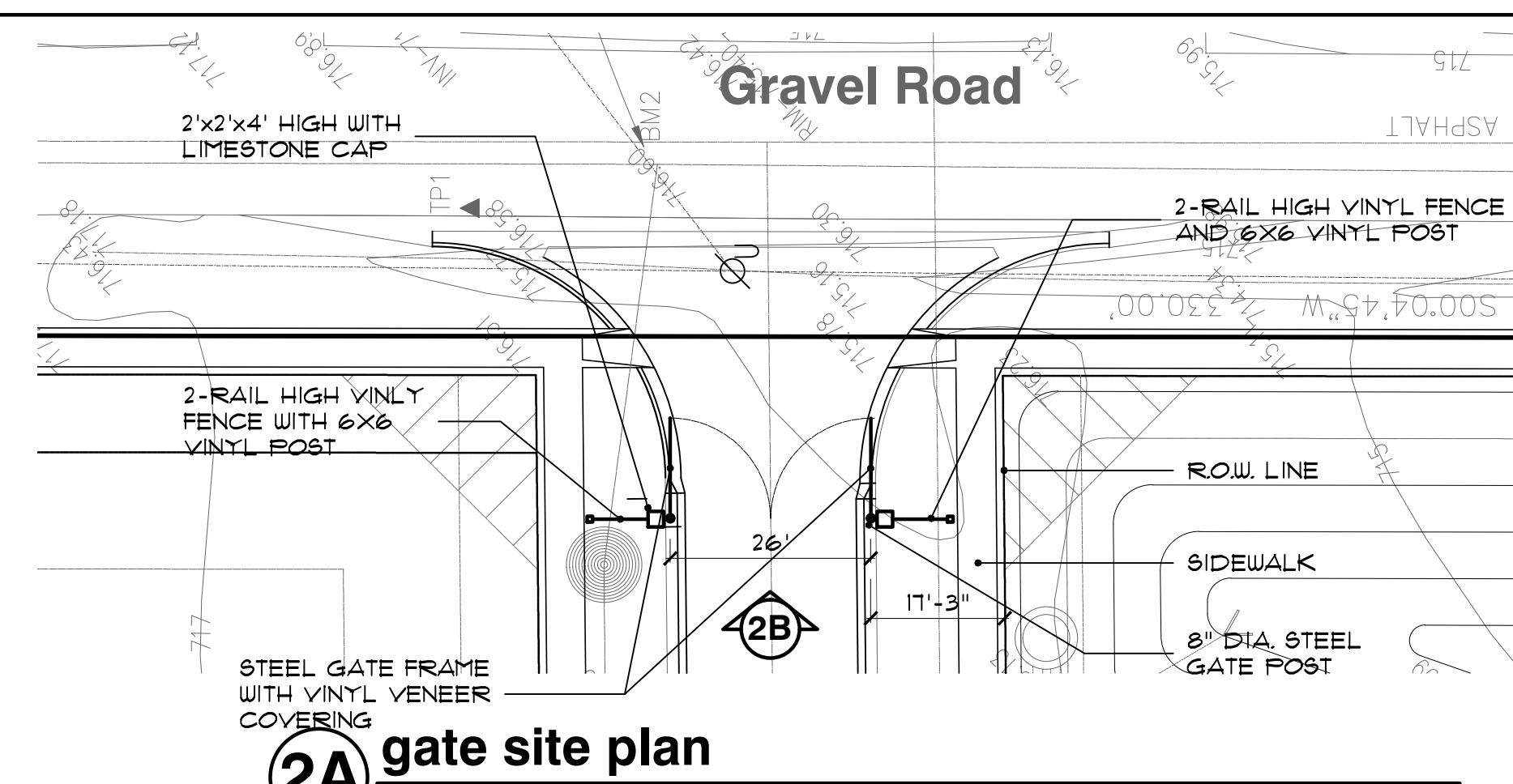


plant material list

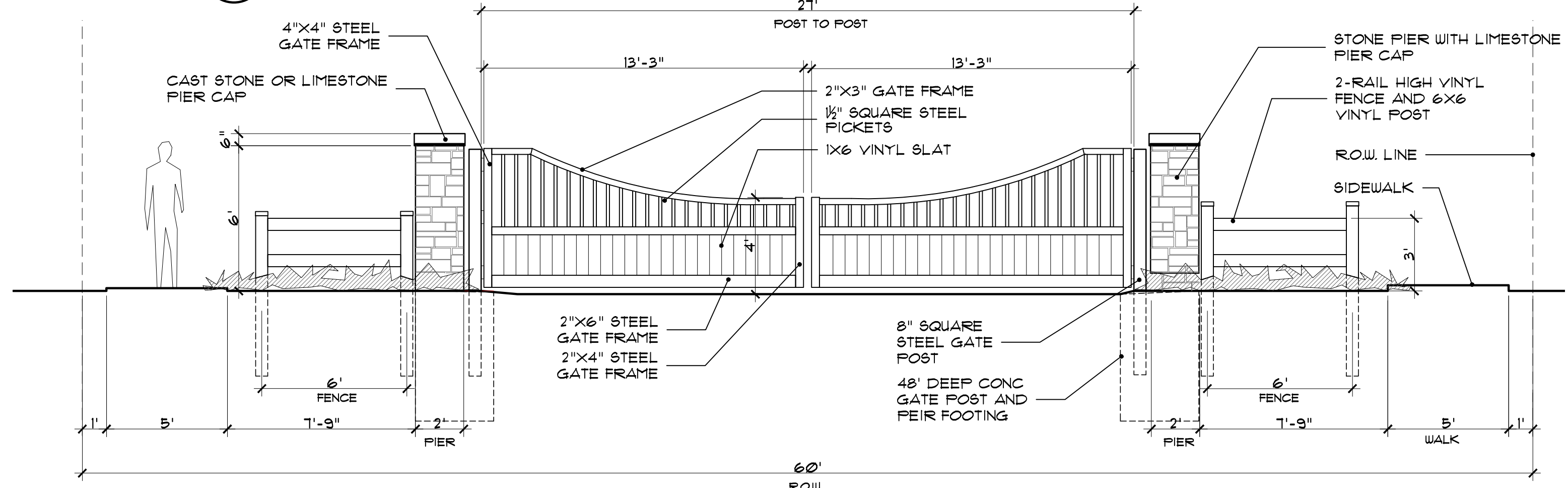
key	quant. LS-1	botanical name	common name	unit cost	size	total cost	comments
LARGE AND SMALL DECIDUOUS TREES							
AF	8	ACER X FREEMANII 'JEFFERSON'	AUTUMN BLAZE RED MAPLE	135.0	3" BB	10,800	
GB	4	QUERCUS BICOLOR	WHITE SWAMP OAK	135.0	3" BB	5,400	
LS	2	LIQUIDAMBAR STYRACIFLUA	AMERICAN SWEET GUM	135.0	2" BB	270.0	
AC	6	'AMELANCHIER X.G. 'AUTUMN BRILLIANCE'	AUTUMN BRILLIANCE SERVICEBERRY	125.0	10" BB	750.0	MULTI-STEM
MR	2	'MALUS 'ROYALTY'	ROYALTY CRABAPPLE	125.0	2" BB	250.0	
SHRUBS							
VMK	31	VIBURNUM X.B. MOHAWK	MOHAWK VIBURNUM	15.0	3 1/2" B.B.	465.0	
CB	11	CORNUS STOLONIFERA	RED TWIG DOGWOOD	15.0	3 1/2" B.B.	165.0	
HA	2	HYDRANGEA ANNEBELLE	ANNABELLE HYDRANGEA	15.0	5 CONT.	30.0	
