



**WISCONSIN**  
UNIVERSITY OF WISCONSIN-MADISON



# DESIGNS FOR AHUSKA PARK IN THE CITY OF MONONA



## LANDSCAPE ARCHITECTURE 365: PLANTING DESIGN

### FALL 2016

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**UNIVERCITY**  
**BETTER**  
  
**PLACES**  
 **TOGETHER**

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# TABLE OF CONTENTS

Acknowledgements ..... 3

Course participants ..... 3

Ahuska Park Plan One ..... 4

Ahuska Park Plan Two ..... 14

Ahuska Park Plan Three ..... 20

Ahuska Park Plan Four ..... 28

Ahuska Park Plan Five ..... 37





# ACKNOWLEDGEMENTS

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Professor John Harrington

Jake Anderson, Parks & Recreation Project Lead

Any other participants that helped in researching designs for Ahuska Park

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## ABOUT THIS REPORT

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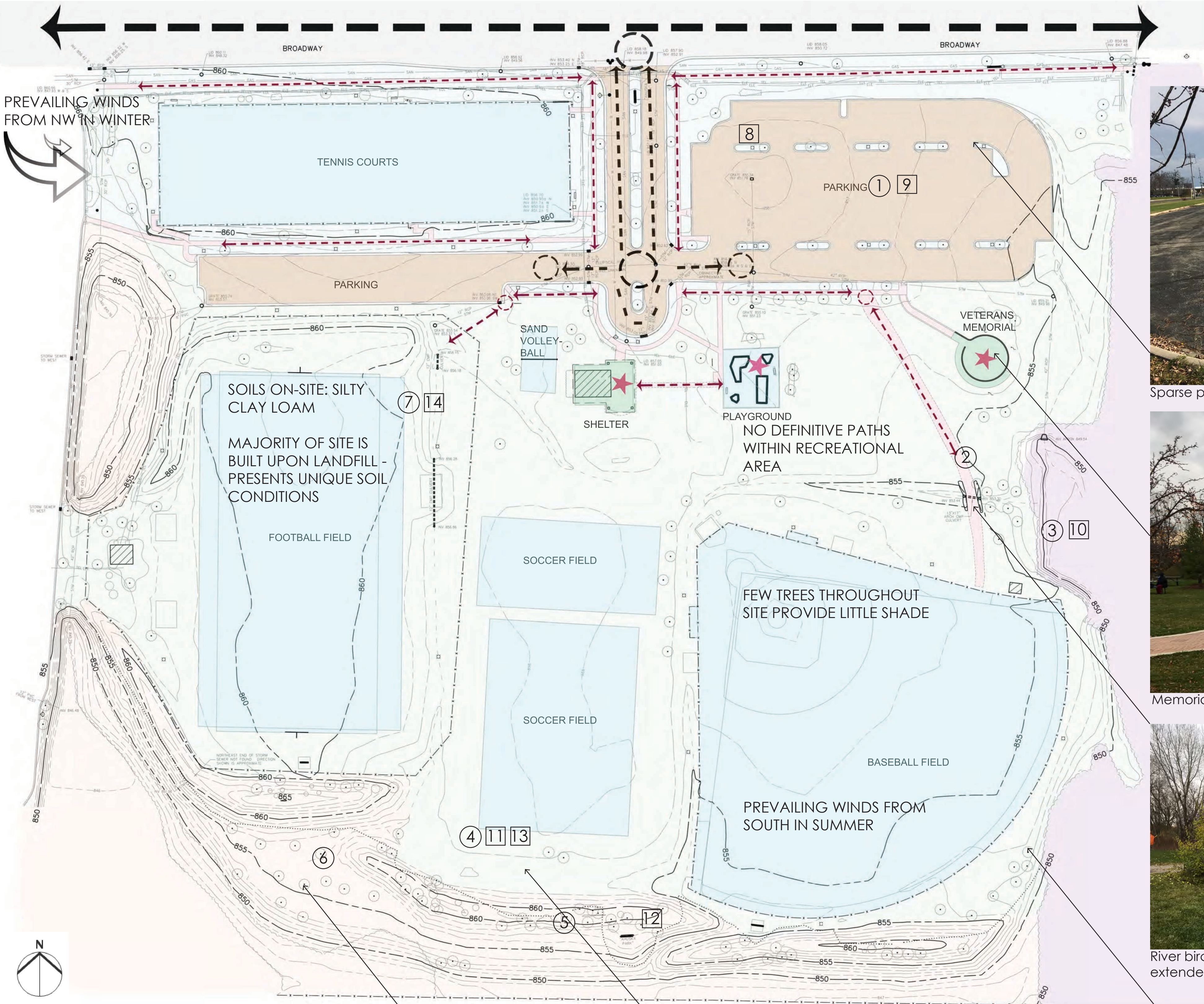
### Faculty mentor:

Professor John Harrington

This report was produced in collaboration with Landscape Architecture Department in the College of Agricultural and Life Sciences and the UniverCity Year at UW-Madison.



SITE ANALYSIS



LEGEND

- VEHICULAR PATHS
- PEDESTRIAN PATHS
- NODES
- LANDMARKS
- EDGES

ZONES

- RECREATION FIELDS
- PARKING
- OPEN GRASS
- EXISTING PATHS
- WETLANDS
- WOODED BERMS
- EXISTING FOUNDATIONS

OPPORTUNITIES

- 1 Open parking provides options for cooling with large shade trees
- 2 Expand path to connect throughout park and wetland
- 3 Wetland is a blank slate for boardwalk and educational opportunities
- 4 Poor draining soil can be used for rain garden plants - additional educational opportunities
- 5 Good views of wetlands across the highway
- 6 Swamp white oak grove for user interaction
- 7 Drainage can be improved throughout park and the water redirected to recreational fields

CONSTRAINTS

- 8 Road salt and drought conditions restrict plants for parking lot
- 9 Need more parking, but not much room for expansion
- 10 Existing grove of invasive trees and shrubs - need to be removed
- 11 Poor drainage makes area messy
- 12 Highway noise
- 13 Need plants that tolerate wet feet
- 14 Underlying soil is landfill - limited plant opportunities



Sparse planting medians in parking lot



Memorial needs context and integration to site



River birch grove and path system need to be extended and connected throughout site



Swamp white oak grove to be developed and used as an educational opportunity



Poor draining soils creates areas of standing water



Messy grove of invasives to be removed

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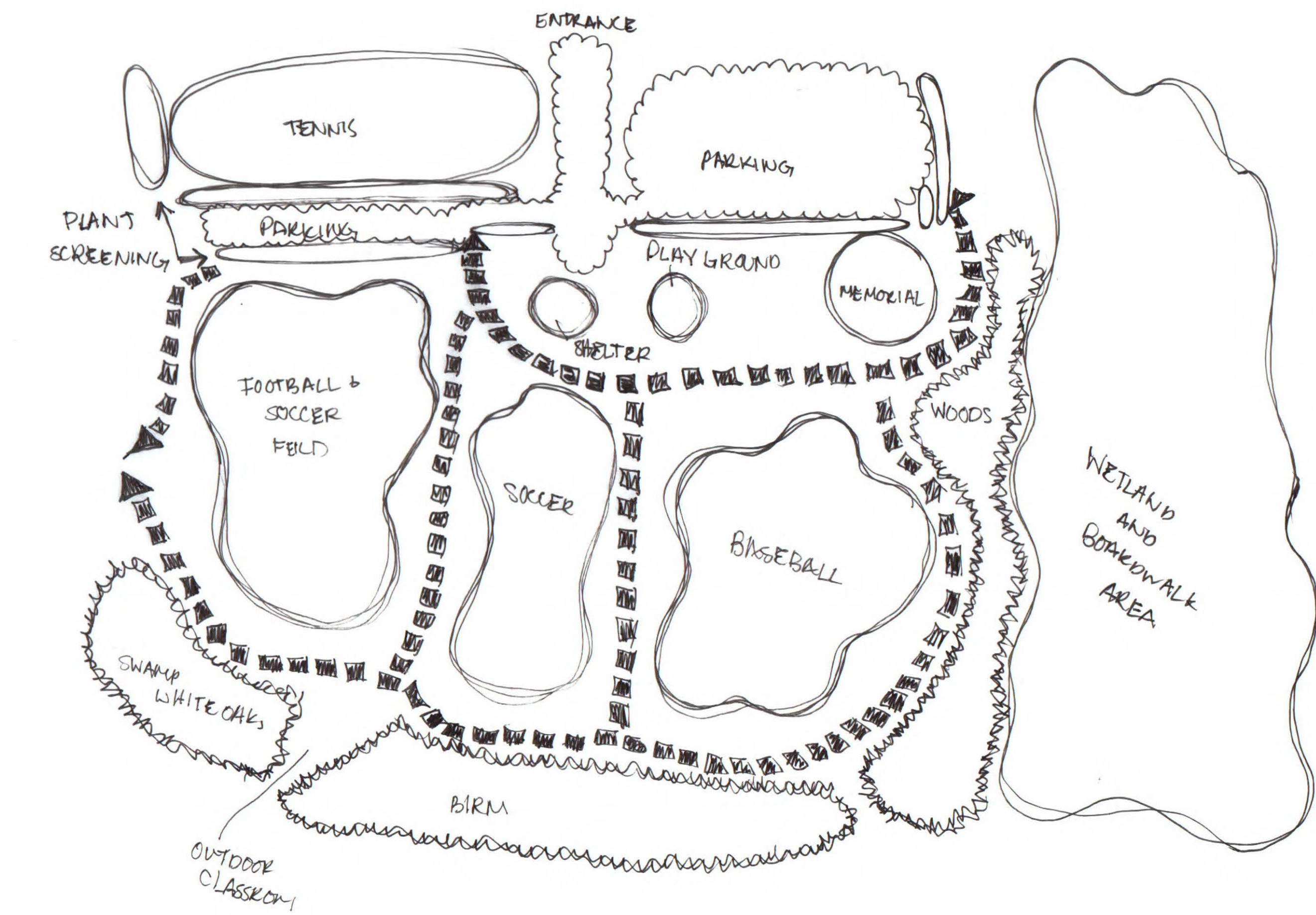
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CONTEXT MAPS



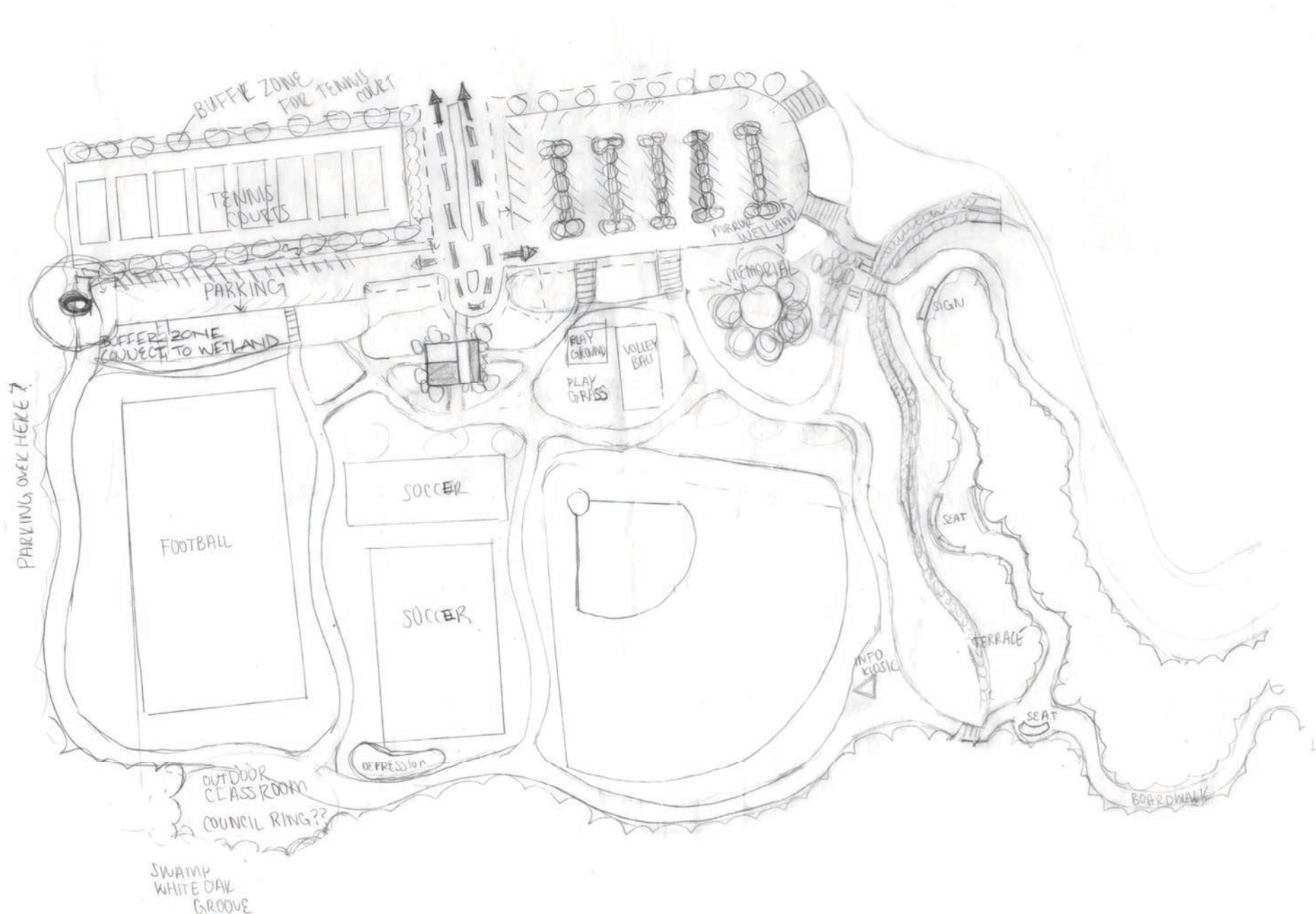
CONCEPTUAL MAP



CONCEPTUAL TO SCHEMATIC

- Strong connection between wetland and surrounding park
- Create opportunities to encourage use of park beyond sports
- Educational opportunities with signage

