight (8), 2" caliper

trees might be required to replace it. If space is not available for replacement trees on the lot, the City Forester or his associate and Planning Commission may direct the planting at a City park, or in lieu of planting, a payment equal to the calculated value from the ISA Guide for Plant Appraisal may be placed in a non lapsing account for future street tree and urban forest projects.

(6) SPECIMEN TREE LIST

A. The following trees (or grouping of trees) have been determined to be of a high value by the City Forester or his associate because of species, size, age, historic significance or other professional criteria. Any tree in fair or better condition which equals or exceeds the following diameter sizes at breast height (DBH):

<u>*Acer rubrum – Red Maple 10"</u>	<u>*Celtis occidentalis – Common Hackberry 16"</u>
<u>*Acer saccharum – Sugar Maple 12"</u>	<u>*Fagus grandifolia – American Beech 12"</u>
<u>*Alnus species Alders 10"</u>	<u>*Quercus species – All Oaks 12"</u>
<u>*Amelanchier species – Amelanchiers 6"</u>	<u>*Pinus strobus – White Pine 12"</u>
<u>*Carpinus caroliniana – Musclewood 6"</u>	<u>*Juglans cinerea – Butternut 12"</u>
<u>*Carya species – All Hickories 12"</u>	<u>*Prunus serotina – Black Cherry 12"</u>
<u>*Juglans nigra – Black Walnut 12"</u>	<u>*Ostrya virginiana – Ironwood 6"</u>
<u>*Juniperus virginiana – E. Red Cedar 8"</u>	<u>*Thuja occidentalis – White Cedar – 12"</u>
<u>*Larix Laricina – Tamarack 12"</u>	<u>*Tilia americana – Basswood/American Linden 20"</u>
<u>*Gymnocladus dioicus – Kentucky Coffeetree 12"</u>	

* = native tree

Note: A lesser-sized tree can be considered a specimen if it is a rare or unusual species, of exceptional quality, or is of historical significance.

B. Standards used in determining whether a tree is in fair or better condition must meet the following minimum criteria:

1. The tree must have a life expectancy of greater than fifteen (15) years.
2. The tree must have a relatively sound and solid trunk with no extensive decay or cavity, and less than 20% radial trunk die-back.
3. The tree must not have more than one (1) major and several minor dead limbs (deciduous only).
4. The tree must not have any major insect or pathological problems.

C. Specimen tree stands shall be identified as a contiguous grouping of trees which contain 25% specimen trees and which have been determined to be of high value based upon the following criteria:

1. A relatively mature native stand which is in process of regeneration.
2. A stand with diversity of native species of a rare or unusual nature.
3. A stand of historical significance.
4. A stand with exceptional aesthetic quality.

5. A stand with endangered wildlife or vegetation.
- D. General information regarding the Specimen Trees identified previously in this document:
1. It has been found that all Oaks, all Hickories, and the American Beech are large trees, very durable, some have excellent fall color, and are hard to replace (not sold in nurseries).
 2. It has been found that the Black Cherry, Sugar Maple, White Ash, Hackberry, Kentucky Coffeetree, Butternut, and Black Walnut are large trees, durable in woodland settings, have interesting bark and fall color, and some are rare in woodland settings.
 3. It has been found that the White Pine, White Cedar, Red Cedar, and Tamarack have native needle-shaped leaves, most are evergreen, and have high wildlife value.
 4. It has been found that the Basswood, Alder, and Red Maple are large bottomland trees suitable for wetland areas and have high wildlife value.
 5. It has been found that the Ironwood, Musclewood, and Amelanchier are small, understory or located at the edge of woodland trees, are very durable, have interesting bark features and have high wildlife value.

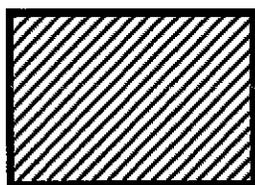
SECTION (7)

EXHIBIT #1 – EXAMPLE LANDSCAPE PLAN

Landscape Plan for Outskirt Ridge

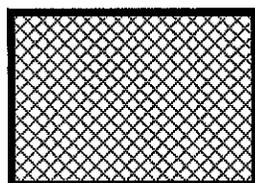
The attached plan give a general outline of the location of trees and shrubs on the Outskirt Ridge development. The following color key will give you a general guideline as to the type and more importantly the size of the trees on the development.