CKF	11	CALAMAGROSTIS ACUTIFLORA 'KARL FOERSTER'	KARL FOERSTER FEATHER REED GRASS	12.0	5 CONT.	132.0	
MBM	4	MISCANTHUS SINENSIS 'MORNING LIGHT'	MORNING LIGHT MAIDEN GRASS	12.0	5 CONT.	48.0	
LARGE AND SMALL EVERGREENS							
JS	65	JUNIFERUS SABINA 'TAMARISCIFOLIA'	TAM'S JUNIPER	15.0	24" BB	975.0	42" O.C. SPACING
AW	16	ABIES CONCOLOR	CONCOLOR WHITE FIR	1325	8" BB	21,200	
AUL	14	ABIES CONCOLOR	CONCOLOR WHITE FIR	1400	10" BB O	19,600	
PS	2	PINUS STROBUS	EASTERN WHITE PINE	1325	8" BB	2650	
PBL	1	PINUS STROBUS	EASTERN WHITE PINE	1400	10" BB O	1400	
PP	14	PICEA ABIES	NORWAY SPRUCE	1400	10" BB	19,600	
PFL	11	PICEA ABIES	NORWAY SPRUCE	1450	12" BB O	15,950	
				SOD (110 S.Y.)	16 S.Y.	4,620	
				HYDRO-SEED (2,850 S.Y.)	13 S.Y.	10,350	
				IRRIGATION	16,000		
				TOTAL		152,610	