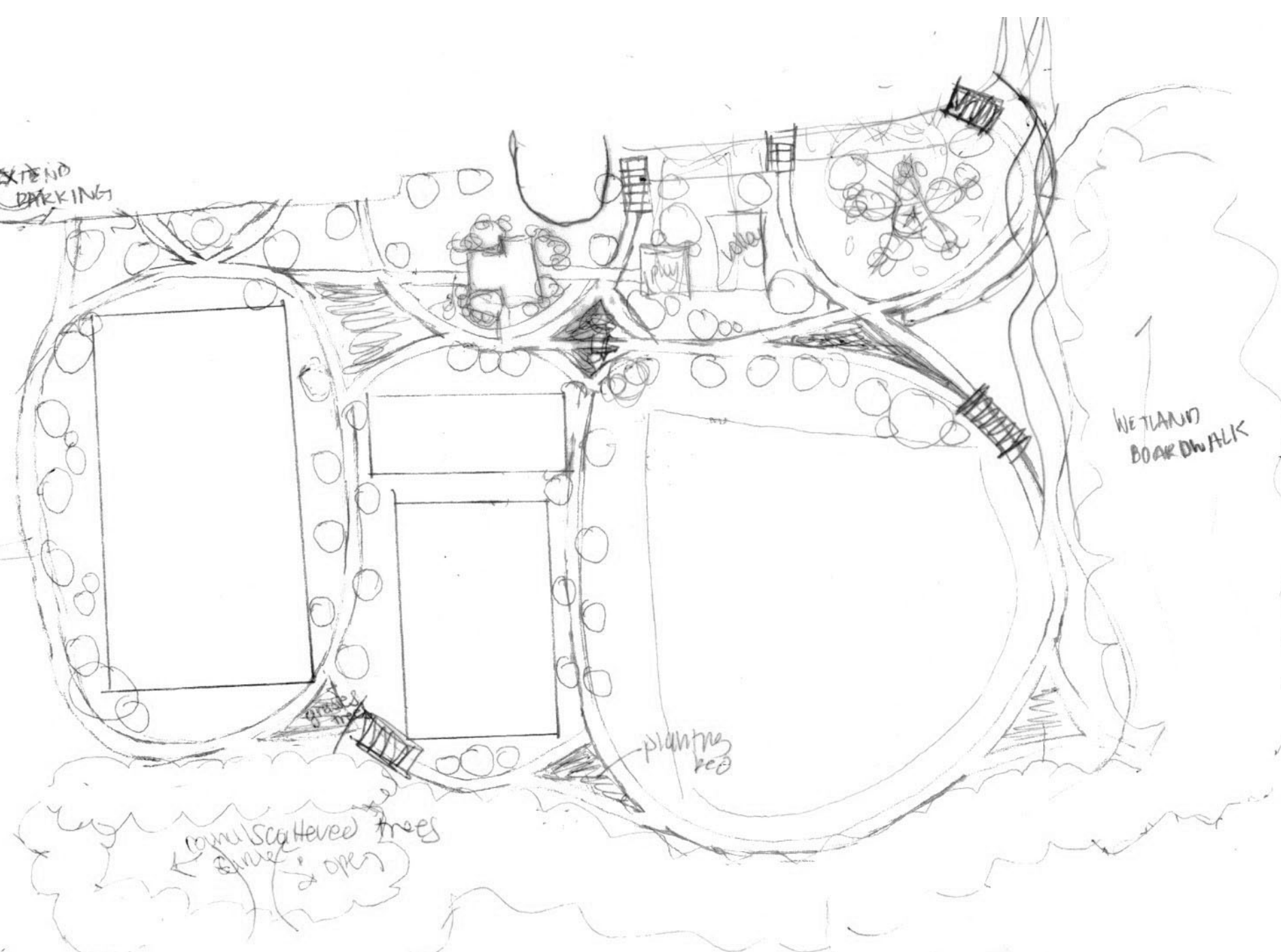
SCHEMATIC DRAWINGS



SCHEMATIC PATH 1: Curvy path option

DESIGN DEVELOPMENT

- Buffer zone next to parking creates immediate connection to wetland
- Curvy paths mimic more natural form
- Paths connect throughout entire park providing more user opportunities
- Pull star shape out of memorial - creates a more immersive experience



SCHEMATIC PATH 2: Formal path option

PRECEDENT STUDIES



THE HELIX: Curvilinear and interlocking paths



THE HELIX: Meandering boardwalk



WETLAND SIGNAGE: Vaulted educational signs in Llanelli, Wales



MODERN PAVILLION: Wood accents tie into boardwalk

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DESIGN CONCEPT: ECO-PARK

This concept involves engaging the local community with the park and its surrounding area. This means that the park has additional uses beyond sports; it is a green space designed with a multitude of users and uses in mind. There is a strong emphasis on connections to the wetland. Educational opportunities are created and experienced throughout the entirety of Ahuska Park. This sustainable design involves using materials that do not require a lot of maintenance and do not rapidly degrade. To create sustainable plantings, invasive species will be removed and hardy plants that require little maintenance will replace them and be planted throughout the site.

MASTER PLAN



N  
NOT TO SCALE

KEY

- |   |                                      |   |                              |   |             |   |                        |    |                                |
|---|--------------------------------------|---|------------------------------|---|-------------|---|------------------------|----|--------------------------------|
| 1 | OUTDOOR CLASSROOM WITHIN OAK SAVANNA | 3 | PROPOSED FARMERS MARKET AREA | 5 | SHELTER     | 7 | MEMORIAL               | 9  | PATH CONNECTING TO PARKING LOT |
| 2 | RAIN GARDEN POCKET                   | 4 | TERRACED PAIRIE PLANTINGS    | 6 | BUFFER ZONE | 8 | BURR OAK SPECIMEN TREE | 10 | EXTENDED PARKING               |

PROGRAM ELEMENTS

- BOARDWALK WITH EDUCATIONAL SIGNAGE
- OUTDOOR CLASSROOM
- VARIOUS ECOSYSTEMS
  - MESIC PRAIRIE
  - RAIN GARDEN
  - OAK SAVANNA
- PARKING BUFFER
- TENNIS COURT SCREENING
- CONNECTED PATHS



PROPOSED PARKING LOT: Grasscrete to replace asphalt



PARKING BUFFER: Boardwalk through plants



SEATING NOOKS: "Swollen" parts of boardwalk create nooks for seating and signage

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RAIN GARDEN PLANTS

DECIDUOUS TREES



*Hamamelis virginiana*  
Common witch hazel  
Zones: 3-8  
Height: 15'-20'  
Spread: 15'-20'  
Desirable Characteristics: Horizontal branching & yellow flowers from October to December

PERENNIALS



*Allium cernuum*  
nodding pink onion  
Zones: 4-8  
Height: 1'-1.5'  
Spread: 0.25'-0.5'  
Desirable Characteristics: pink flowers from June to August



*Helenium 'Helbro'*  
Mardi Gras sneezeweed  
Zones: 4-8  
Height: 3'-5'  
Spread: 2'-3'  
Desirable Characteristics: yellow and red flowers from June to August



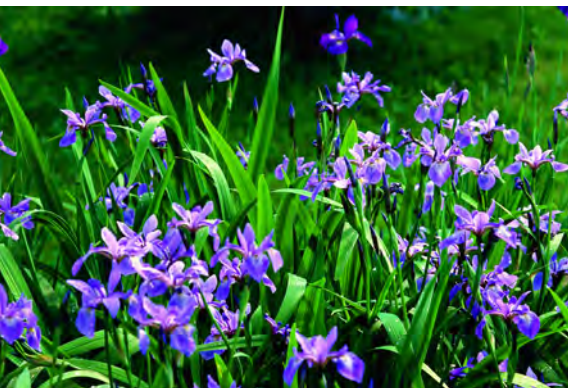
*Baptisia lactea*  
white false indigo  
Zones: 4-9  
Height: 3'-5'  
Spread: 2'-3'  
Desirable Characteristics: white flowers from June to July



*Heliopsis helianthoides*  
oxeye sunflower  
Zones: 3-9  
Height: 3'-6'  
Spread: 2'-4'  
Desirable Characteristics: yellow flowers from June to August



*Eupatorium perfoliatum*  
American boneset  
Zones: 3-8  
Height: 4'-6'  
Spread: 3'-4'  
Desirable Characteristics: white flowers from July to September



*Iris versicolor*  
northern blue flag  
Zones: 3-9  
Height: 2'-2.5'  
Spread: 2'-2.5'  
Desirable Characteristics: violet-blue flowers from May to June



*Monarda filulosa*  
wild bergamot  
Zones: 3-9  
Height: 2'-4'  
Spread: 2'-3'  
Desirable Characteristics: pink/lavender flowers from July to September



*Liatris pycnostachya*  
Prairie blazing star  
Zones: 3-9  
Height: 2'-5'  
Spread: 1'-2'  
Desirable Characteristics: purple flowers from July to August



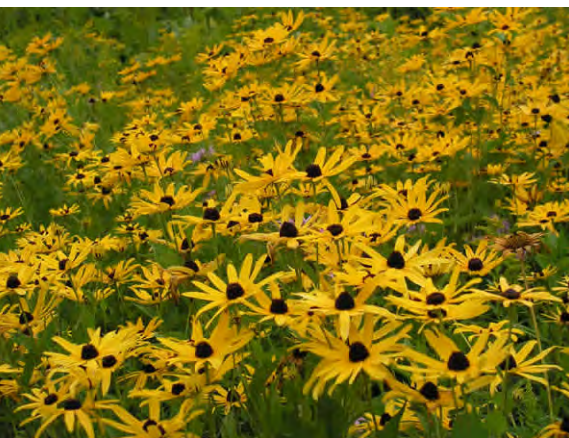
*Aster novae-angliae 'Skyscraper'*  
New England aster  
Zones: 3-8  
Height: 4'-5'  
Spread: 2'-3'  
Desirable Characteristics: purple flowers from August to October



*Amsonia hubrichtii*  
Blue star amsonia  
Zones: 5-8  
Height: 2'-3'  
Spread: 2'-3'  
Desirable Characteristics: blue flowers from April to May & leaf texture



*Thalictrum pubescens*  
tall meadow rue  
Zones: 3-8  
Height: 3'-7'  
Spread: 2'-3'  
Desirable Characteristics: white flowers from June to August



*Rudbeckia subtomentosa*  
sweet coneflower  
Zones: 4-8  
Height: 3'-5'  
Spread: 1'-2'  
Desirable Characteristics: yellow flowers from July to October



*Lobelia sphilitica*  
blue cardinal flower  
Zones: 4-9  
Height: 2'-3'  
Spread: 1'-1.5'  
Desirable Characteristics: blue flowers from July to September



*Sagittaria latifolia*  
common arrowhead  
Zones: 5-10  
Height: 1'-4'  
Spread: 1'-3'  
Desirable Characteristics: white flowers from July to September



*Solidago ohioensis*  
Ohio goldenrod  
Zones: 3-9  
Height: 3'-4'  
Spread: 1'-1.5'  
Desirable Characteristics: yellow flowers from August to September



*Lobelia cardinalis*  
cardinal flower  
Zones: 3-9  
Height: 2'-4'  
Spread: 1'-2'  
Desirable Characteristics: red flowers from July to September



*Mimulus luteus*  
yellow monkey-flower  
Zones: 5-9  
Height: 1'  
Spread: 1'-2'  
Desirable Characteristics: yellow and red flowers from July to August

GRASSES



*Carex vulpinoidea*  
fox sedge  
Zones: 3-9  
Height: 1'-3'  
Spread: 0.5'-2'  
Desirable Characteristics: fine texture and unique seed heads



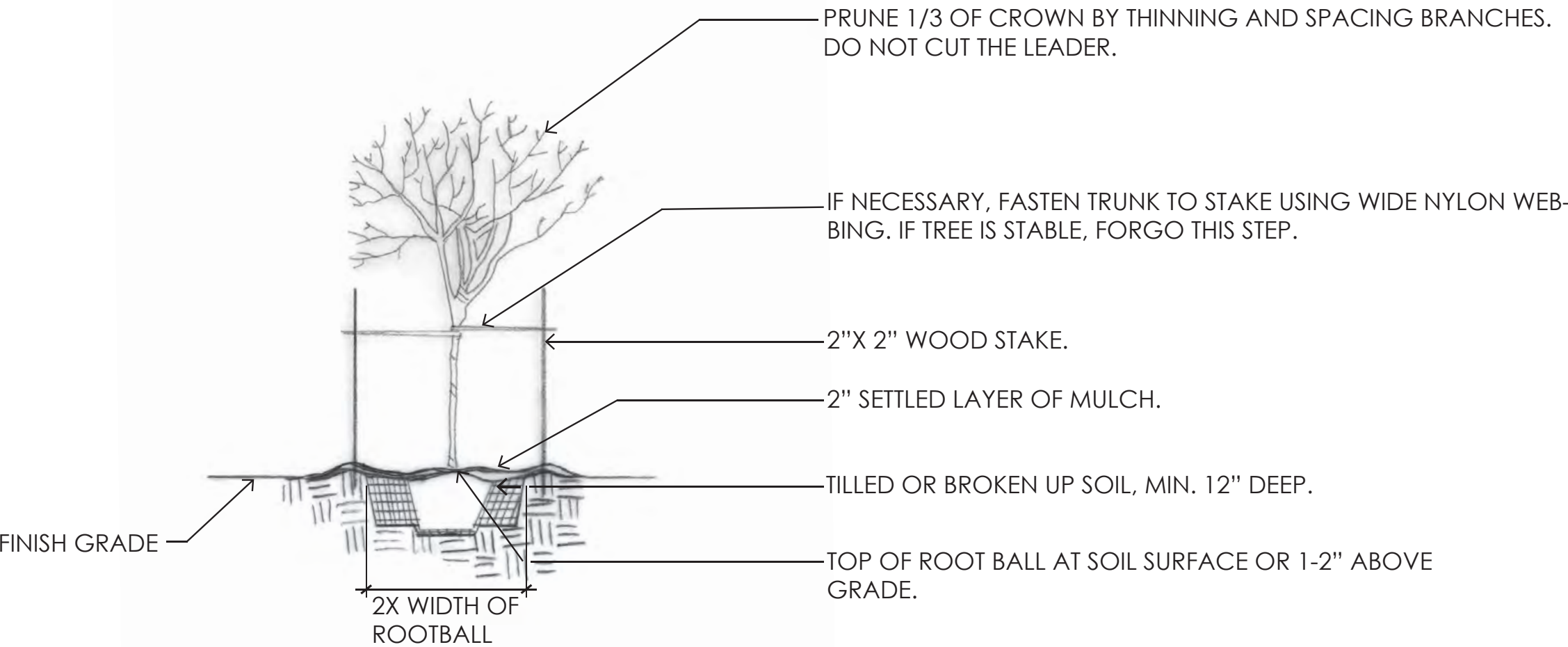
*Juncus effusus*  
soft rush  
Zones: 4-9  
Height: 2'-4'  
Spread: 2'-4'  
Desirable Characteristics: tall, upright form and unique seed heads



*Scirpus cyperinus*  
wool grass  
Zones: 4-8  
Height: 3'-5'  
Spread: 2'-4'  
Desirable Characteristics: persistent inflorescence through winter



*Elymus virginicus*  
Virginia wild rye  
Zones: 3-8  
Height: 2'-4'  
Spread: 1'-2'  
Desirable Characteristics: persistent seed heads into early fall



TREE PLANTING DETAIL  
N.T.S.