Natural Area #1



Areas of thick brush and trees along north exterior lot line and interior sections. The trees range in size from three (3) inches and smaller to old growth specimen trees of sizes greater than twenty-four (24) inches in diameter. The average DBH is twelve (12) inches. Species include Sugar Maples, Crimson Maples, Summit Ash and White Pine.

Natural Area #2



Areas along north exterior lot line and south east exterior lot line in which a variety of trees are planted in four (4) rows between ten (10) and fifteen (15) feet apart. The trees range in size between seven (7) and ten (10) inches in diameter. The average DBH is eight (8) inches. Species include Black Walnuts, Patmore Ash and Sugar Maples.

Marked Xs:

Either large specimen trees or trees transplanted to interior portion of field in mid-1980s. Specimens are specifically identified and include: Sugar Maple, Black Walnut, White Pine.

SECTION (8)
APPENDIX A

STREET TREE APPROVAL PROCESS
AND STREET TREE LIST

STREET TREE
APPROVAL PROCESS FOR
RESIDENTIAL SUBDIVISIONS

1. Before final plat approval, the developer shall contact the City Forester or his associate prior to selecting trees.
 - a.) The City Forester or his associate will then direct the developer as to street tree requirements and procedures and supply an appropriate list of street trees.
 - b.) The developer shall choose a minimum of three (3) tree species from the recommended list of trees to plant in the subdivision.

2. The developer shall have a professional landscape architect, landscape designer or horticulturist prepare a scaled street tree/landscape plan, having each tree labeled as to its specific location and species type; this will be submitted to the Tree Board for recommendations and review. Thereafter, the developer may proceed to the Planning Commission for final approval.

The Tree Board requires developers follow the standardized agenda listed below when submitting street tree plans to the Tree Board. The agenda would include:

- a) Six copies of plans.
- b) 1" – 30' scaled drawings.
- c) Street tree keys, botanical and common names, including numbers and sizes.
- d) Number of lineal feet of road.
- e) Location of property (map).
- f) Plan submitted two weeks prior to meeting date.
- g) All plans must meet City specifications.
- h) Trees are selected from the approved Street Tree List.
- i) Road right of way and centerline included on plan.
- j) Arrow on plan indicating north (direction).
- k) Incorporate all information on one page, if possible.

[Note: Six copies of all plans must be submitted to the Department of Community Development at least two (2) weeks prior to the Tree Board meeting.]

[Note: The City Forester or his associate will provide specification sheets for the developer/contractor at the time of approval so they are aware of the City's planting, burlapping and staking requirements.]

- a.) Prior to installation, the developer shall contact the City Forester or his associate to go out and inspect the quality of stock and proper installation procedures. The City Forester or his associate will also be called out upon completion of the planting to ensure installation and staking is correct. The developer will be charged a minimal fee for these inspections.

GUIDELINES TO FOLLOW:

- The landscape plan shall be a scaled drawing.
- The developer shall install street trees with an average trunk diameter of three (3) inches at a point six (6) inches above the grade. To ensure proper planting and growth, the tree shall be balled, burlapped and staked when installed, according to City specifications. (*Section 58-564 and 58-637.*)
- Trees shall be provided at a rate of not less than one (1) for every thirty (30) feet of new and private subdivision roadway frontage and located within the road right-of-way at a point two (2) feet from the right-of-way line unless otherwise allowed by the Planning Commission. However, the Tree Board has adopted a more flexible spacing scheme allowing low growth trees to be spaced 20 feet apart, medium growth trees to be spaced 30 feet apart and tall growth trees to be spaced 40 feet apart. The Planning Commission has allowed the Tree Board to suggest the spacing of the trees and make that recommendation to the developer and Planning Commission. (*Section 58-564 and 58-637 .*) Tree planting outside road right of way on adjacent lots will be allowed in accordance with the approved plan, provided a street tree preservation and maintenance easement document is submitted. (Inserted)
- Any tree that has died or is damaged beyond repair within three (3) years of planting shall be promptly replaced by the developer. The replacement planting shall be of the same size and quality as the approved landscaping plan. (*Section 3.16(7)(b)4.*)
- In seeking diversity, preventing disease and promoting appropriate street tree and landscape aesthetics, the following guidelines shall pertain:
 1. A minimum of three (3) different street tree species shall be planted throughout the subdivision;
 2. No less than 15% and no more than 40% of one specific street tree species shall be planted throughout the subdivision;
 3. If more than three (3) street tree species are planted within the subdivision, those trees may be planted in a quantity less than the 15% generally required throughout the entire subdivision planting.
 4. City Forester or his associate may approve additional tree species from other groups.
 5. The Tree Board may use their discretion in using smaller size trees of unusual varieties in the interest of diversification of the urban forest.