2A gate site plan
scale: 20' = 1' - 0"



gate view illustration
FOR VISUAL REFERENCE USE ONLY



2B gate elevation
scale: 1/4" = 1' - 0"

pier/fence / notes:

1. LOCATE AND STAKE ALL EXISTING AND PROPOSED UTILITIES PRIOR TO CONSTRUCTION. COORDINATE ANY ADJUSTMENTS WITH ARCHITECT.
2. SEE LANDSCAPE PLAN FOR PROPOSED PLANTINGS ADJACENT TO PROPOSED ENTRY SIGN MONUMENTS, PIERS & FENCES.
3. VERIFY SOIL BEARING CAPACITY PRIOR TO ENTRY SIGN MONUMENT & PIER CONSTRUCTION. IF SOIL BEARING CAPACITY FALLS BELOW STANDARD REQUIREMENTS, CONSULT STRUCTURAL ENGINEER FOR RECOMMENDATION OF FINAL ENTRY MONUMENT & PIER FOOTING DESIGN.
4. SIGNAGE TEXT AND LOGO TO BE METAL FRAGMENT DIMENSIONAL LETTERS. PRIOR TO INSTALLATION, PERMITS TO BE OBTAINED PER ROCHESTER HILLS REQUIREMENTS AND APPROVALS.
5. FOOTINGS SHALL BEAR ON FIRM, UNDISTURBED SOIL WITH AN ASSUMED SAFE BEARING CAPACITY OF 2000 P.S.I. IF SOIL OF THIS CAPACITY IS NOT FOUND AT THE ELEVATIONS INDICATED, FOOTINGS SHALL BE ENLARGED OR LOWERED AT THE DIRECTION OF THE SOIL ENGINEER. VERIFY FOUNDATION SOIL BEARING PRESSURE IN FIELD BY SOILS ENGINEER.
6. ALL INFORMATION CONTAINED HEREIN IS SUBJECT TO APPROVAL, AND PERMITS TO BE OBTAINED PRIOR TO CONSTRUCTION.
7. ALL CONCRETE WORK AND PLACEMENT SHALL CONFORM TO THE LATEST RECOMMENDATIONS OF A.C.I.
8. PROVIDE DOUELS INTO FOUNDATION TO MATCH SIZE AND SPACING OF VERTICAL REINFORCEMENT AT ALL WALLS, UNLESS OTHERWISE NOTED.
9. MINIMUM CONCRETE STRENGTH TO BE 3000 P.S.I. # 18 DAYS. UO.N. SLABS SHALL BE 3500 P.S.I. MIN. UO.N. EXPOSED CONCRETE SHALL BE 4000 P.S.I. WITH 6% ± 1% ENTRAINED AIR UO.N.
10. PROVIDE MINIMUM 3" CONCRETE COVER FOR REINFORCEMENT BARS BELOW GRADE AND MINIMUM 2" CONCRETE COVER FOR REINFORCEMENT BARS ABOVE GRADE.