PERSPECTIVE OF RAIN GARDEN POCKET

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TERRACED PRAIRIE PLANT SEED MIX



**PERENNIALS:**  
Lavender Hyssop / Nodding Pink Onion / Butterflyweed / Sky Blue Aster / Smooth Aster / New Jersey Tea / Lance-leaf Coreopsis / White Prairie Clover / Purple Prairie Clover : Shootingstar / Pale Purple Coneflower / Purple Cone-flower / Rattlesnake Master / Roundhead Bushclover / Rough Blazingstar / Prairie Blazingstar / Wild Quinine / Smooth Penstemon / Great Solomon’s Seal / Black Eyed Susan / Brown Eyed Susan / Stiff Goldenrod / Ohio Spider-wort

**GRASSES:**  
Sideoats Grama / Little Bluestem / Prairie Dropseed



DECIDUOUS SHRUBS



*Ceanothus americanus*  
New Jersey tea  
Zones: 4-8  
Height: 3'-4'  
Spread: 3'-5'  
Desirable Characteristics: white flowers from May to July



*Eryngium yuccifolium*  
rattlesnake master  
Zones: 3-8  
Height: 4'-5'  
Spread: 2'-3'  
Desirable Characteristics: white flowers from June to September

PERENNIALS



*Dalea purpurea*  
purple prairie clover  
Zones: 3-8  
Height: 1'-3'  
Spread: 1'-1.5'  
Desirable Characteristics: purple flowers from June to August



*Dalea candida*  
white prairie clover  
Zones: 3-8  
Height: 1'-2'  
Spread: 0.75'-1.5'  
Desirable Characteristics: white flowers from May to July



*Asclepias tuberosa*  
butterfly weed  
Zones: 3-9  
Height: 1'-2.5'  
Spread: 1'-1.5'  
Desirable Characteristics: orange flowers from June to August

GRASSES



*Andropogon gerardii* 'Red October'  
Big bluestem  
Zones: 4-9  
Height: 4'-6'  
Spread: 2'-3'  
Desirable Characteristics: texture & fall color



*Sporobolus heterolepis*  
prairie dropseed  
Zones: 3-9  
Height: 2'-3'  
Spread: 2'-3'  
Desirable Characteristics: mound-ing form and fine texture



*Bouteloua curtipendula*  
sideoats grama  
Zones: 4-9  
Height: 1.5'-2.5'  
Spread: 1.5'-2'  
Desirable Characteristics: Attractive seeds



MESIC PRAIRIE TERRACE



BOARDWALK WITH SEATING PRECEDENT



TERRACE WITH BOARDWALK PRECEDENT

WETLAND FEATURES

- EDUCATIONAL BOARDWALK WITH SIGNAGE
  - PLANT ECOSYSTEMS
  - ANIMAL HABITATS
  - IMPORTANCE OF OUR NATURAL ENVIRONMENTS
- SEATING NOOKS
- MESIC PRAIRIE TERRACE
- POTENTIAL FOR WETLAND RESTORATION TO INCREASE DI-VERSITY OF NATIVE PLANT AND ANIMAL SPECIES

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PARKING AND TRANSITIONAL ZONE PLANTS



SEED MIX FOR BUFFER AREA

**PERENNIALS:**  
Nodding Pink Onion / Red Milkweed / New England Aster / White False Indigo / Pale Indian Plantain / Wild Senna / Canada Tick Trefoil / Joe Pye Weed / Boneset / Dogtooth Daisy / Ox Eye Sunflower / Wild Iris / Blue Flag Iris / Prairie Blazingstar / Dense Blazingstar / Great Blue Lobelia / Bergamot / Yellow Coneflower / Black Eyed Susan / Sweet Black Eyed Susan / Brown Eyed Susan / Rosinweed / Cupplant / Prairie Dock / Ohio Goldenrod / Stiff Goldenrod / Tall Meadowrue / Blue Vervain / Ironweed / Culver's Root / Golden Alexanders

**GRASSES:**  
Big Bluestem / Bebb's Sedge / Bottlebrush Sedge / Porcupine Sedge / Awl Fruited Sedge / Fox Sedge / Canada Wild Rye / Virginia Wild Rye / Switchgrass / Dark Green Bulrush / Indiangrass / Prairie Cordgrass / Annual Rye

GRASSES



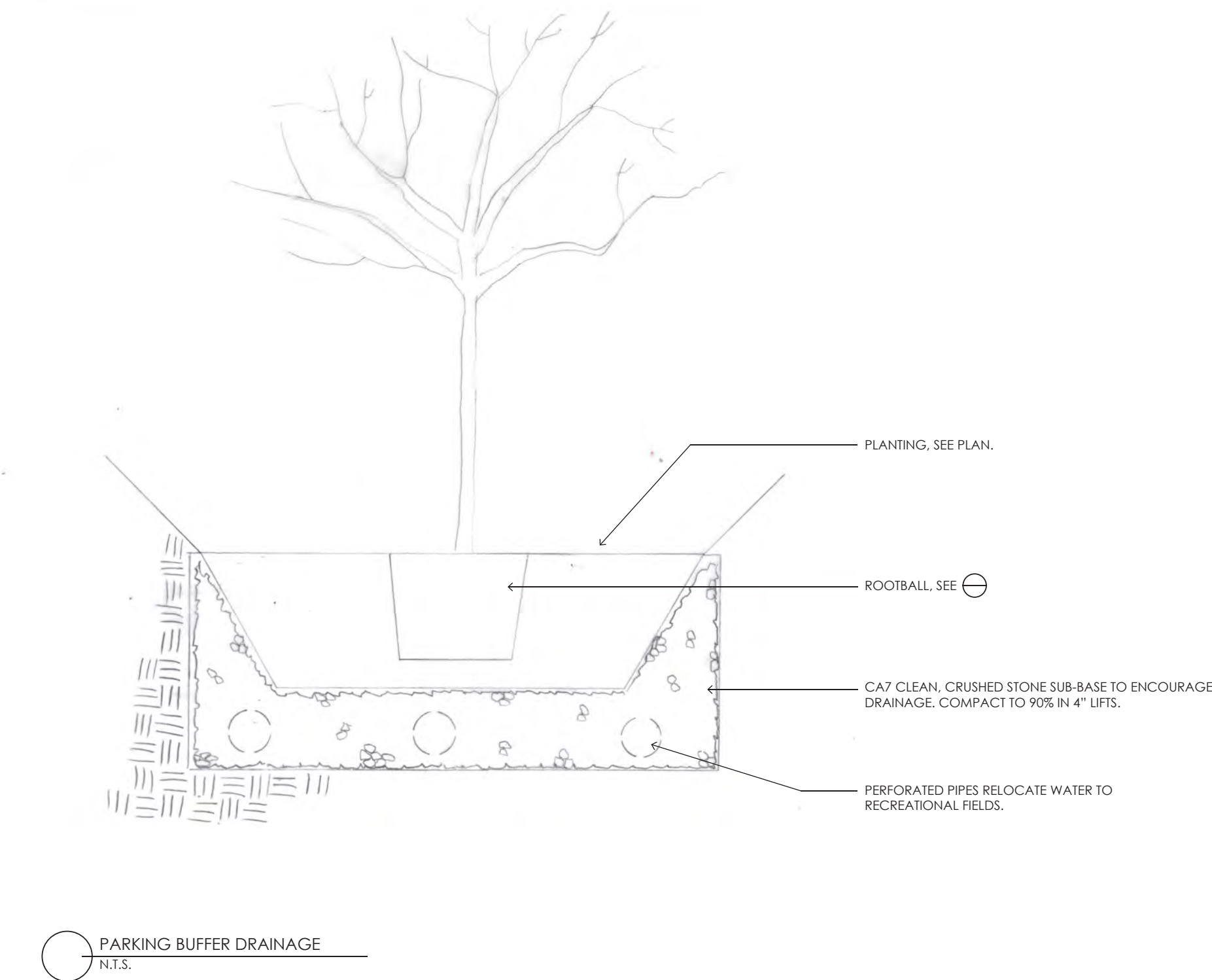
*Carex bicknellii*  
copper shouldered oval sedge  
Zones: 3-7  
Height: 1'-3'  
Spread: 1'-1.5'  
Desirable Characteristics: persistent seed heads



*Pennisetum alopecuroides* 'Piglet'  
fountain grass  
Zones: 5-9  
Height: 0.75'-1.5'  
Spread: 1'-2'  
Desirable Characteristics: texture & persistent seeds



*Schizachyrium scoparium*  
little bluestem  
Zones: 3-9  
Height: 2'-4'  
Spread: 1.5'-2'  
Desirable Characteristics: texture and red fall color



DETAIL OF PARKING BUFFER DRAINAGE

DECIDUOUS TREES



*Betula nigra* 'Cully'  
Heritage river birch  
Zones: 4-9  
Height: 40'-70'  
Spread: 40'-70'  
Desirable Characteristics: exfoliating bark  
Intended use: buffer between parking lot and park



*Ilex verticillata* 'Nana'  
Red Sprite winterberry  
Zones: 3-9  
Height: 2.5'-3'  
Spread: 2.5'-3'  
Desirable Characteristics: persistent red berries



*Celtis occidentalis*  
common hackberry  
Zones: 2-9  
Height: 40'-60'  
Spread: 40'-60'  
Desirable Characteristics: dark and rough bark  
Intended use: buffer and parking lot



*Viburnum dentatum*  
Arrowwood viburnum  
Zones: 2-8  
Height: 6'-10'  
Spread: 6'-10'  
Desirable Characteristics: leaf texture & fall color



*Quercus muehlenbergii*  
chinkapin oak  
Zones: 5-7  
Height: 40'-60'  
Spread: 50'-70'  
Desirable Characteristics: interesting foliage, branching structure & fall color  
Intended use: buffer and parking lot



*Hydrangea paniculata* 'Jane'  
Little Lime panicle hydrangea  
Zones: 3-8  
Height: 3'-5'  
Spread: 3'-5'  
Desirable Characteristics: white panicles of flowers from July to September, persistent into late fall/early winter



*Aronia melanocarpa* 'Autumn Magic'  
Black chokeberry  
Zones: 3-8  
Height: 3'-6'  
Spread: 4'-7'  
Desirable Characteristics: blue fruit & fall color

DECIDUOUS SHRUBS



*Diervilla sessilifolia* 'LPDC Podaras'  
Cool Splash southern bush honeysuckle  
Zones: 4-8  
Height: 2'-3'  
Spread: 2'-3'  
Desirable Characteristics: variegated leaves



*Physocarpus opulifolius* 'Seward'  
Summer Wine ninebark  
Zones: 3-8  
Height: 4'-6'  
Spread: 4'-6'  
Desirable Characteristics: exfoliating bark & purple foliage



PERSPECTIVE OF PARKING LOT BUFFER ZONE

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RECREATIONAL AREA TREES



*Quercus bicolor*  
Swamp white oak  
Zones: 3-8  
Height: 50'-60'  
Spread: 50'-60'  
Desirable Characteristics: good growing conditions for sight



*Quercus macrocarpa*  
Burr oak  
Zones: 3-8  
Height: 60'-80'  
Spread: 60'-80'  
Desirable Characteristics: large shade tree with horizontal branching



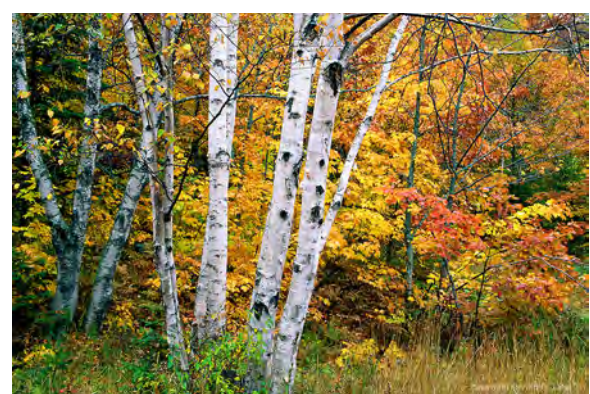
*Taxodium distichum*  
Bald cypress  
Zones: 4-9  
Height: 50'-70'  
Spread: 25'-40'  
Desirable Characteristics: interesting leaf texture and wet feet tolerant



*Nyssa sylvatica*  
Black gum  
Zones: 3-9  
Height: 30'-50'  
Spread: 20'-30'  
Desirable Characteristics: horizontal branching and beautiful fall color



*Acer x freemani*  
Freeman maple  
Zones: 5-8  
Height: 40'-60'  
Spread: 20'-40'  
Desirable Characteristics: bright red fall color



*Betula papyrifera*  
Paper birch  
Zones: 2-6  
Height: 50'-70'  
Spread: 25'-50'  
Desirable Characteristics: white, peeling bark and dentate leaves



*Betula nigra*  
River birch  
Zones: 4-9  
Height: 40'-70'  
Spread: 40'-60'  
Desirable Characteristics: peeling bark and tolerable to wet soil



*Hamamelis Virginiana*  
sideoats grama  
Zones: 3-8  
Height: 15'-20'  
Spread: 15-20'  
Desirable Characteristics: horizontal branching and yellow flowers



*Pinus strobus*  
Eastern white pine  
Zones: 4-9  
Height: 1.5'-2.5'  
Spread: 1.5'-2'  
Desirable Characteristics: upright form, horizontal branching and foliage texture

TENNIS COURT PLANTS



*Juniperus scopulorum*  
'Skyrocket' juniper  
Zones: 4-9  
Height: 15'-20'  
Spread: 2'-3'  
Desirable Characteristics: bluish green foliage and columnar form



*Thuja occidentalis 'Smaragd'*  
Emerald green arborvitae  
Zones: 2-7  
Height: 12'-14'  
Spread: 3'-4'  
Desirable Characteristics: upright form and bright green leaf foliage



PERSPECTIVE OF MEMORIAL PLANTING



PERSPECTIVE OF PAVILLION/FARMER'S MARKET PLANTING

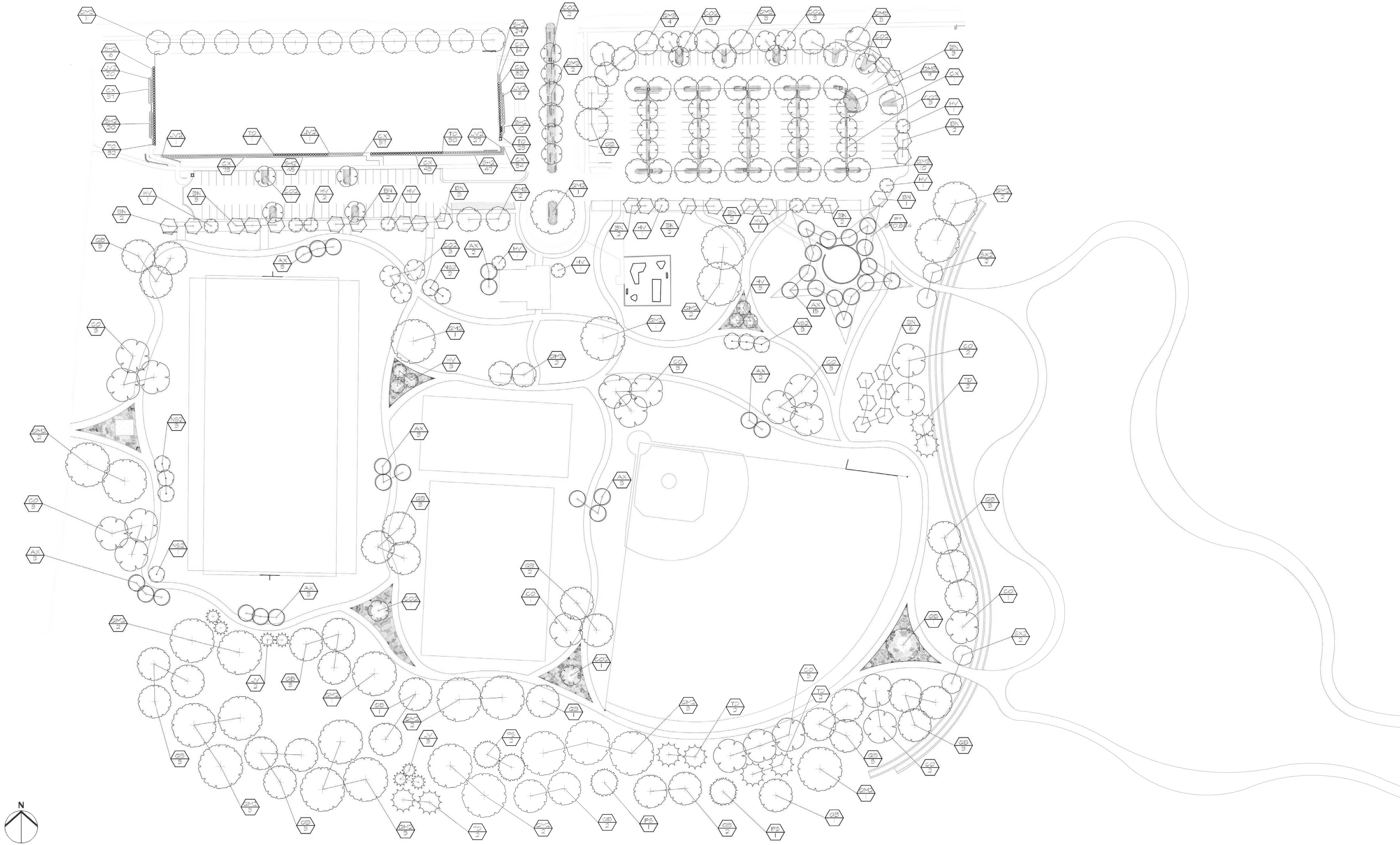
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PLANTING PLAN