MEQUON TREE BOARD SUGGESTED STREET TREE GROUPS

The Mequon Tree Board recommends the suggested tree groups for the following reasons:

1. The trees will provide a planned procedure of diversification throughout the City.
2. The trees will meet the City's soil type needs.
3. The variety of heights will allow the developer/City to better cope with various site conditions (i.e. power lines, telephone lines, cable lines, existing trees).
4. The trees will offer a specific continuity throughout each proposed subdivision.
5. The trees are tolerant of salt, fumes, and other city stresses.
6. Many of the trees are native Wisconsin trees or cultivars of native trees. The cultivars are improvements of original natives. The remaining trees have been proven hearty and long-lasting in our climate.
7. The Tree Board and City Forester or his associate may consider other trees not provided on the street tree list with justification.

STREET TREE PLANTINGS FOR RESIDENTIAL SUBDIVISIONS - Street Tree List

	Tall (40-100')	Medium (30-40')	Low (15-30')
<u>GROUP 1</u>	<ul style="list-style-type: none"> ▪ *Acer platanoides 'Cleveland' – Cleveland Maple ▪ Tilia x euchlora 'Redmond' – Redmond Linden ▪ Ulmus parvifolia – Lacebark Elm or disease resistant cultivars 	<ul style="list-style-type: none"> ▪ Pyrus calleryana 'Autumn Brilliance' –Autumn Brilliance Callery Pear ▪ Prunus virginiana 'Schubert' – Canada Select, Common Chokecherry 	<ul style="list-style-type: none"> ▪ Malus disease resistant cultivars ▪ Acer tatarian 'Rubrum' – Tatarian Maple ▪ Cercis Canadensis – Eastern Redbird
<u>GROUP 2</u>	<ul style="list-style-type: none"> ▪ *Acer platanoides 'Emerald Queen' – Emerald Queen Maple ▪ Quercus robur – English Oak ▪ Aesculus hippocastanum 'Baumannii' – European Horsechestnut 	<ul style="list-style-type: none"> ▪ Phellodendron amurense 'Macho' – Macho Amur Corktree ▪ Gleiditsia triacanthos 'Imperial' – Thornless Common Honeylocust 	<ul style="list-style-type: none"> ▪ Syringa reticulata 'Ivory Silk' – Ivory Silk Japanese Tree Lilac ▪ Acer truncatum 'Pacific Sunset' – Purpleblow Maple, Shantung Maple
<u>GROUP 3</u>	<ul style="list-style-type: none"> ▪ Celtis occidentalis 'Prairie Pride' – Prairie Pride Hackberry ▪ Tilia cordata 'Glenleven' – Glenleven Littleleaf Linden ▪ Gingko biloba 'Autumn Gold' – Autumn Gold Gingko 	<ul style="list-style-type: none"> ▪ *Acer platanoides 'Crimson King' – Crimson King Maple ▪ Alnus glutinosa – European Alder 	<ul style="list-style-type: none"> ▪ Crataegus crus-galli inermis – Thornless Cockspur Hawthorn ▪ Malus disease resistant cultivars
<u>GROUP 4</u>	<ul style="list-style-type: none"> ▪ Quercus robur 'Skymaster' – Skymaster English Oak ▪ Quercus macrocarpa – Bur Oak 	<ul style="list-style-type: none"> ▪ Corylus columna - Turkish Filbert 	<ul style="list-style-type: none"> ▪ Disease resistant flowering Crab ▪ Acer ginnala 'Flame' – Amur Maple
<u>GROUP 5</u>	<ul style="list-style-type: none"> ▪ *Acer platanoides 'Deborah' – Deborah Norway Maple ▪ Gleditsia triacanthos 'Skyline' – Skyline Honeylocust ▪ Ulmus 'Regal' Regal Elm disease resistant cultivars ▪ Tilia cordata 'Chancellor' – Little Leaf Linden 	<ul style="list-style-type: none"> ▪ Gleiditsia triacanthos 'Imperial' – Thornless Common Honeylocust 	<ul style="list-style-type: none"> ▪ Crataegus x viridis 'Winter King' – Winter King Hawthorn ▪ Disease resistant Flowering Crab