City of Rochester Hills notes:

PRIOR APPROVAL IS REQUIRED TO PLANT ANY TREE OR SHRUB ON THE PUBLIC R/W. ALL TREES AND SHRUBS MUST BE PLANTED AT LEAST 10' FROM THE EDGE OF THE PUBLIC ROAD. (TREES MUST BE PLANTED AT LEAST 15' AWAY FROM CURB OR ROAD EDGE WHERE THE SPEED LIMIT IS MORE THAN 35 MPH.) SHADE TREES AND SHRUBS MUST BE PLANTED AT LEAST 5' FROM THE EDGE OF THE PUBLIC WALKWAY. EVERGREEN AND ORNAMENTAL TREES MUST BE PLANTED AT LEAST 10' FROM THE EDGE OF THE PUBLIC WALKWAY. NO TREES OR SHRUBS MAY BE PLANTED WITHIN THE TRIANGULAR AREA FORMED AT THE INTERSECTION OF ANY STREET R/W LINES AT A DISTANCE ALONG EACH LINE OF 25' FROM THEIR POINT OF INTERSECTION. NO TREES OR SHRUBS MAY BE PLANTED IN THE TRIANGULAR AREA FORMED AT THE INTERSECTION OF ANY DRIVEWAY WITH A PUBLIC WALKWAY AT A DISTANCE ALONG EACH LINE OF 15' FROM THEIR POINT OF INTERSECTION. ALL TREES AND SHRUBS MUST BE PLANTED AT LEAST 10' FROM ANY FIRE HYDRANT, SHADE AND EVERGREEN TREES MUST BE AT LEAST 15' AWAY FROM THE NEAREST OVERHEAD WIRE. TREES MUST BE PLANTED A MINIMUM OF 5' FROM AN UNDERGROUND UTILITY, UNLESS THE CITY'S LANDSCAPE ARCHITECT REQUIRES A GREATER DISTANCE.

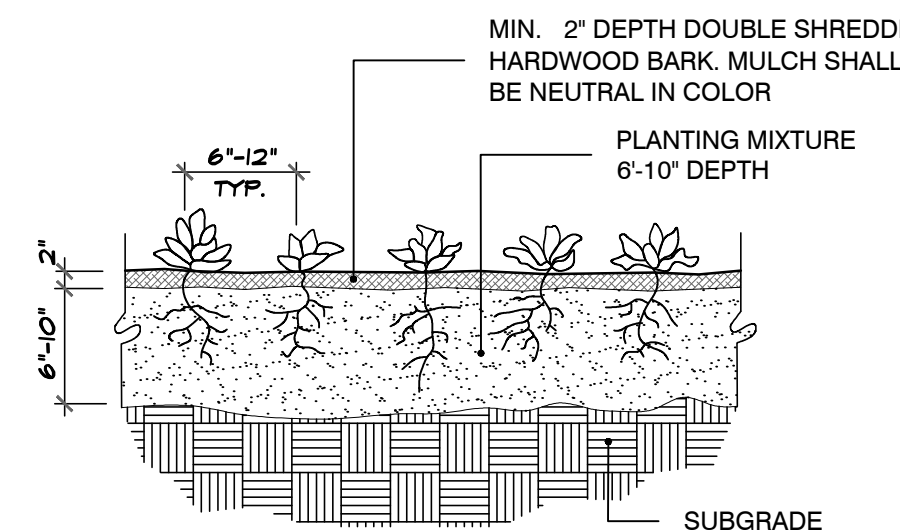
PRIOR TO THE RELEASE OF THE PERFORMANCE BOND:
A. THE CITY OF ROCHESTER HILLS WILL INSPECT ALL LANDSCAPE PLANTINGS INCLUDED ON THE PLANS.
B. THE CITY OF ROCHESTER HILLS FORESTRY DIVISION WILL INSPECT ALL TREES, EXISTING OR PLANTED, TO IDENTIFY ANY THAT POSE A HAZARD TO THE SAFE USE OF THE PUBLIC R.O.W. FORESTRY MAY REQUIRE THE DEVELOPER TO REMOVE, AND POSSIBLY REPLANT, ANY SUCH TREES.

detention basin seed mix:

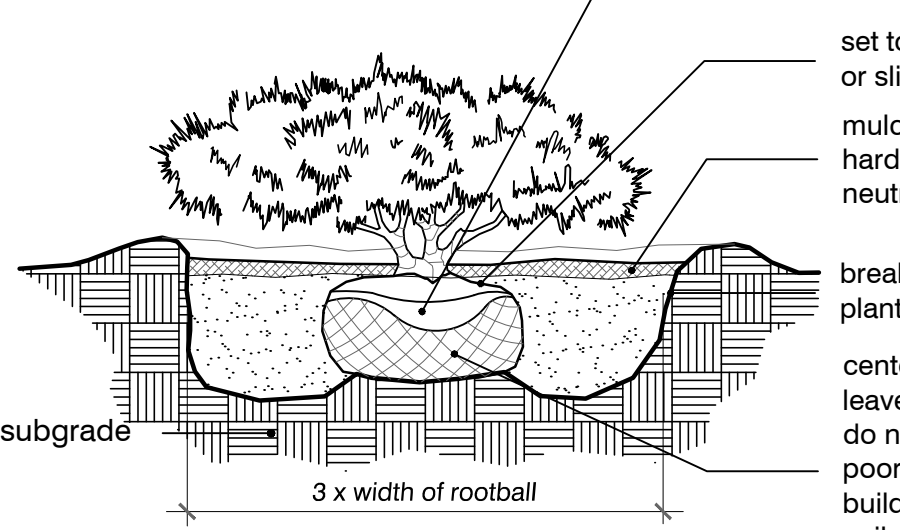
Sedge Meadow Mix: (Edge Zone)		Forbs oz/acre	
A mix of sedges, grasses and wildflowers recommended for soils that are saturated during most of the growing season. Use just above the normal waterline in the capillary zone in our Lake Edge Enhancement System.			
Sedge Meadow Mix oz/acre		Forbs oz/acre	
1	Carex comosa (Briny Sedge)	1	Aster puniceus (Swamp Aster)
2	Carex cristatella (Crested Sedge)	1	Aster umbellatus (Flat-topped Aster)
3	Carex frankii (Frank's Sedge)	1	Cassia hebecarpa (Wild Senna)
4	Carex hystericina (Porcupine Sedge)	1	Eupatorium maculatum (Spotted Joe-Pye Weed)
5	Carex lasiocarpa (Lund Sedge)	1	Eupatorium perfoliatum (Boneset)
6	Carex stipitata (Awn-Fruited Sedge)	2	Helianthus autumnale (Autumn Sneezeweed)
7	Carex tribuloides (Pointed Oval Sedge)	2	Liatris spicata (Dense Blazing Star)
8	Carex vulpinoidea (Fox Sedge)	1	Lobelia cardinalis (Cardinal Flower)
9	Elymus virginicus (Virginia Wild Rye)	1	Lobelia siphilitica (Great Blue Lobelia)
10	Glyceria strata (Fowl Mannia Grass)	2	Penstemon digitalis (Foxglove Beardtongue)
11	Leersia oryzoides (Rice Cut Grass)	3	Pycnanthemum virginianum (Mountain Mint)
12	Panicum virgatum (Switchgrass)	3	Rudbeckia fulgida speciosa (Showy Black-Eyed Susan)
13	Scirpus atrovirens (Dark Green Bulrush)	4	Rudbeckia hirta (Black-Eyed Susan)
14		2	Rudbeckia subtomentosa (Sweet Black-Eyed Susan)
15		2	Silphium integrifolium (Rosinweed)
16		2	Silphium perfoliatum (Cupplant)
17		2	Silphium terestriacum (Prairie Dock)
18		2	Solidago patula (Swamp Goldenrod)
19		2	Solidago riddellii (Riddell's Goldenrod)
20		2	Verbena hastata (Blue Vervain)
21		2	Vernonia fasciculata (Smooth Ironweed)
22		2	Veronica virginicum (Culver's Root)
23		1	Zizia aurea (Golden Alexanders)
24		1	

Components per acre
Sedge Meadow: 8 lbs grasses and sedges, 3 lbs forbs
annual cover: (Edge, Upland & Dry Upland Zones)
50% Temporary Grasses: will contain two of the following species:
Seed Date: Avena sativa
Annual Rye: Lolium multiflorum
Winter Wheat: Triticum aestivum
American Slough Grass: Beckmannia syzigachne