AHUSKA PARK  
Monona, WI

BRANDI BACKUS  
KARLEY BOLZ  
SARAH LETARSKI



PLANT SCHEDULE

SYM	SCIENTIFIC NAME	COMMON NAME	SIZE	ROOTS	QTY	LOCATION
DECIDUOUS TREES						
QB	Quercus bicolor	Swamp white oak	2" CAL	B&B	37	Recreation
QM2	Quercus macrocarpa	Burr oak	2" CAL	B&B	26	Recreation
TD	Taxodium distichum	Bald cypress	2" CAL	B&B	8	Recreation
NS2	Nyssa sylvatica	Black gum	2" CAL	B&B	9	Recreation
AX	Acer x freemanii	Freeman maple	2" CAL	B&B	34	Recreation
BN	Betula nigra	River birch	2" CAL	B&B	30	Recreation
HV	Hamamelis virginiana	Witchhazel	2" CAL	B&B	16	Recreation
QM3	Quercus muhlenbergii	Chinkapin oak	2" CAL	B&B	48	Shelter/Parking
CO2	Celtis occidentalis	Common hackberry	2" CAL	B&B	56	Shelter/Parking
SX2	Salix x sepacralis	Golden weeping willow	2" CAL	B&B	4	Terrace
DECIDUOUS SHRUBS						
AH	Amsonia hubrichtii	Arkansas bluestar	3 GAL	CONT.	485	Parking/Rain Garden
DS	Diervilla sessilifolia 'Cool Splash'	Cool splash honeysuckle	3 GAL	CONT.	465	Parking
EVERGREEN TREES						
PS	Pinus strobus	Eastern white pine	2" CAL	B&B	4	Recreation
JV2	Juniperus scopulorum 'Skyrocket'	Skyrocket' juniper	2" CAL	B&B	116	Recreation
TO	Thuja occidentalis 'Smaragd'	Green emerald juniper	2" CAL	B&B	108	Recreation
JV	Juniperus virginiana	Eastern red cedar	2" CAL	B&B	7	Recreation
GRASSES/SEDGES						
CB2	Carex bicknellii	Prairie sedge	2 GAL	CONT.	1276	Shelter/Parking
CX	Calamagrostis x acutiflora 'Karl Foerster'	Feather reed grass	2 GAL	CONT.	790	Shelter/Parking
SH2	Sporobolus heteropolis 'Tara'	Dwarf prairie dropseed	2 GAL	CONT.	682	Shelter/Parking
PA	Pennisetum alopecuroides 'Piglet'	Fountain grass	2 GAL	CONT.	885	Shelter/Parking
CV	Carex vulpinoidea	Fox Sedge	2 GAL	CONT.	132	Rain Garden
SC	Scirpus cyperinus	Woolgrass	2 GAL	CONT.	25	Rain Garden
EV	Elymus virginicus	Virginia wildrye	2 GAL	CONT.	40	Rain Garden
PERENNIALS						
AI2	Asclepias incarnata 'Ice Ballet'	Swamp milkweed	4"	PLUGS	79	Rain Garden
AC2	Allium cernuum	Nodding wild onion	4"	PLUGS	758	Rain Garden
HA	Helenium autumnale	Dog-tooth Daisy	4"	PLUGS	94	Rain Garden
BL2	Baptisia lactea	White False Indigo	4"	PLUGS	103	Rain Garden
HH	Helioopsis helianthoides	Ox eye sunflower	4"	PLUGS	76	Rain Garden
CH	Cassia hebecarpa	Wild Senna	4"	PLUGS	37	Rain Garden
IG	Iris setosa	Wild iris	4"	PLUGS	129	Rain Garden
EP	Eupatorium perfoliatum	Boneset	4"	PLUGS	32	Rain Garden
IV5	Iris versicolor	Northern Blue Flag	4"	PLUGS	66	Rain Garden
LP2	Liatris pycnostachya	Prairie blazing star	4"	PLUGS	175	Rain Garden
LC	Lobelia cardinalis	Cardinal flower	4"	PLUGS	93	Rain Garden
PI	Parthenium integrifolium	Wild Quinine	4"	PLUGS	53	Rain Garden
LS	Lobelia siphilitica	Great blue lobelia	4"	PLUGS	247	Rain Garden
PD	Penstemon digitalis	Smooth Penstemon	4"	PLUGS	211	Rain Garden
ML	Mimulus luteus	Yellow monkey flower	4"	PLUGS	662	Rain Garden
RS	Rudbeckia subtomentosa	Sweet black eyed susan	4"	PLUGS	215	Rain Garden
SL	Sagittaria latifolia	Common Arrowhead	4"	PLUGS	122	Rain Garden
S0	Solidago ohioensis	Ohio Goldenrod	4"	PLUGS	130	Rain Garden
TP	Thalictrum pubescens	Tall Meadow Rue	4"	PLUGS	69	Rain Garden
AN2	Aster novae-angliae 'Skyscraper'	New Engand Aster	4"	PLUGS	54	Rain Garden
JE	Juncus effusus	Soft rush	4"	PLUGS	38	Rain Garden
CS	Carex stipata	Awl-fruited Sedge	4"	PLUGS	70	Rain Garden
SA	Scirpus hattorianus	Dark-green bulrush	4"	PLUGS	21	Rain Garden
MF2	Monarda fistulosa	Wild bergamot	4"	PLUGS	91	Rain Garden

SEED MIX PLANT SCHEDULE

	SCIENTIFIC NAME	COMMON NAME	PERCENTAGE %	ROOTS	LOCATION
SHORT PRAIRIE SEED MIX					
	Agastache foeniculum	Lavender Hyssop	5%	SEED	Terrace
	Allium cernuum	Nodding Pink Onion	5%	SEED	Terrace
	Asclepias tuberosa	Butterflyweed	5%	SEED	Terrace
	Symphyotrichum oolentangiense	Sky Blue Aster	1%	SEED	Terrace
	Symphyotrichum laeve	Smooth Aster	1%	SEED	Terrace
	Ceanothus americanus	New Jersey Tea	5%	SEED	Terrace
	Coreopsis lanceolata	Lanceleaf Coreopsis	5%	SEED	Terrace
	Dalea candida	White Prairie Clover	5%	SEED	Terrace
	Dalea purpurea	Purple Prairie Clover 'Shootingstar'	2%	SEED	Terrace
	Echinacea pallida	Pale Purple Coneflower	3%	SEED	Terrace
	Echinacea purpurea	Purple Coneflower	5%	SEED	Terrace
	Eryngium yuccifolium	Rattlesnake Master	1%	SEED	Terrace
	Lespedeza capitata	Roundhead Bushclover	5%	SEED	Terrace
	Liatris aspera	Rough Blazingstar	3%	SEED	Terrace
	Liatris pycnostachya	Prairie Blazingstar	3%	SEED	Terrace
	Parthenium integrifolium	Wild Quinine	5%	SEED	Terrace
	Penstemon digitalis	Smooth Penstemon	2%	SEED	Terrace
	Polygonatum biflorum	Great Solomon's Seal	3%	SEED	Terrace
	Rudbeckia subtomentosa	Sweet Black Eyed Susan	1%	SEED	Terrace
	Rudbeckia triloba	Brown Eyed Susan	1%	SEED	Terrace
	Solidago rigida	Stiff Goldenrod	2%	SEED	Terrace
	Tradescantia ohiensis	Ohio Spiderwort	2%	SEED	Terrace
	Bouteloua curtipendula	Sideoats Grama	10%	SEED	Terrace
	Schizachyrium scoparium	Little Bluestem	10%	SEED	Terrace
	Sporobolus heteropolis	Prairie Dropseed	10%	SEED	Terrace
DETENTION BASIN SEED MIX					
	Allium cernuum	Nodding Pink Onion	2%	SEED	Parking Buffer
	Baptisia lactea	White False Indigo	3%	SEED	Parking Buffer
	Arnoglossum atriplicifolium	Pale Indian Plantain	2%	SEED	Parking Buffer
	Cassia hebecarpa	Wild Senna	2%	SEED	Parking Buffer
	Desmodium canadense	Canada Tick Trefoi	2%	SEED	Parking Buffer
	Eupatorium perfoliatum	Boneset	2%	SEED	Parking Buffer
	Helenium autumnale	Dogtooth Daisy	2%	SEED	Parking Buffer
	Helioopsis helianthoides	Ox Eye Sunflower	2%	SEED	Parking Buffer
	Iris setosa	Wild Iris	2%	SEED	Parking Buffer
	Iris versicolor	Blue Flag Iris	2%	SEED	Parking Buffer
	Liatris pycnostachya	Prairie Blazingstar	2%	SEED	Parking Buffer
	Liatris spicata	Dense Blazingstar	2%	SEED	Parking Buffer
	Lobelia siphilitica	Great Blue Lobelia	2%	SEED	Parking Buffer
	Monarda fistulosa	Bergamot	2%	SEED	Parking Buffer
	Echinacea paradoxa	Yellow Coneflower	2%	SEED	Parking Buffer
	Rudbeckia hirta	Black Eyed Susan	1%	SEED	Parking Buffer
	Rudbeckia subtomentosa	Sweet Black Eyed Susan	1%	SEED	Parking Buffer
	Rudbeckia triloba	Brown Eyed Susan	1%	SEED	Parking Buffer
	Silphium integrifolium	Rosinweed	2%	SEED	Parking Buffer
	Silphium perfoliatum	Cupplant	2%	SEED	Parking Buffer
	Silphium terebinthinaceum	Prairie Dock	3%	SEED	Parking Buffer
	Solidago ohioensis	Ohio Goldenrod	2%	SEED	Parking Buffer
	Solidago rigida	Stiff Goldenrod	2%	SEED	Parking Buffer
	Thalictrum pubescens	Tall Meadowrue	2%	SEED	Parking Buffer
	Verbena hastata	Blue Vervain	3%	SEED	Parking Buffer
	Veronicastrum virginicum	Culver's Root	2%	SEED	Parking Buffer
	Zizia aurea	Golden Alexanders	2%	SEED	Parking Buffer
	Andropogon gerardii	Big Bluestem	4%	SEED	Parking Buffer
	Carex bebbii	Bebb's Sedge	3%	SEED	Parking Buffer
	Carex comosa	Bottlebrush Sedge	3%	SEED	Parking Buffer
	Carex hystericina	Porcupine Sedge	3%	SEED	Parking Buffer
	Common Fox Sedge	Awl Fruited Sedge	3%	SEED	Parking Buffer
	Carex vulpinoidea	Fox Sedge	3%	SEED	Parking Buffer
	Elymus canadensis	Canada Wild Rye	3%	SEED	Parking Buffer

MANAGEMENT PLAN

OVERALL FEEL OF SITE:

- Immediate immersion in nature upon arrival at site
- Plantings that invoke natural environments
- Distinct environments (mesic prairie, wetland parking buffer, rain gardens) that are all tied together through similar plants

TERRACED MESIC PRAIRIE:

- Natural planting contained within terraces
- Diverse prairie planting with swaths of purple and yellow
- Seed mix shall be watered until established and then left to grow naturally
- Prairie plants shall be contained to terraces – remove if they spread outside terraces
- Allow plants to spread, but remove if they crowd out other plants

RAIN GARDENS:

- Densely planted groups of grasses and perennials with specimen trees
- Rain garden nooks shall remain densely planted to prevent people walking through rain garden areas
- Only limb up trees if they impede with pedestrian traffic
- Remove plants only if they crowd out other plants
- Leaf litter should not be allowed to build up as it may prevent water drainage
- Allow seed heads to remain for seasonal interest

PARKING DETENTION BUFFERS:

- Invokes the feeling of a wetland to immediately make connection to wetlands onsite
- Only limb up trees if they impede with vehicular or pedestrian traffic
- Only cut back grasses and perennials if they cause obstructions on boardwalks
- To promote water drainage, leaf litter should not be allowed to build up
- Allow seed heads to remain for seasonal interest

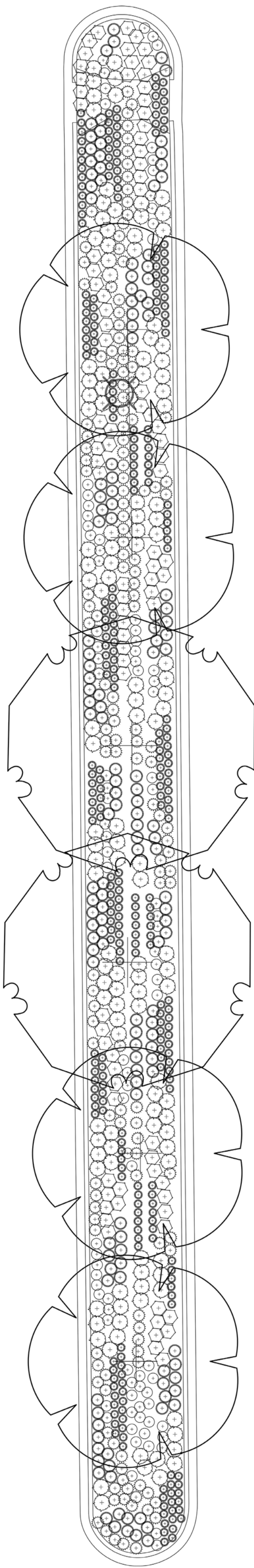
BRANDI BACKUS  
KARLEY BOLZ  
SARAH LETARSKI