*Asterisk species may not exceed 15% of the trees planted within the subdivision. (Note: This refers to the species, not the cultivar. Cultivars are shown in ' '.)

STREET TREE PLANTINGS FOR RESIDENTIAL SUBDIVISIONS - Street Tree List

	Tall (40-100')	Medium (30-40')	Low (15-30')
<u>GROUP 6</u>	<ul style="list-style-type: none"> ▪ <i>Gymnocladus dioicus</i> – Kentucky Coffeetree ▪ <i>Gleditsia triacanthos</i> 'Shademaster' – Shademaster Honeylocust ▪ Freeman Maple ▪ <i>Quercus rubra</i> Red Oak 	<ul style="list-style-type: none"> ▪ <i>Cercidiphyllum japonicum</i> - Katsuratree 	<ul style="list-style-type: none"> ▪ <i>Acer truncatum</i> 'Norwegian Sunset' – Purpleblow Maple/Shantung Maple
<u>GROUP 7</u>	<ul style="list-style-type: none"> ▪ <i>Acer saccharum</i> 'Legacy' – Sugar Maple ▪ <i>Quercus bicolor</i> – Swamp White Oak ▪ <i>Tilia americana</i> 'Legend' – American Linden ▪ <i>Tilia tomentosa</i> 'Whitnal' or 'Sterling' – Silver Linden 	<ul style="list-style-type: none"> ▪ <i>Ostrya virginiana</i> – 'Ironwood' – Ironwood/American Hophornbeam ▪ <i>Betula nigra</i> 'Heritage' – Heritage River Birch 	<ul style="list-style-type: none"> ▪ <i>Carpinus caroliniana</i> – Musclemwood ▪ <i>Amelanchier grandiflora</i> 'Autumn Brilliance' - Serviceberry

NOTE: Other cultivars may be acceptable with justification.

*Asterisk species may not exceed 15% of the trees planted within the subdivision. (Note: This refers to the species, not the cultivar. Cultivars are shown in ' '.)

SECTION (9)
APPENDIX B

**SPECIFICATIONS FOR TREE PLANTING
AND PROTECTION**

(The City will inspect the stock and planting procedure used by the developer in conformance with the subsequent guidelines.)

TREE PLANTING GUIDELINES

1. BACKGROUND

The most important aspect of proper tree planting is matching individual tree species to planting sites. Major considerations include overhead utility wires, tree border/boulevard width, and vehicular traffic. Soil type is another factor to be considered. Most soils in Milwaukee are heavy clays. Clay soils hold moisture very well, which can be a problem during periods of high rainfall since root systems may be damaged. In areas where we know soil remains very wet, we plant tree species which are more tolerant of the conditions. Vandalism is also a consideration. In high vandalism areas, trees with stronger trunks and branches are selected.

The tree species list currently used in our planting program has been developed after many years of experience. Species diversity is a goal of the tree planting program. Dutch Elm Disease taught many communities a painful lesson about over-planting a single species of tree. The American Elm dominated urban tree planting programs in many cities resulting in the majority of their tree population made up of one tree species. Dutch Elm Disease has nearly eliminated American Elms from most cities. To prevent this from re-occurring, many cities are planting a variety of tree species with the goal of having a balanced tree population.