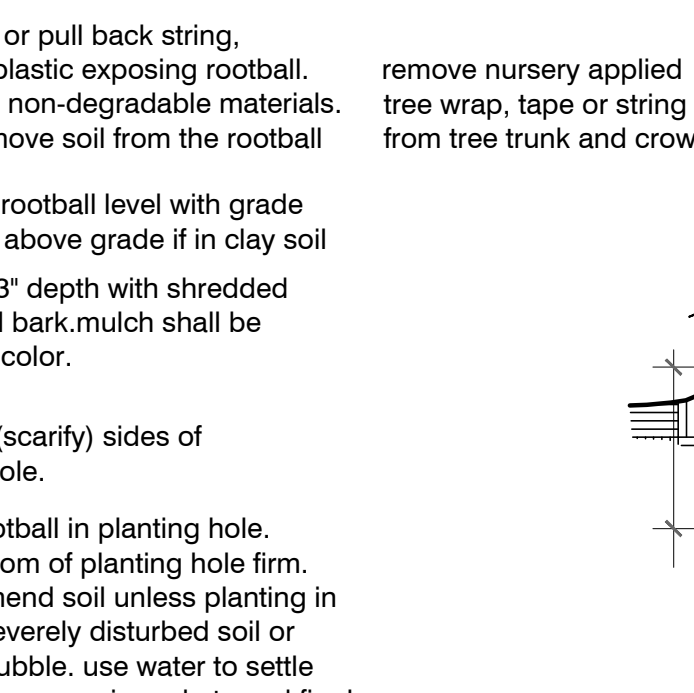
SOURCE:
NATIVESCAPE L.L.C.
P.O. BOX 122
ROCHESTER, MICHIGAN 48156
PH: 517-456-1616
WWW.NATIVESCAPE.NET