AHUSKA PARK  
Monona, WI

LA 365  
DEC. 19, 2016

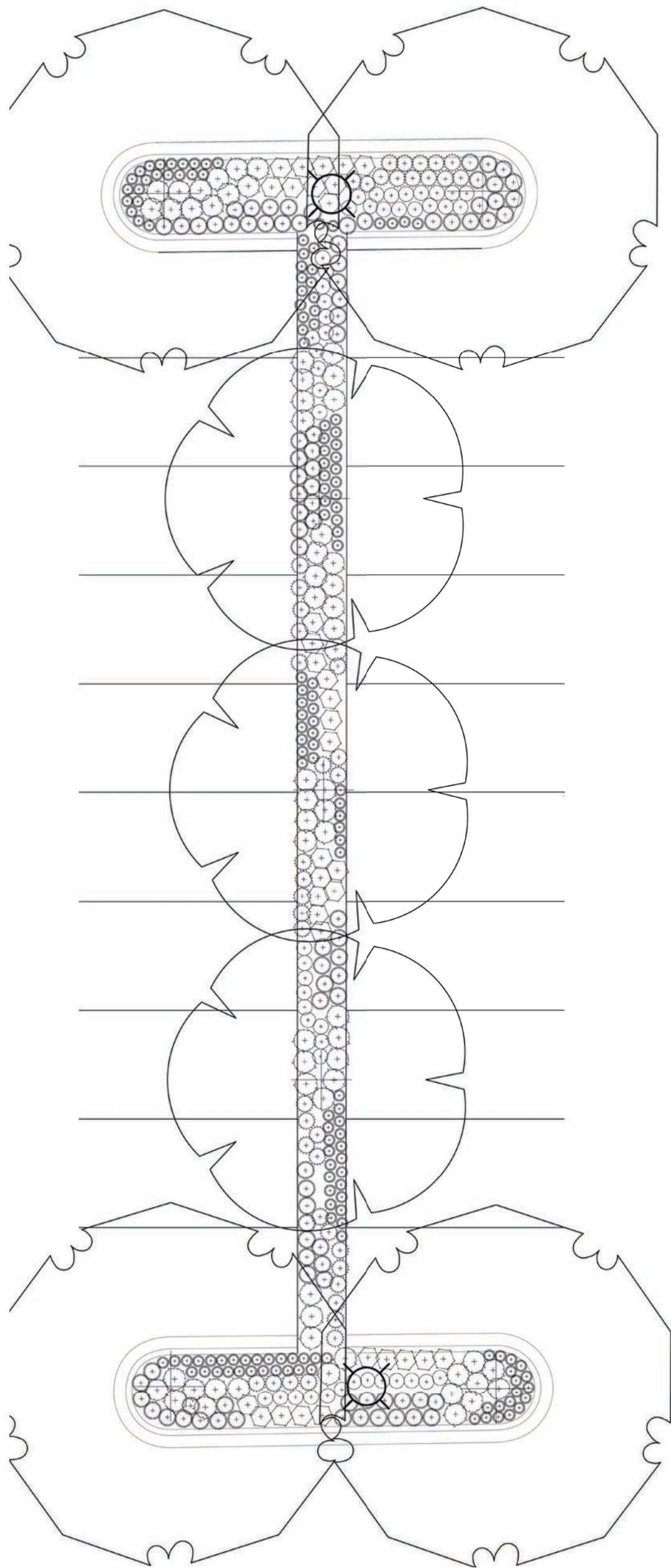


PLANT BLOW-UPS



ENTRANCE MEDIAN

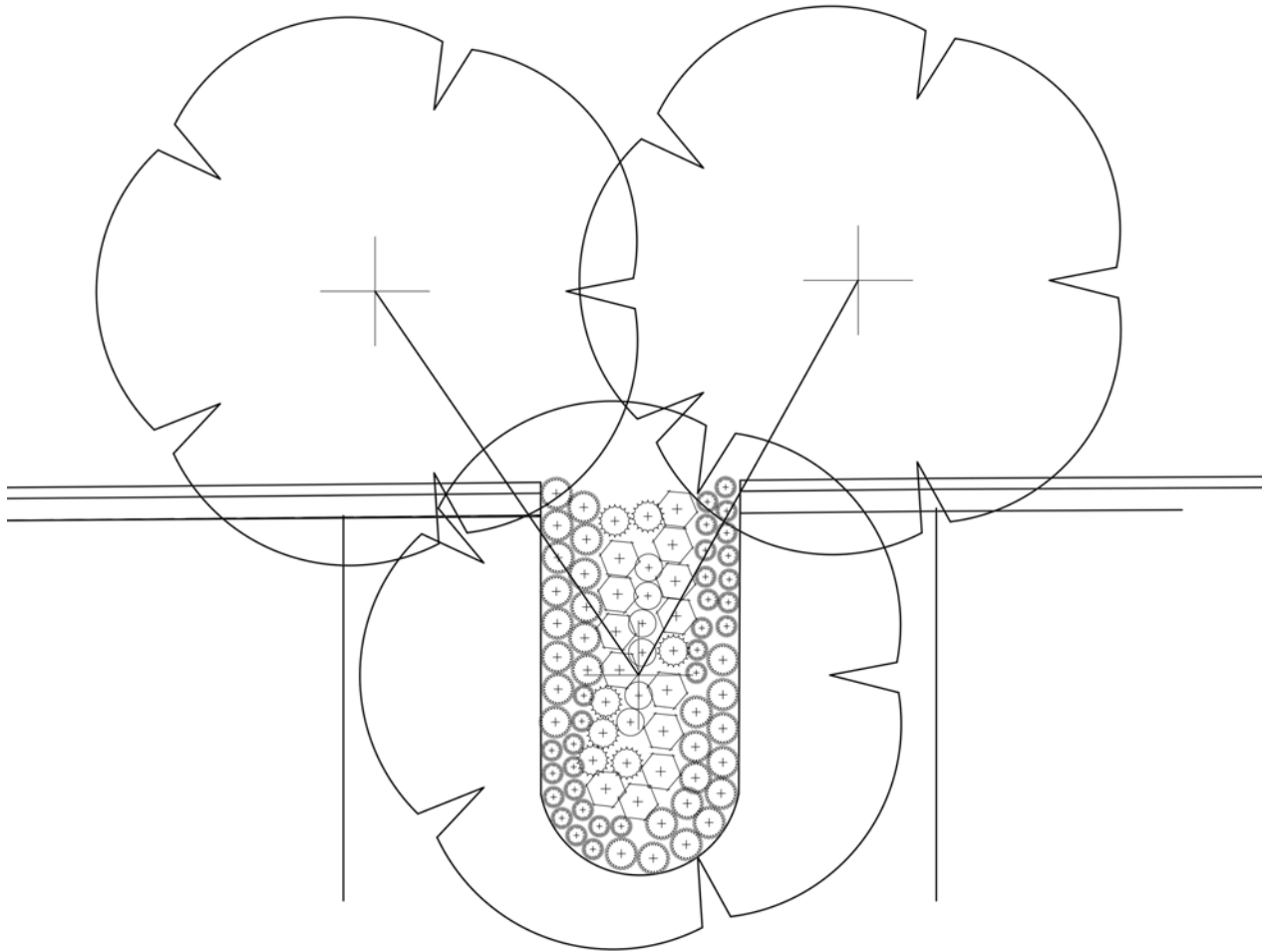
PARKING		BOTANICAL NAME / COMMON NAME	QTY
		<i>Celtis occidentalis</i> / Common Hackberry	3
		<i>Quercus muehlenbergii</i> / Chinkapin Oak	4
PARKING		BOTANICAL NAME / COMMON NAME	QTY
		<i>Amsonia hubrichtii</i> / Arkansas Blue-star	34
		<i>Calamagrostis x acutiflora</i> 'Karl Foerster' / Feather Reed Grass	50
		<i>Carex bicknellii</i> / Prairie Sedge	148
		<i>Diervilla sessilifolia</i> 'Cool Splash' / Cool Splash False Honeysuckle	63
		<i>Pennisetum alopecuroides</i> 'Piglet' / Piglet Dwarf Fountain Grass	91
		<i>Sporobolus heterolepis</i> 'Tara' / Prairie Dropseed	44



PARKING LOT MEDIAN

PARKING LOT    ENTANCE MEDIAN

BOTANICAL NAME / COMMON NAME	QTY
<i>Celtis occidentalis</i> / Common Hackberry	4
<i>Quercus muehlenbergii</i> / Chinkapin Oak	2
<i>Amsonia hubrichtii</i> / Arkansas Blue-star	88
<i>Calamagrostis x acutiflora</i> 'Karl Foerster' / Feather Reed Grass	90
<i>Carex bicknellii</i> / Prairie Sedge	296
<i>Diervilla sessilifolia</i> 'Cool Splash' / Cool Splash False Honeysuckle	130
<i>Pennisetum alopecuroides</i> 'Piglet' / Piglet Dwarf Fountain Grass	147
<i>Sporobolus heterolepis</i> 'Tara' / Prairie Dropseed	150

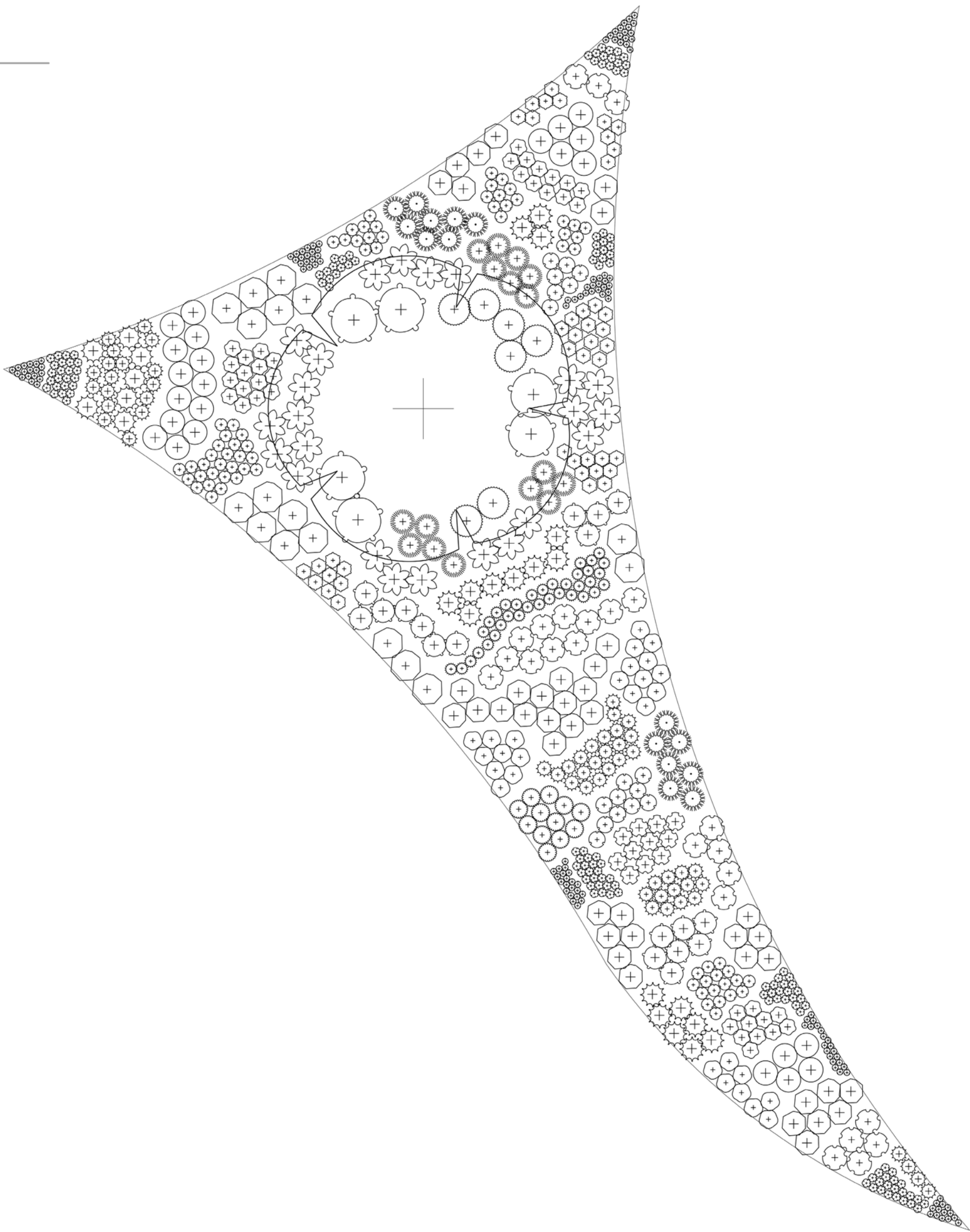


PARKING LOT PENINSULA

PARKING		BOTANICAL NAME / COMMON NAME	QTY
		<i>Celtis occidentalis</i> / Common Hackberry	3
		<i>Amsonia hubrichtii</i> / Arkansas Blue-star	13
PARKING		BOTANICAL NAME / COMMON NAME	QTY
		<i>Calamagrostis x acutiflora</i> 'Karl Foerster' / Feather Reed Grass	6
		<i>Carex bicknellii</i> / Prairie Sedge	29
		<i>Pennisetum alopecuroides</i> 'Piglet' / Piglet Dwarf Fountain Grass	28
		<i>Sporobolus heterolepis</i> 'Tara' / Prairie Dropseed	7

PLANT SCHEDULE

PARKING	BOTANICAL NAME / COMMON NAME	QTY
	<i>Celtis occidentalis</i> / Common Hackberry	
RAIN GARDEN	BOTANICAL NAME / COMMON NAME	QTY
	<i>Allium cernuum</i> / Nodding Wild Onion	131
	<i>Amsonia hubrichtii</i> / Arkansas Blue-star	41
	<i>Asclepias incarnata</i> / Swamp Milkweed	18
	<i>Aster novae-angliae</i> 'Skyscraper' / New England Aster	18
	<i>Baptisia leucantha</i> / White False Indigo	24
	<i>Carex stipata</i> / Sawbeak Sedge	17
	<i>Carex vulpinoidea</i> / Brown Fox Sedge	28
	<i>Helenium autumnale</i> / Sneezeweed	11
	<i>Helopsis scabra</i> / False Sunflower	23
	<i>Iris versicolor</i> / Blue Flag	21
	<i>Juncus effusus</i> / Soft Rush	7
	<i>Liatris pycnostachya</i> / Gayfeather	38
	<i>Lobelia cardinalis</i> / Cardinal Flower	17
	<i>Lobelia siphilitica</i> / Great Lobelia	72
	<i>Mimulus luteus</i> / Yellow Monkey Flower	131
	<i>Monarda fistulosa</i> / Bergamot	15
	<i>Parthenium integrifolium</i> / American Feverfew	12
	<i>Penstemon digitalis</i> / Beard-tongue	43
	<i>Rudbeckia subtomentosa</i> / Sweet Black-eyed Susan	34
	<i>Sagittaria latifolia</i> / Lance-Leaved Arrowhead	24
	<i>Scirpus cyperinus</i> / Nod Grass	6
	<i>Solidago ohioensis</i> / Ohio Goldenrod	35
	<i>Thalictrum pubescens</i> / King Of The Meadow	16



RAIN GARDEN POCKET

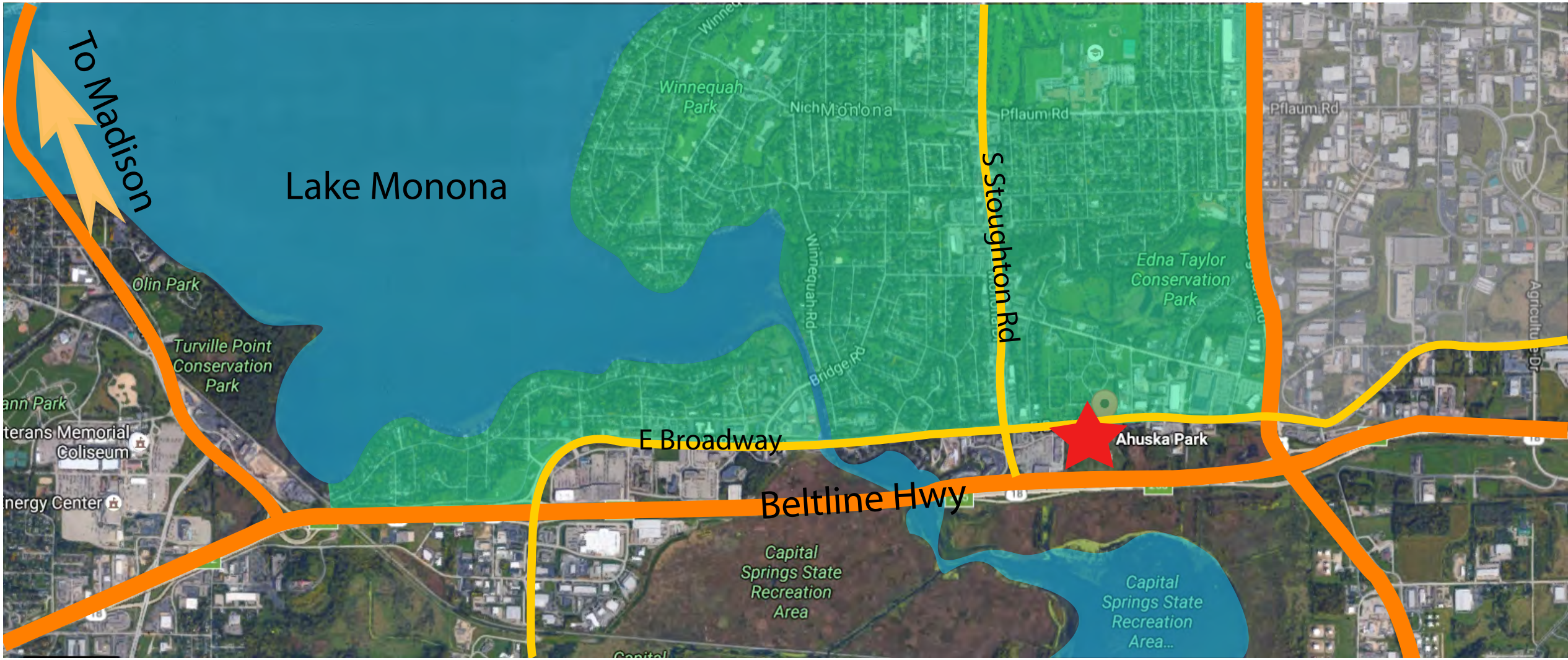
BRANDI BACKUS  
KARLEY BOLZ  
SARAH LETARSKI