Once planting sites and tree species have been selected, the planting process begins. Proper planting techniques set the stage for a tree's overall health throughout its life cycle.

Most tree health problems are related to the condition of the root system. Planting trees too deep is a very common mistake which can pre-dispose the tree to an early death. Tree trunks were not meant to be buried with soil and/or mulch. When this occurs, basal rot, girdling roots, and trunk cankers may develop. The base of the trunk is similar to your neck. It doesn't take much damage to that area to seriously affect the overall health of the tree.

2. PLANTING PROCEDURE: TERMINOLOGY AND TECHNIQUE

Balled in burlap (B&B): The tree is dug with the original soil and placed in burlap for shipping. The root ball may or may not have a wire basket on the outside of the burlap for support. Avoid using the trunk of the tree to move the root ball since severe root damage may occur.

Barefoot (BR): The tree is dug and the soil removed from the roots in the nursery. The roots are immediately covered to reduce moisture loss. Root pruning may be necessary for excessively long roots. Make the cut perpendicular to the root and remove as little root tissue as possible.

Root flare (Fig. 15.1): The bell-shaped area at the base of the trunk where the root system begins. The root flare should be exposed at the soil surface if the tree was planted at the proper depth.

Bud/graft union (Fig. 15.1): Most trees today are produced by budding or grafting a particular variety onto a root system. Budding or grafting usually results in the trunk having a larger diameter above the root flare to the point where the bud/graft was performed. Do NOT mistake this area for the root flare when estimating the depth required for the planting hole (Fig. 15.2). B&B trees typically have excess soil on top of

the root ball making it impossible to positively identify the root flare. The top of the bud/graft union is roughly six (6) inches above the root flare and is usually visible on top of the root ball.

3. THE PLANTING HOLE

Whether using a stump puller, a preloader or a hand shovel to dig the planting hole, the following guidelines are to be followed:

- Dig the hole size twice as wide as the root ball (B&B) or root system (BR).
- Dig only as deep as needed to have the root flare level with the soil surface. To prevent settling, do NOT disturb the soil in the bottom of the hole.
- Slope the sides to the bottom of the hole. Rough up the sides of the hole to eliminate any smooth, shiny surfaces which may inhibit root penetration.
- For B&B trees, use the bud/graft union to estimate the depth of the root flare. Figure the root flare is six (6) inches below the bud/graft union. Dig the hole so the root flare is at the soil level.

4. TREE PLACEMENT

- B&B Trees: Center the tree in the border/planting location. Move the root ball with tools rather than the trunk. Adjust the root ball so the trunk is vertical and free standing. Staking should not be used to hold a tree in a vertical position. Remove the burlap and wire basket from the upper half of the root ball. Remove it entirely, if possible. Remove and dispose of the burlap and wire basket properly. Backfill the hole without placing soil on top of the root ball.
- Bareroot Trees: Center the tree in the border/planting location. Do NOT crush the root system into the bottom of the hole while backfilling.

5. PLANTING SITE RESTRICTIONS

- For trees with narrow borders, center the tree between the sidewalk and curb and in-line with other trees.
- Trees with wide borders do not have to be centered, but allow a minimum of four (4) feet from paved surfaces. Plant in-line with existing trees if they are over four (4) feet from paved surfaces.
- Avoid centering a tree directly beneath utility wires. Only plan low profile tree species under utility lines.

6. STAKING

Place the stakes outside the root ball (B&B) or root system (BR), with the flanges facing out. Stakes should be parallel to the sidewalk and street. The wire and straps should be placed as high as possible on the tree to prevent vandalism. Do NOT over-tighten the wires. The tree should be free to move. Wrap the wire ends around the stake and clip the excess to prevent injury to the public.

7. MULCHING & WATERING

Apply mulch no greater than six (6) inches deep and at least four (4) feet in diameter. The mulch should be no deeper than one (1) inch next to the trunk. Thoroughly water the entire mulched area.