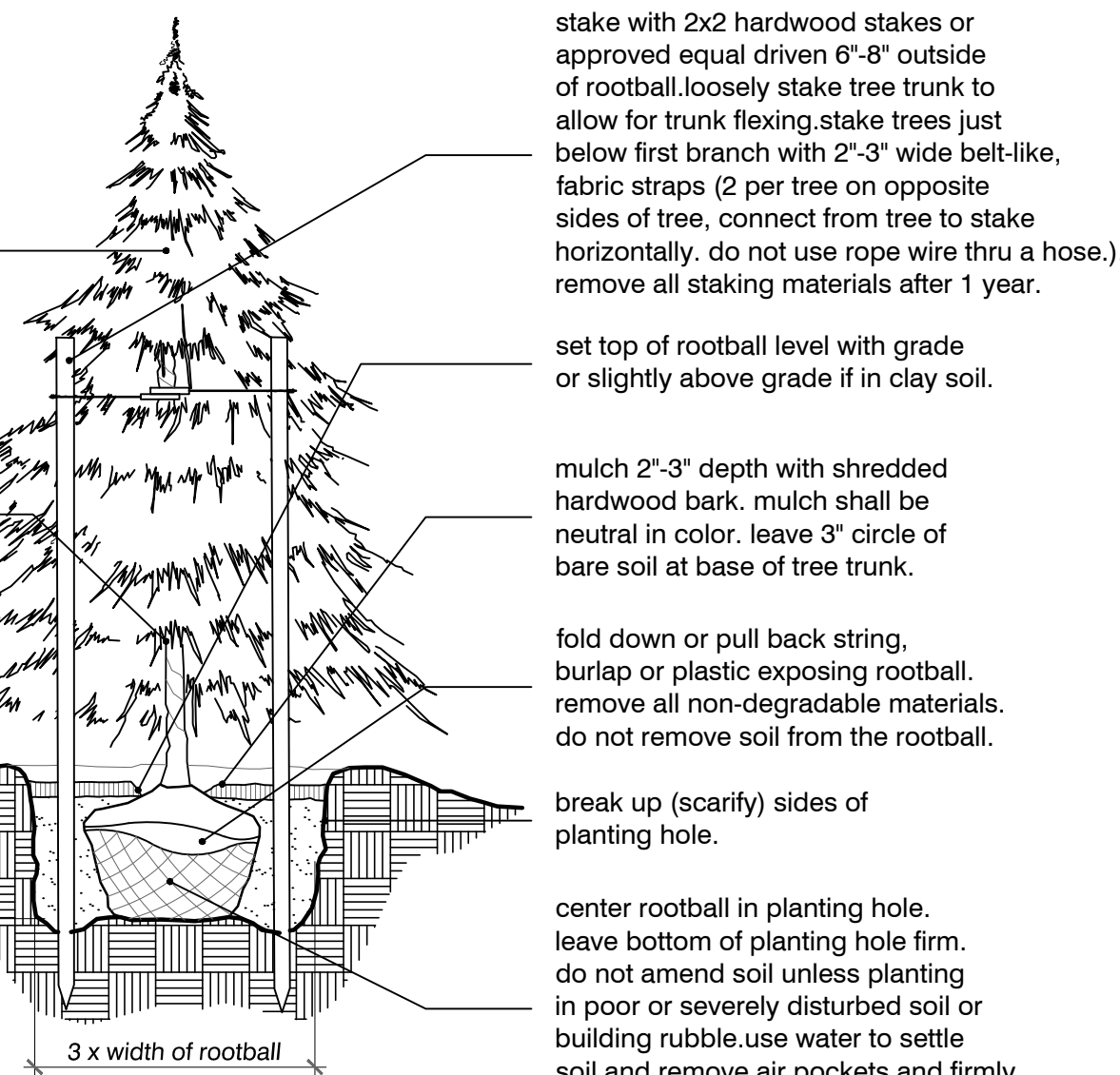
perennial planting detail
no scale



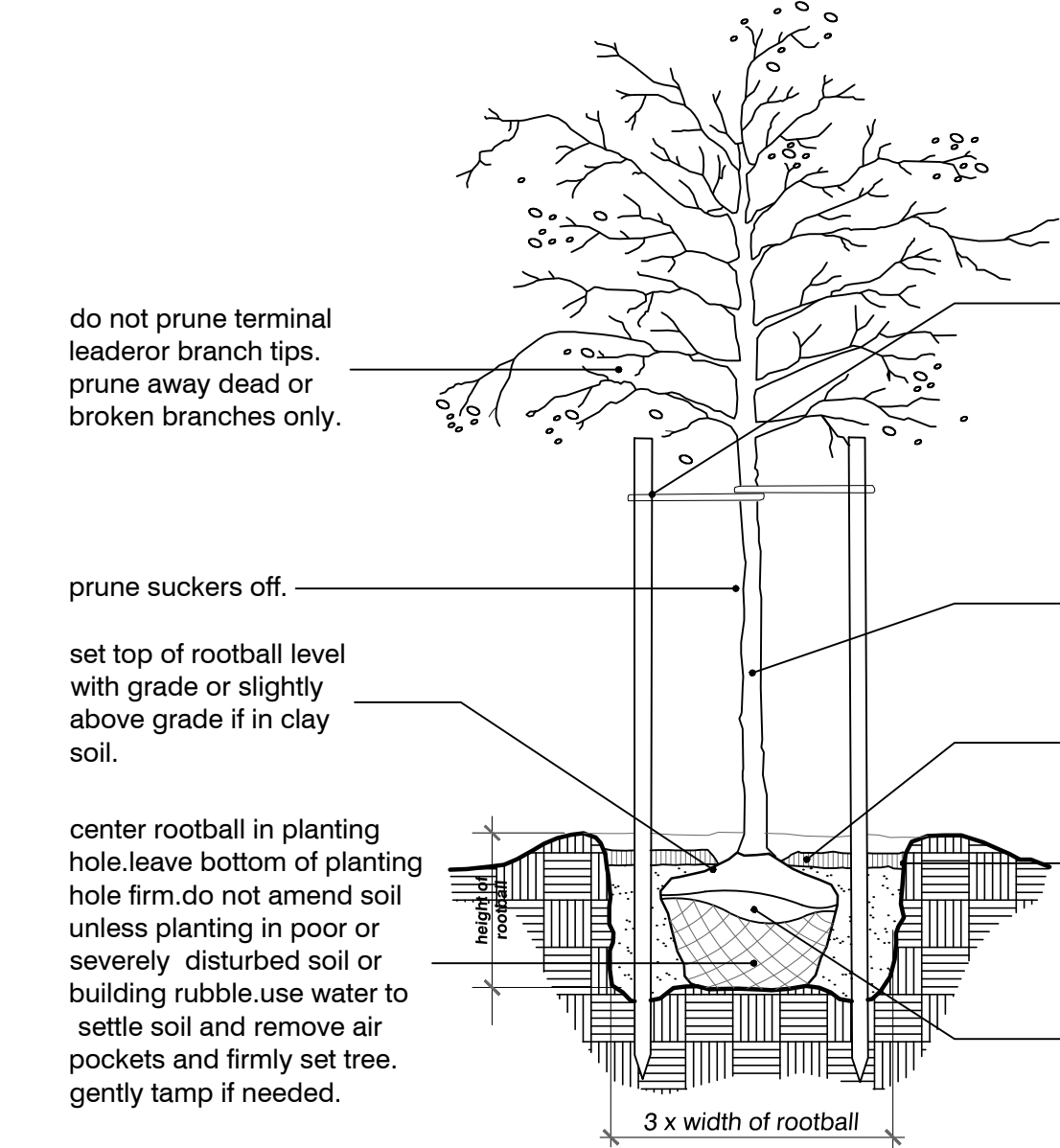
shrub planting detail
no scale



evergreen planting detail
no scale



tree planting detail
no scale



tree planting detail
no scale

do not stake trees unless in heavy clay soil, windy conditions, 3" or greater diameter tree trunk or large crown. if staking is needed due to these conditions - stake with 2x2 hardwood stakes or approved equal driven 6"-8" outside of rootball - loosely stake tree trunk to allow for trunk flexing. - stake trees just below first branch with 2"-3" wide belt-like, fabric straps (2 per tree on opposite sides of tree, connect from tree to stake horizontally, do not use rope wire thru a hose.) - remove all staking materials after 1 year.

do not prune terminal leader/branch tips. prune away dead or broken branches only.

prune suckers off.

set top of rootball level with grade or slightly above grade if in clay soil.

center rootball in planting hole. leave bottom of planting hole firm. do not amend soil unless planting in poor or severely disturbed soil or building rubble. use water to settle soil and remove air pockets and firmly set tree. gently tamp if needed.

fold down or pull back string, burlap or plastic exposing rootball. remove all non-degradable materials. do not remove soil from the rootball.