AHUSKA PARK  
Monona, WI

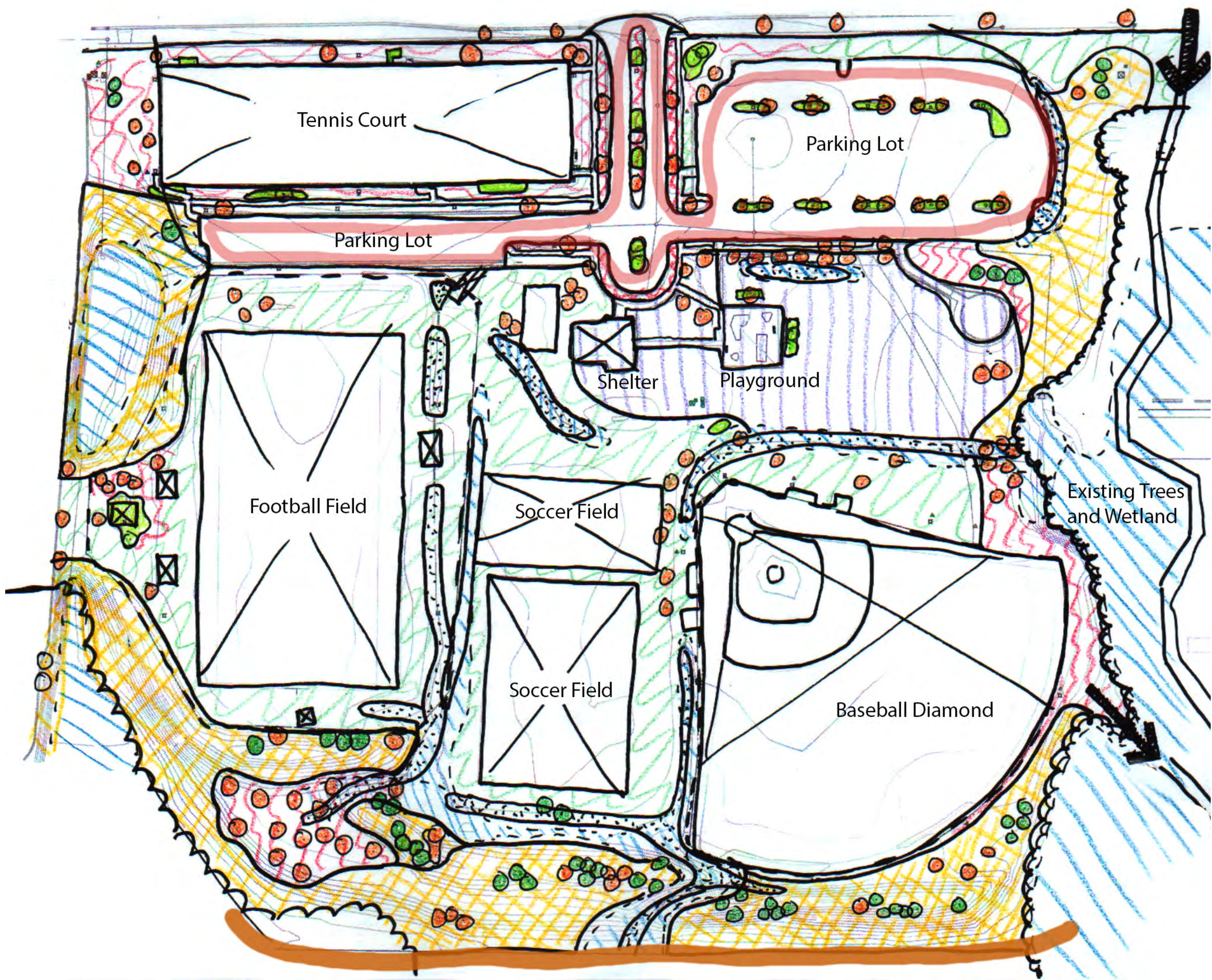
LA 365  
DEC. 19, 2016



# Site Analysis



Context



### Legend

- Deciduous Trees
- Evergreen Trees
- Planting Bed

### Opportunities

- Natives Plantings
- Bioswale
- Farmer's Market
- Turf
- Ornamental Plantings

### Constrints

- Wet Soils
- Noise
- Road Salt

# Precedent Studies



Wetland and Boardwalk



Boardwalk Overlook



Farmer's Market Earthwork



Native Planting



Noise Wall



# Design Process

## Program Statement



Zoning

**Community Involvement:** inclusion and diversity  
native and non-native plants  
farmer's market  
athletic fields

**Veteran's Memorial:** anchor point of wing shaped  
farmer's market terrace

# Concept

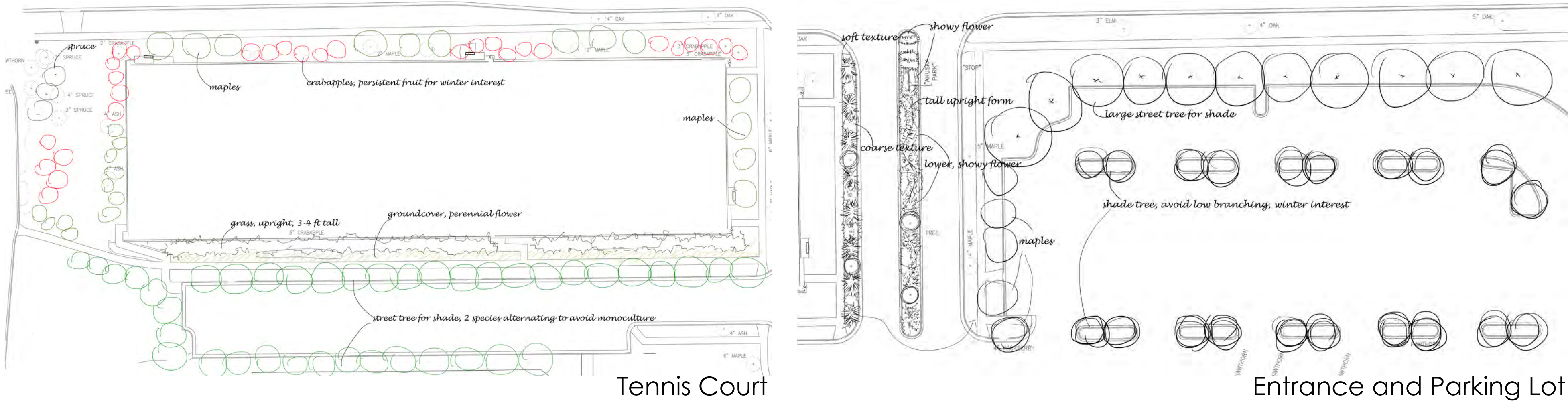
## The People & The Landscape

**Woodland Garden:** oaks and Wisconsin native  
woodland flowers

**Oak Savanna:** Wisconsin oak savanna planting with  
native grasses, light tree, and forb densities

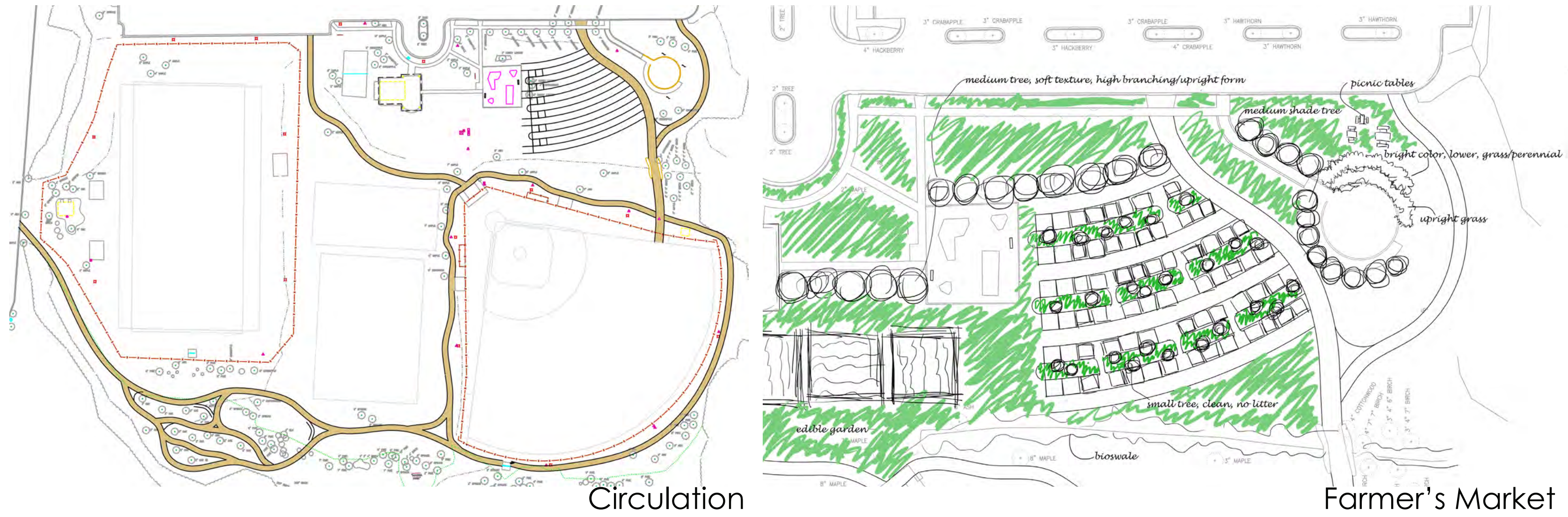
**Wetland with Boardwalk:** Wisconsin wetland for-  
est and marsh, reflection of out regional wetland  
communities sounding Madison. with informational  
boards explaining native plants for the native com-  
munities

# Schematic Plan



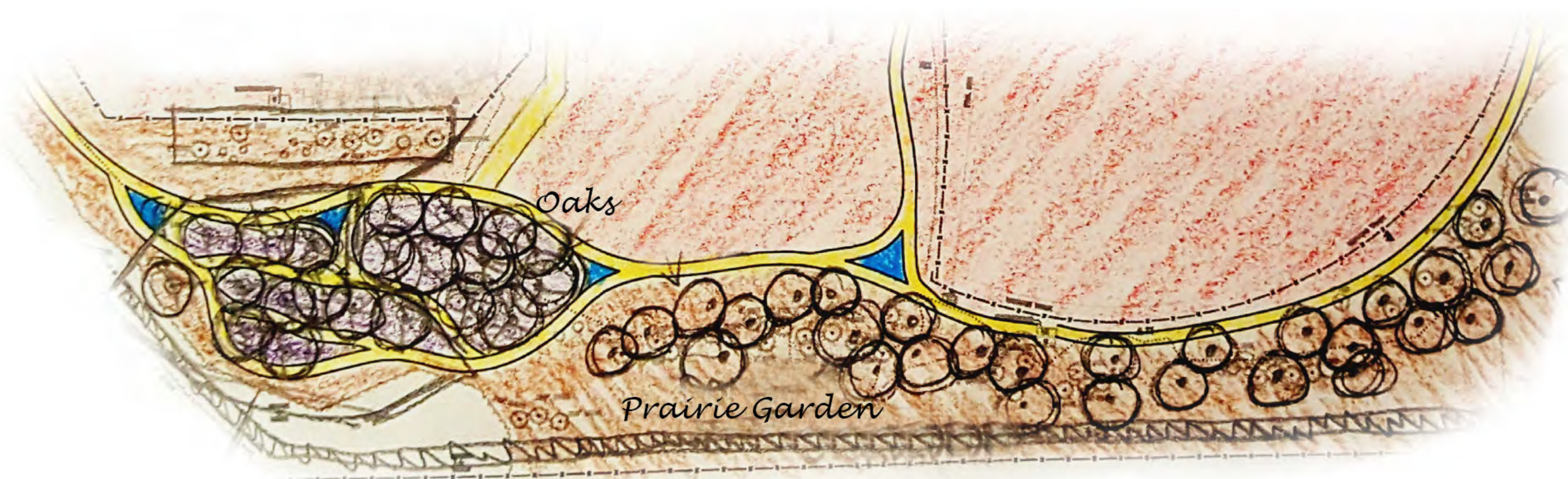
Tennis Court

Entrance and Parking Lot



Circulation

Farmer's Market



Woodland Garden



# Master Plan



Entrance



Memorial



Farmer's Market



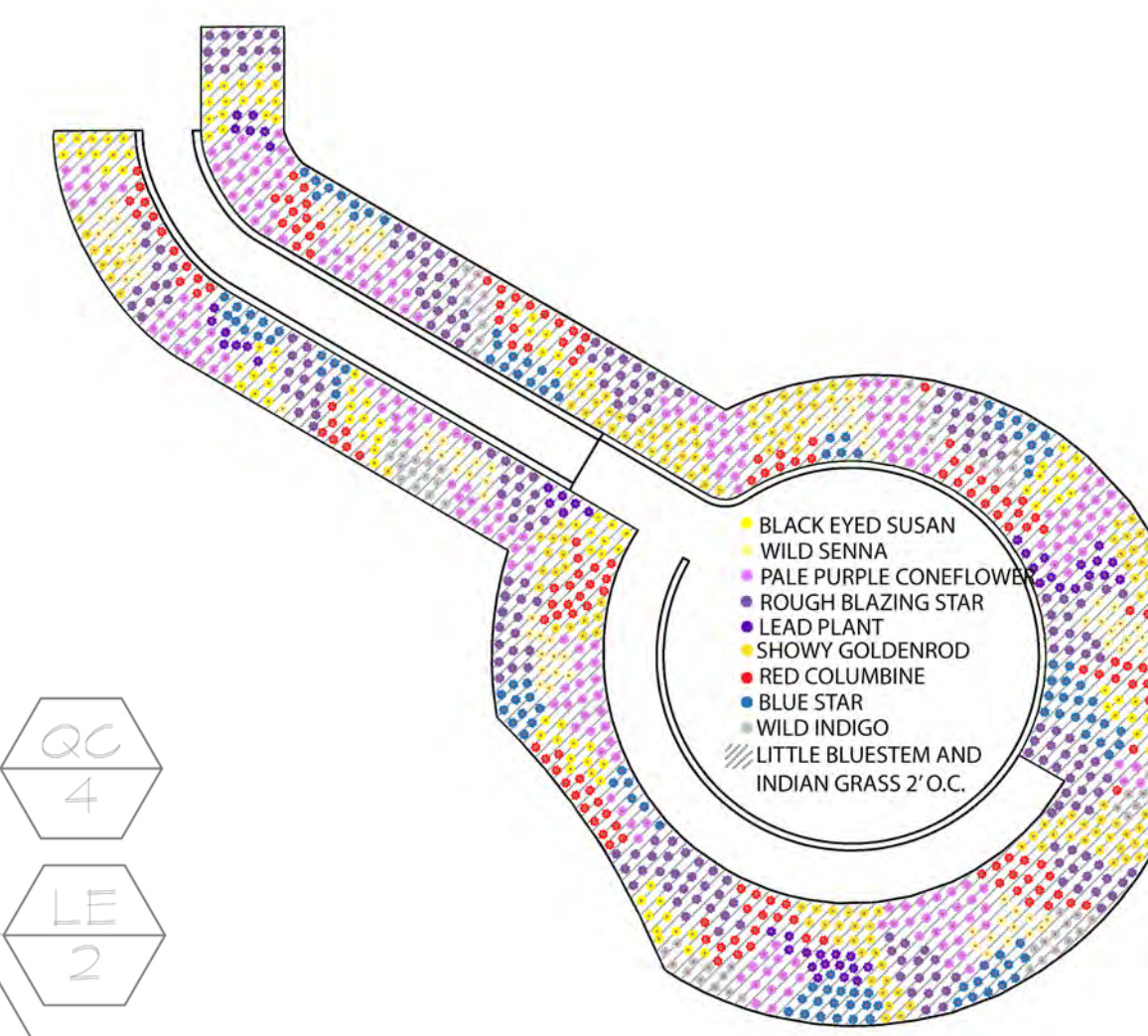
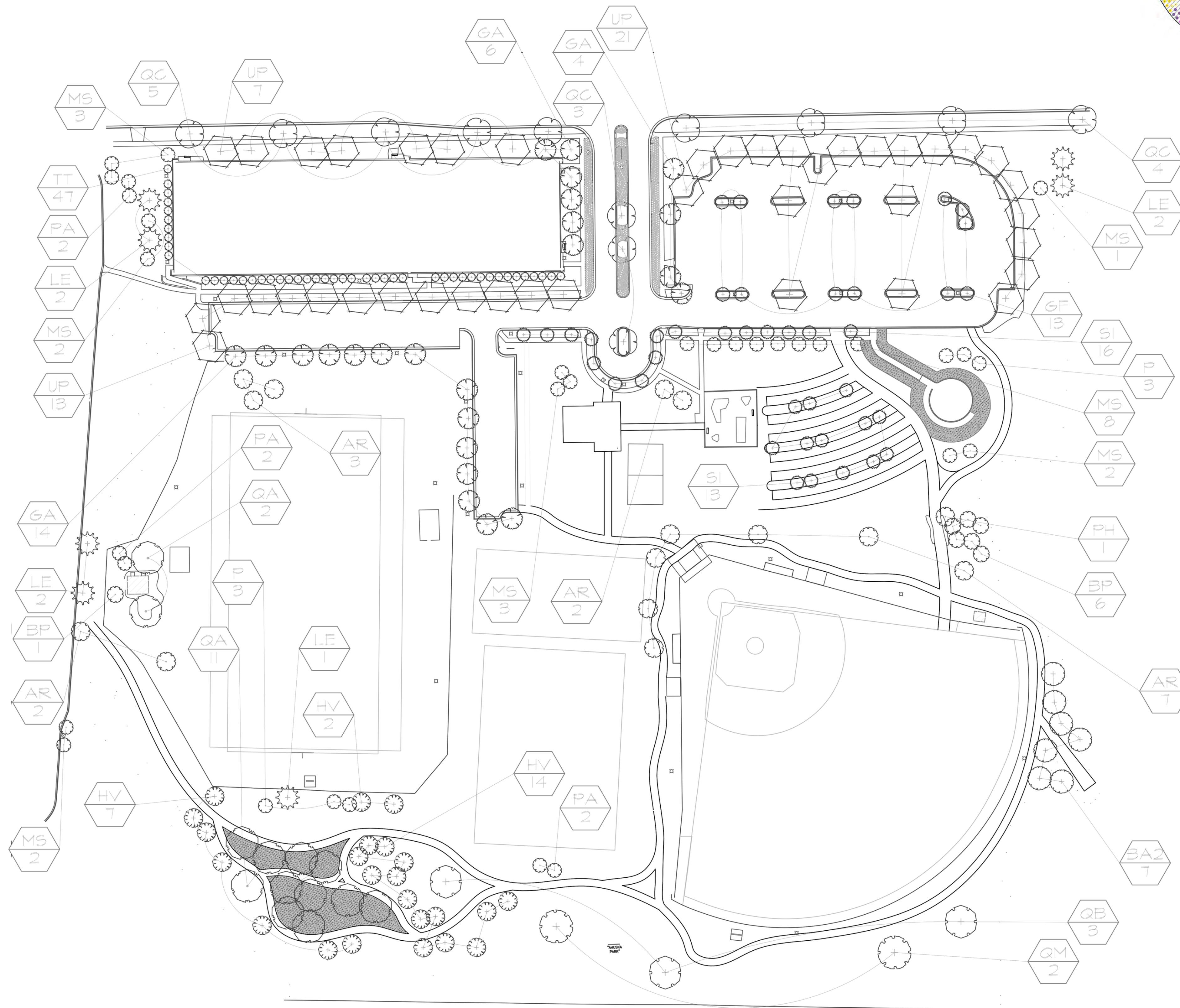
Woodland Garden