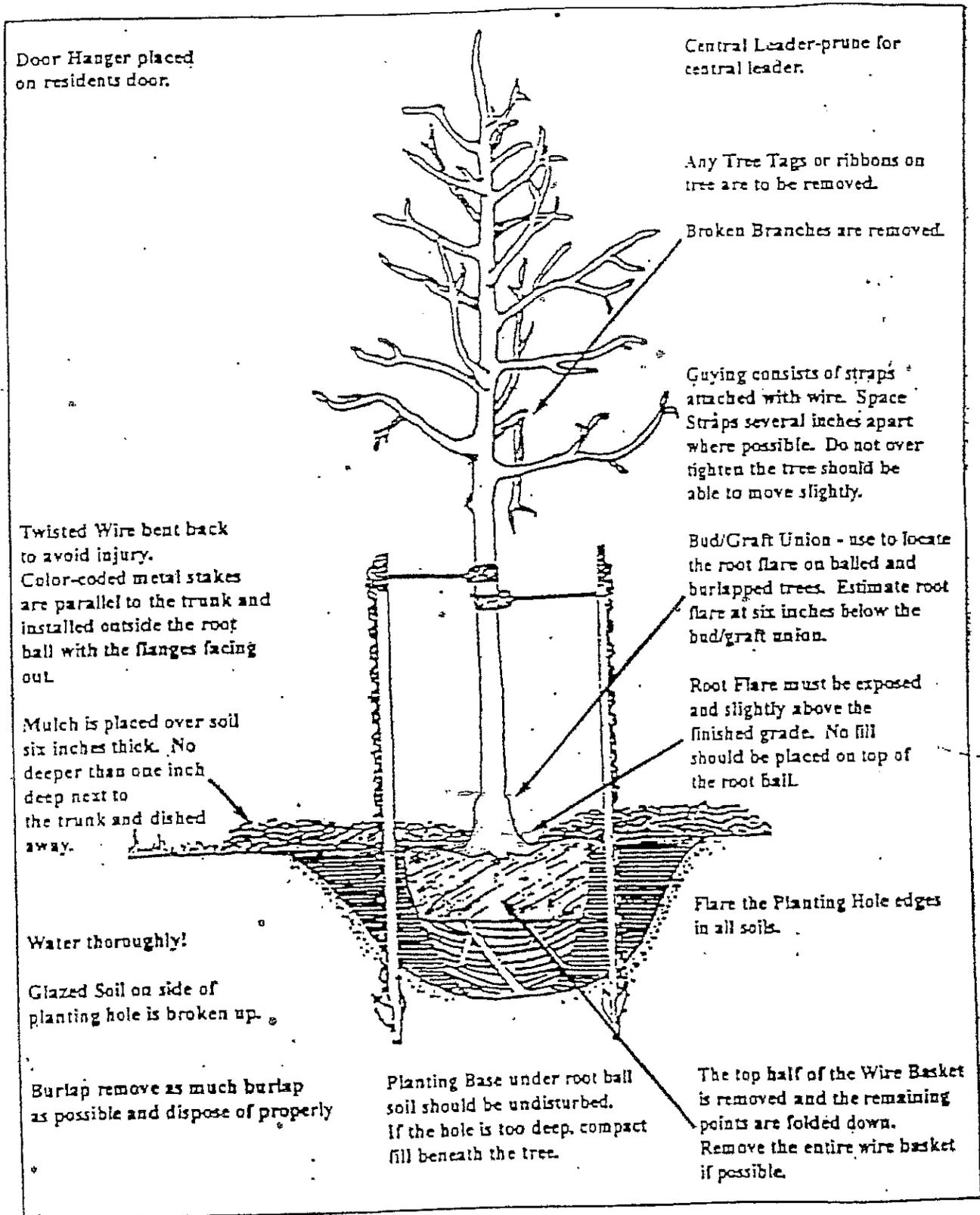
8. PRUNING

Remove broken or damaged branches. Make sure there is a central leader present. Do as little pruning as possible to create one before leaving. Remove any tags from the tree. Please place the information brochure on the property owner's door.