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remove nursery applied tree wrap, tape or string from tree trunk and crown. remove any tags or labels.

mulch 2"-3" depth with shredded hardwood bark. mulch shall be neutral in color. leave 3" circle of bare soil at base of tree trunk.

break up (scarify) sides of planting hole.

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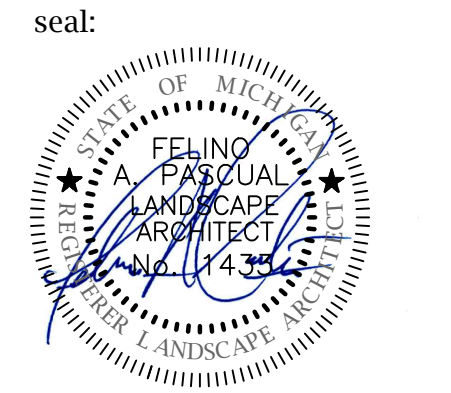
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Plant Material List, Planting Details, and Notes

FP A
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fax. (248) 557-5416



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Shelby Township, MI 48316
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project:
BERKSHIRE

project location:
City of Rochester Hills, Michigan
John R Road and Gravel Ridge Road

sheet title:
PLANT MATERIAL AND PLANTING DETAILS

job no./issue/revision date:
LS17.083.07 SPA 7-05-2017
LS17.083.08 SPA 8-01-2017
LS17.083.09 SPA 9-21-2017
LS17.083.11 SPA 11-29-2017
LS18.079.05 SPA 05-29-2018
LS18.079.06 SPA 06-11-2018

drawn by:
JP, CS
checked by:
FP, OG
date:
5-29-2018

notice:
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Do Not scale drawings. Use figured dimensions only.

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project no:
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LS-2 of 2