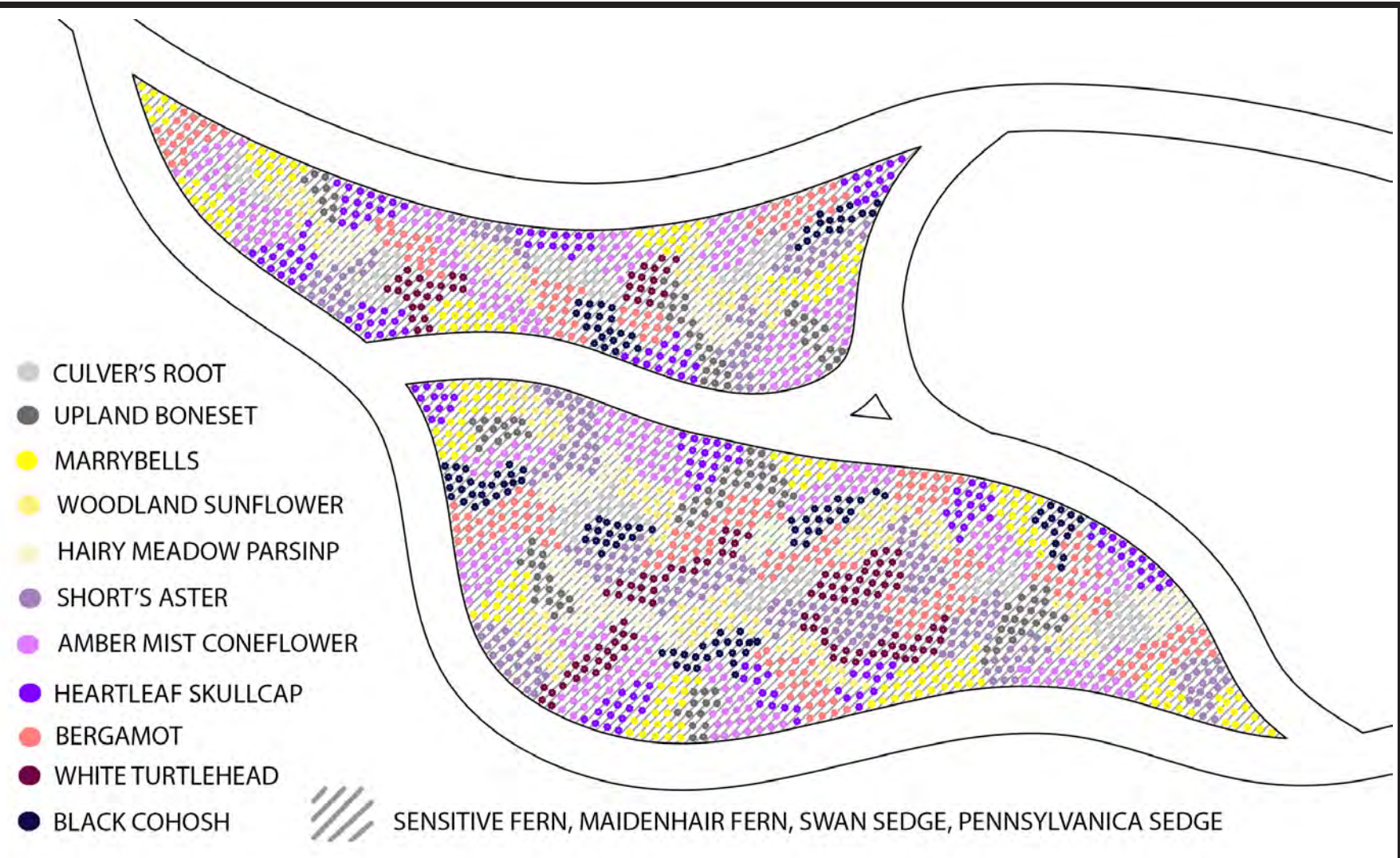
Not To Scale



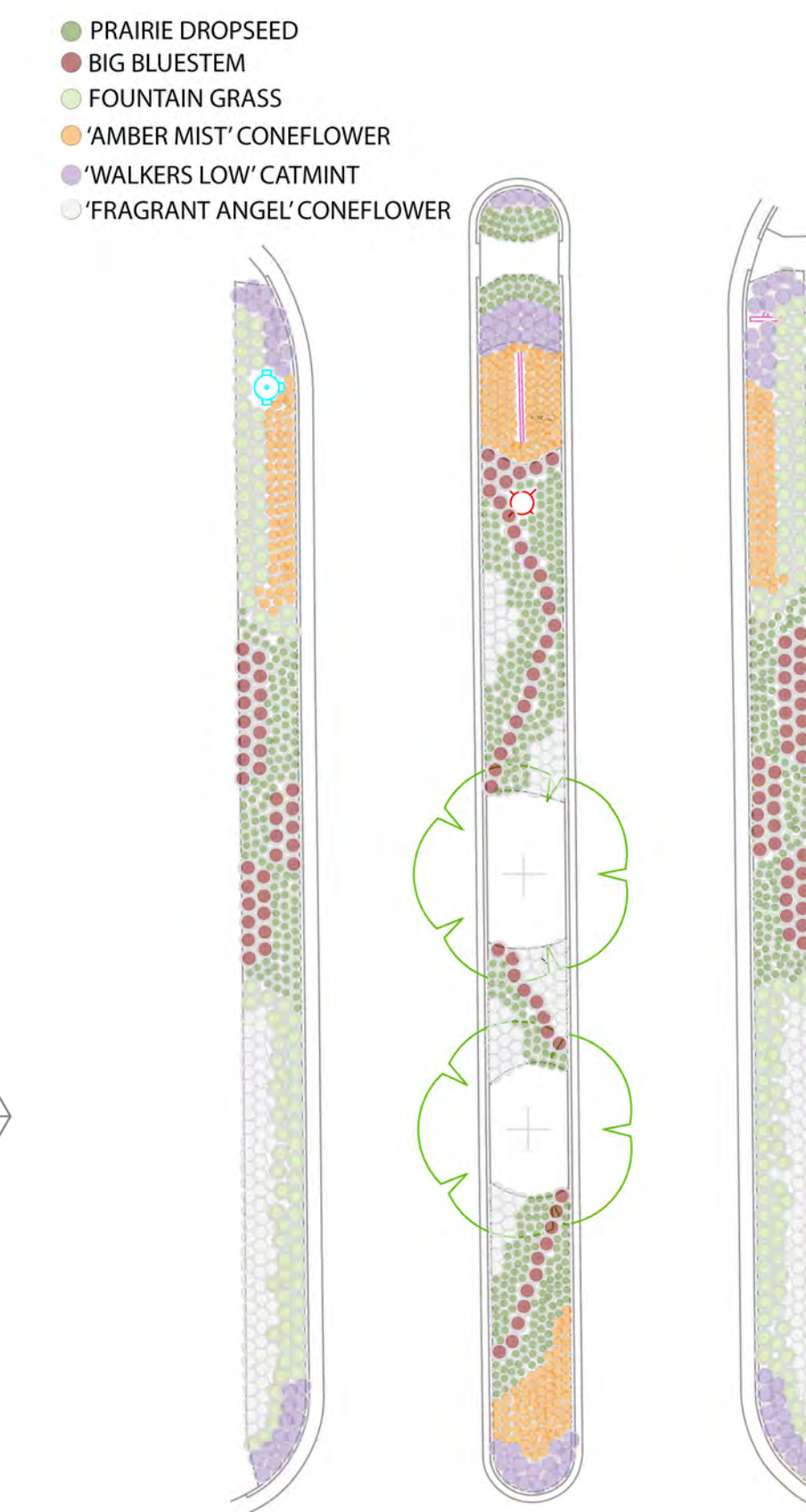
# Planting Plan



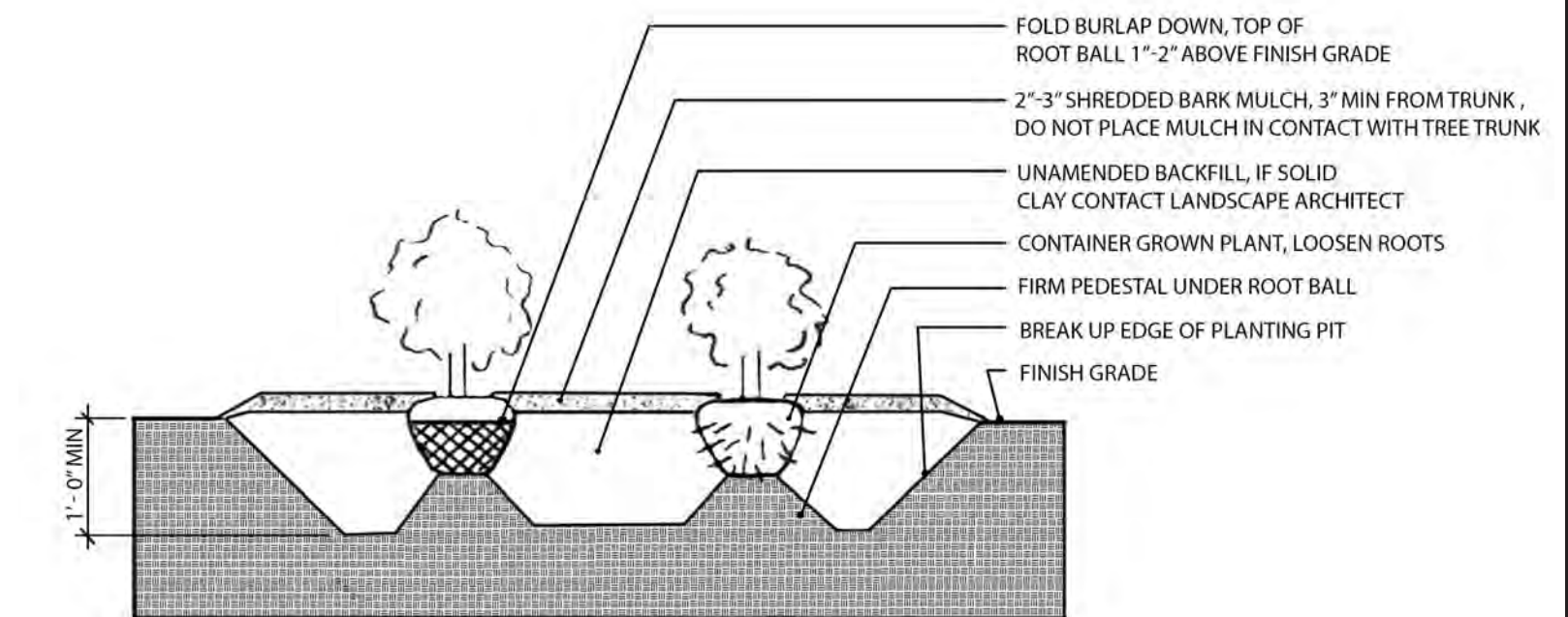
## Memorial Zoom-In



Woodland Garden Zoom-In

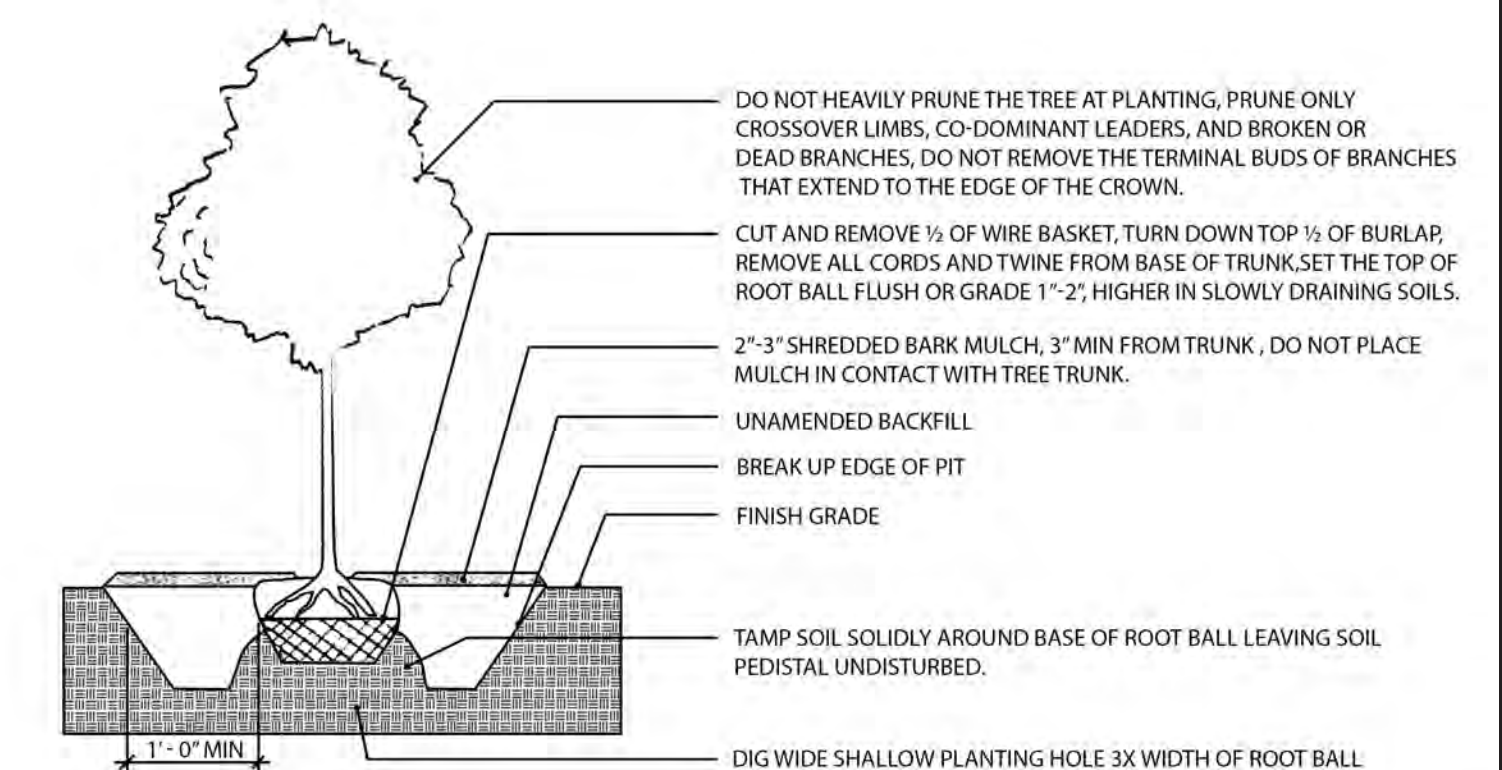


### Entrance Zoom-In



NOTES: CULTIVATE ENTIRE PLANTING AREA WHEN PLANTING MULTIPLES. ALL TREES SHALL CONFORM TO THE STANDARDS SET FORTH IN THE MOST RECENT AMERICAN STANDARDS FOR NURSERY STOCK PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN. EACH TREE MUST BE PLANTED SUCH THAT THE TRUNK FLARE IS VISIBLE AT THE TOP OF THE ROOT BALL. TREES WHERE THE TRUNK FLARE IS NOT VISIBLE SHALL BE REJECTED. DO NOT COVER THE TOP OF THE ROOT BALL WITH SOIL.

### Planting Detail 1



NOTES: ALL TREES SHALL CONFORM TO THE STANDARDS SET FORTH IN THE MOST RECENT AMERICAN STANDARDS FOR NURSERY STOCK PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN. EACH TREE MUST BE PLANTED SUCH THAT THE TRUNK FLARE IS VISIBLE AT THE TOP OF THE ROOT BALL. TREES WHERE THE TRUNK FLARE IS NOT VISIBLE SHALL BE REJECTED. DO NOT COVER THE TOP OF THE ROOT BALL WITH SOIL.

### Planting Detail 2


$$3/16'' = 1' - 0''$$



Planting Board

TREES



Betula alleghaniensis  
Yellow Birch  
height: 60’ - 75’  
spread: 60’ - 75’  
bloom time: April - May  
bloom color: yellow, green, brown  
botanical interest: showy bark



Ginkgo biloba ‘Autumn Gold’ TM  
‘Autumn Gold’ Ginkgo  
height: 40’ - 50’  
spread: 25’ - 30’  
bloom time: April  
bloom color: green  
botanical interest: golden fall color



Ginkgo biloba ‘Fastigiata’  
‘Fastigiata’ Ginkgo  
height: 30’ - 50’  
spread: 10’ - 15’  
bloom time: April  
bloom color: green  
botanical interest: golden fall color



Hamamelis virginiana  
Common Witch Hazel  
height: 15’ - 20’  
spread: 15’ - 20’  
bloom time: October - December  
bloom color: yellow  
botanical interest: golden fall color



Larix decidua  
European Larch  
height: 60’ - 100’  
spread: 20’ - 30’  
bloom time: non-flowering  
bloom color: non-flowering  
botanical interest: foliage



Quercus Bicolor  
Swamp White Oak  
height: 50’ - 60’  
spread: 50’ - 60’  
bloom time: April  
bloom color: yellowish green  
botanical interest: branching



Quercus coccinea  
Scarlet Oak  
height: 50’ - 70’  
spread: 40’ - 50’  
bloom time: April - May  
bloom color: yellowish green  
botanical interest: scarlet fall color



Quercus macrocarpa  
Bur Oak  
height: 60’ - 80’  
spread: 60’ - 80’  
bloom time: April  
bloom color: yellowish green  
botanical interest: branching



Syringa reticulata ‘Ivory Silk’  
Ivory Silk Japanese Tree Lilac  
height: 20’ - 25’  
spread: 15’ - 20’  
bloom time: May - June  
bloom color: creamy white  
botanical interest: showy flower



Thuja occidentalis ‘Techny’  
Techny Arborvitae  
height: 10’ - 15’  
spread: 6’ - 10’  
bloom time: non-flowering  
bloom color: non-flowering  
botanical interest: evergreen



Ulmus parvifolia  
Lacebark Elm  
height: 40’ - 50’  
spread: 25’ - 40’  
bloom time: August - September  
bloom color: reddish-green  
botanical interest: showy bark

PERENNIALS



Actaea racemosa  
Black Cohosh  
height: 4’ - 6’  
spread: 2’ - 4’  
bloom time: June - July  
bloom color: white  
botanical interest: showy flower



Amorpha canescens  
Lead Plant  
height: 2 ‘ - 3’  
spread: 2’ - 2.5’  
bloom time: July - September  
bloom color: purple to blue  
botanical interest: showy flower



Amsonia hubrichtii  
Blue Star  
height: 2’ - 3’  
spread: 2’ - 3’  
bloom time: April - May  
bloom color: light blue  
botanical interest: showy flower



Asclepias tuberosa  
Butterfly Weed  
height: 1’ - 2.5’  
spread: 1’ - 1.5’  
bloom time: June - August  
bloom color: yellow and orange  
botanical interest: showy flower



Aquilegia canadensis  
Red Columbine  
height: 2’ - 3’  
spread: 1’ - 1.5’  
bloom time: April - May  
bloom color: red  
botanical interest: showy flower



Baptisia australis  
Wild Indigo  
height: 3’ - 4’  
spread: 3’ - 4’  
bloom time: May - June  
bloom color: indigo blue  
botanical interest: showy flower



Cassia hebecarpa  
Wild Senna  
height: 4’ - 6’  
spread: 1.5’ - 2’  
bloom time: July - August  
bloom color: yellow  
botanical interest: showy flower



Chelone glabra  
White Turtle Head  
height: 2’ - 4’  
spread: 1.5’ -2.5’  
bloom time: July - September  
bloom color: white  
botanical interest: showy flower



Conoclinium coelestinum  
Mist Flower  
height: 1.5’ - 3’  
spread: 1.5’ - 2.5’  
bloom time: September - October  
bloom color: blue  
botanical interest: showy flower



Echinacea pallida  
Pale Purple Coneflower  
height: 1.5’ - 2’  
spread: 1’ - 1.5’  
bloom time: June - August  
bloom color: purple  
botanical interest: showy flower



Echinacea purpurea ‘Fragrant Angel’  
‘Fragrant Angel’ Coneflower  
height: 2’ - 3’  
spread: 1’ - 2’  
bloom time: June - August  
bloom color: white  
botanical interest: showy flower, fragrant



Echinacea x ‘Amber Mist’  
‘Amber Mist’ Coneflower  
height: 1.5’ - 2’  
spread: 1’ - 1.5’  
bloom time: June - August  
bloom color: orange  
botanical interest: showy flower



Eupatorium sessilifolium  
Upland Boneset  
height: 4’ - 5’  
spread: 3’ - 4’  
bloom time: July - October  
bloom color: white  
botanical interest: showy flower



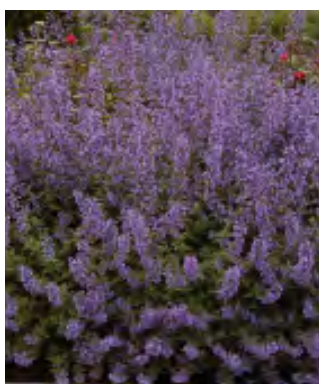