9. PLANTING PROBLEMS

- **Planting Too Deep:** Planting a tree too deep may result in either girdling roots or basal rot. When roots grow upward, they can damage the trunk as the tree's diameter increases. This may take years to develop. In addition, rotting of the trunk may occur if the trunk is buried in the soil, leading to overall tree decline. Trunk cracks may also appear due to the death of tissue at the base of the trunk.
- **Root Sprouts Above the Root Flare:** Root sprouts above the root flare develop due to planting too deep in the nursery. You may remove them, but only if a few are present and the main root system appears healthy (Fig. 15.5). You would then plant the tree at the original root flare. Do NOT remove root sprouts when an entirely new root system has formed above the old one (Fig. 15.5). In this case, you would plant at the new root flare.

Figure 15.1



Figures 15.2 & 15.3

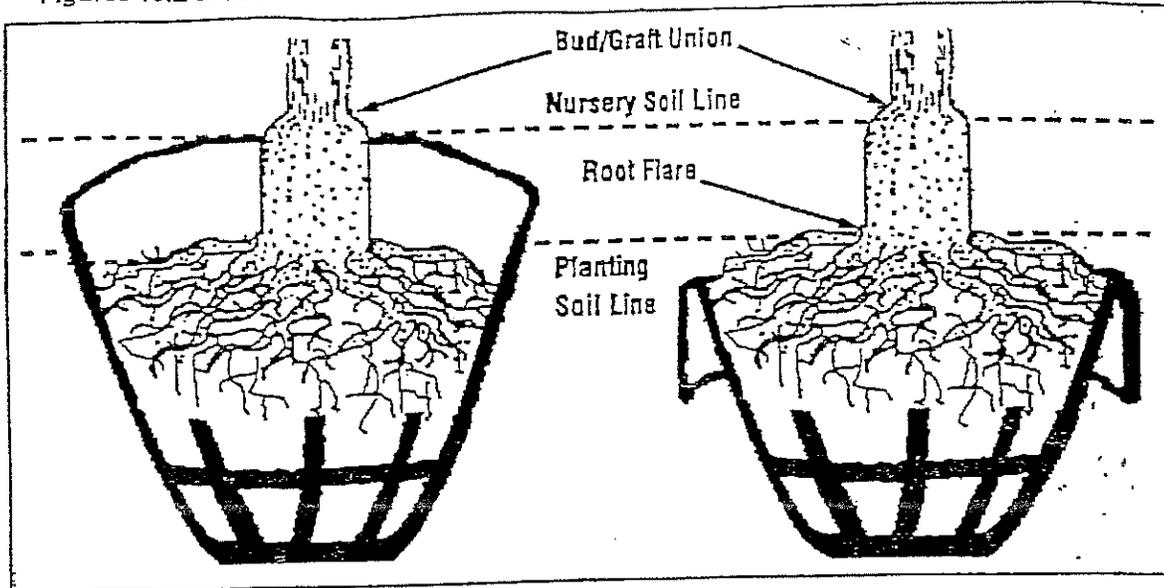


Fig. 15.2 Root ball of a tree planted too deep in Nursery.

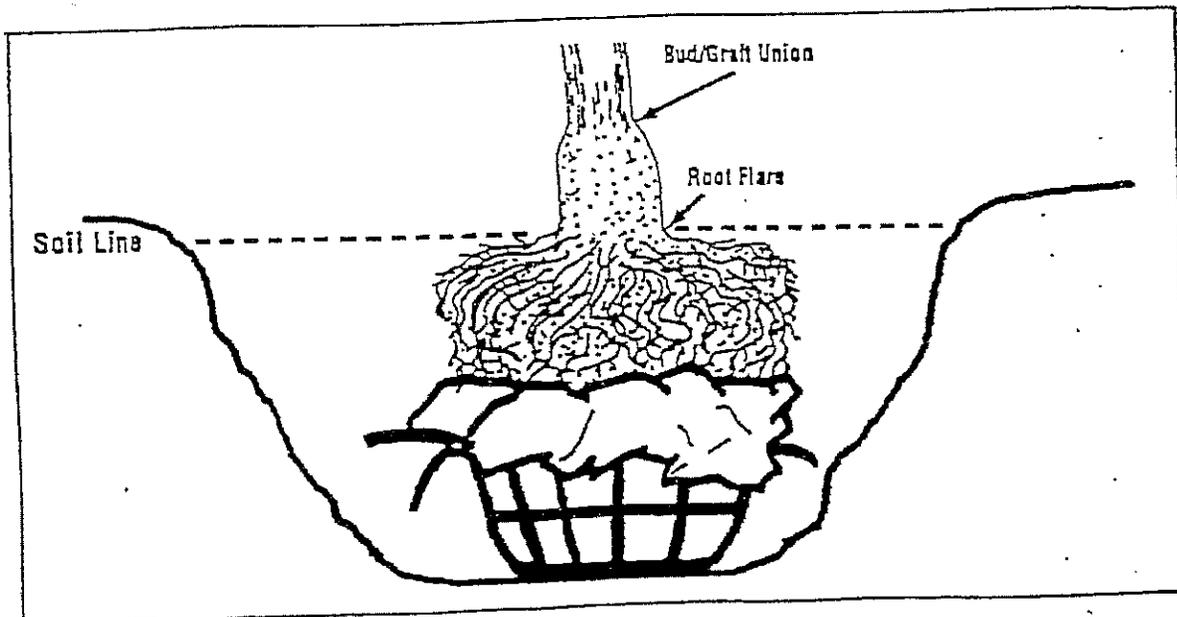


Fig. 15.3 Proper planting of a tree moved balled in burlap. 1. Root Flare level with soil line. 2. Excess soil removed from top of root ball. 3. Burlap and wire basket removed from as much of the root ball as possible and stuffed into bottom of hole or removed.

Figure 15.4

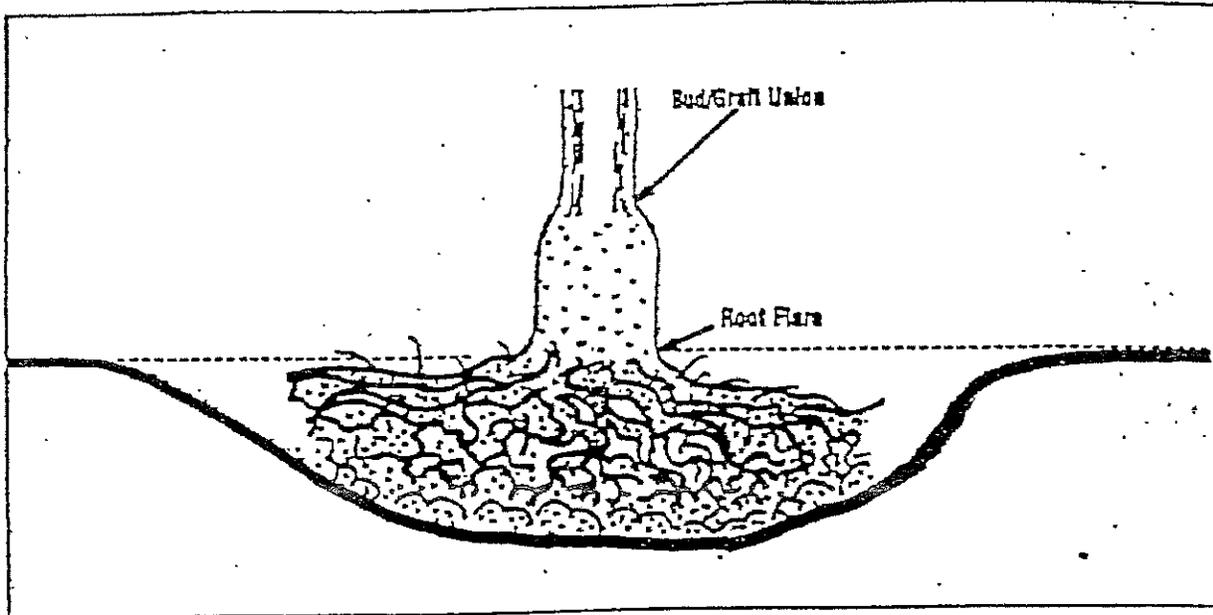


Fig. 15.4 Proper planting of a tree moved bare root. 1. Root Flare level with soil line. 2. Compact fill under root system if added. 3. Remove sprouts above Root Flare.

SECTION (10)
APPENDIX C

STREET TREE REPLACEMENT
PROGRAM