Helianthus divaricatus  
Woodland Sunflower  
height: 2’ - 6’  
spread: 1’ - 3’  
bloom time: July - September  
bloom color: yellow  
botanical interest: showy flower



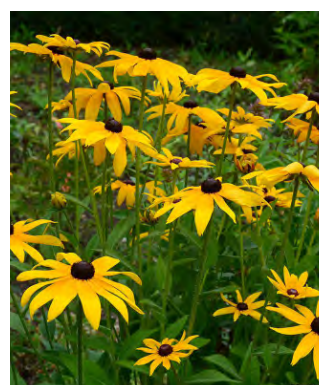
Liatris aspera  
Rough Blazing Star  
height: 2’ - 3’  
spread: 1’ - 1.5’  
bloom time: August - October  
bloom color: purple  
botanical interest: showy flower



Monarda didyma  
Bergamot  
height: 2’ - 4’  
spread: 2’ - 3’  
bloom time: July - August  
bloom color: purple  
botanical interest: showy flower, fragrant



Nepeta x faassenii ‘Walkers Low’  
‘Walkers Low’ Catmint  
height: 2’ - 2.5’  
spread: 2.5’ - 3’  
bloom time: April - September  
bloom color: lavender blue  
botanical interest: showy flower, fragrant



Rudbeckia hirta  
Black Eyed Susan  
height: 2 - 3’  
spread: 1’ - 2’  
bloom time: June - September  
bloom color: yellow with orange  
botanical interest: showy flower



Scutellaria ovata  
Heartleaf Skullcap  
height: 1’ - 2’  
spread: .75’ - 1.5’  
bloom time: May - September  
bloom color: blue to purple  
botanical interest: showy flower



Solidago speciosa  
Showy Goldenrod  
height: 2’ - 3’  
spread: 2’ - 3’  
bloom time: July - September  
bloom color: yellow  
botanical interest: showy flower



Symphyotrichum shortii  
Short’s Aster  
height: 2’ - 3.5’  
spread: 1’ - 1.5’  
bloom time: August - October  
bloom color: light purple  
botanical interest: showy flower



Thaspium chapmanii  
Hairy Meadow Parsnip  
height: 2’ - 2.5’  
spread: 1’ - 2’  
bloom time: May - June  
bloom color: yellow  
botanical interest: showy flower



Uvularia grandiflora  
Merrybells  
height: 1.5’ - 2’  
spread: 1’ - 1.5’  
bloom time: April - May  
bloom color: yellow  
botanical interest: showy flower



Veronicastrum virginicum  
Culver’s Root  
height: 4’ - 7’  
spread: 2’ - 4’  
bloom time: May - August  
bloom color: white to pale blue  
botanical interest: showy flower

GRASSES AND FERNS



Adiantum pedatum  
Maidenhair Fern  
height: 1’ - 2.5’  
spread: 1’ - 1.5’  
bloom time: non-flowering  
bloom color: non-flowering  
botanical interest: unique texture



Andropogon gerardii  
Big Bluestem  
height: 4’ - 6’  
spread: 2’ - 3’  
bloom time: September - February  
bloom color: purplish-red  
botanical interest: winter interest



Carex pensylvanica  
Pennsylvania sedge  
height: 0.5’ - 1’  
spread: 0.5’ - 1’  
bloom time: May  
bloom color: greenish  
botanical interest: shiny texture



Carex swanii  
Swan Sedge  
height: 1’ - 3’  
spread: 1’ - 2’  
bloom time: May - June  
bloom color: green  
botanical interest: seedheads



Onoclea sensibilis  
Sensitive Fern  
height: 3’ - 4’  
spread: 3’ - 4’  
bloom time: non-flowering  
bloom color: non-flowering  
botanical interest: unique texture



Pennisetum alopecuroides ‘Ginger Love’  
Fountain Grass  
height: 2’ - 3’  
spread: 2’ - 3’  
bloom time: July to February  
bloom color: red  
botanical interest: showy seedheads



Schizachyrium scoparium  
Little Bluestem  
height: 2’ - 4’  
spread: 1.5 - 2’  
bloom time: August - February  
bloom color: purplish bronze  
botanical interest: winter interest



Sorghastrum nutans  
Indian Grass  
height: 3’ - 5’  
spread: 1’ - 2’  
bloom time: September - February  
bloom color: light brown with yellow  
botanical interest: showy seedheads



Sporobolus heterolepis  
Prairie Dropseed  
height: 2’ - 3’  
spread: 2’ - 3’  
bloom time: August - October  
bloom color: pink and brown tinted  
botanical interest: fragrant



Planting Schedule

	SCIENTIFIC NAME	COMMON NAME	ROOT CONDITION	CALIPER	QUANTITY	SPACING
NEW TREES	BAZ	Betula alleghaniensis	Yellow Birch	8 & 8	1.5"	7
	GA	Ginkgo biloba 'Autumn Gold' TM	'Autumn Gold' Ginkgo	8 & 8	1.25"	24
	GF	Ginkgo biloba 'Fastigiata'	'Fastigiata' Ginkgo	8 & 8	1.25"	13
	HV	Hamamelis virginiana	Common Witch Hazel	8 & 8	1"	23
	LE	Larix decidua	European Larch	8 & 8	1.25"	8
	QB	Quercus bicolor	Swamp White Oak	8 & 8	1.25"	3
	QC	Quercus coccinea	Scarlet Oak	8 & 8	1.25"	12
	QM	Quercus macrocarpa	Burr Oak	8 & 8	1.25"	2
	SI	Syringa reticulata 'Ivory Silk'	Ivory Silk Japanese Tree Lilac	8 & 8	1"	29
	TT	Thuja occidentalis 'Techny'	Techny Arborvitae	8 & 8	1.5"-2.0"	47
	UP	Ulmus parvifolia	Lacebark Elm	8 & 8	1.25"	41
EXISTING TREES	AR	Acer rubrum	Red Maple	Existing		14
	BP	Betula papyrifera	Paper Birch	Existing		7
	MS	Malus spp.	Flowering Crabapple	Existing		21
	PA	Picea	Spruce	Existing		6
	P	Pinus	Pine	Existing		6
	PH	Populus deltoides	Eastern Cottonwood	Existing		1
	QA	Quercus alba	White Oak	Existing		13
PERENNIALS	AR2	Actaea racemosa	Black Cohosh	4" plugs		254
	AL	Amorpha canescens	Leadplant	4" plugs		75
	AH	Amsonia hubrichtii	Blue-star	4" plugs		120
	AG	Andropogon gerardii	Big Blue Stem	4" pot		118
	AR3	Aquilaria canadensis	Red Columbine	4" plugs		174
	BA	Baptisia australis	Blue Wild Indigo	4" plugs		89
	CH	Cassia hebecarpa	Wild Senna	4" plugs		60
	CG	Chelone glabra	White Turtle-head	4" plugs		115
	CC	Conoclinium coelestinum	Wild Ageratum	4" plugs		339
	EP	Echinacea pallida	Pale Purple Coneflower	4" plugs		229
	EF	Echinacea purpurea 'Fragrant Angel'	Fragrant Angel Coneflower	4" pot		224
	EA	Echinacea x 'Amber Mist'	Amber Mist Coneflower	4" pot		299
	ES	Eupatorium sessilifolium	Upland Boneset	4" plugs		110
	HD	Helianthus divaricatus	Woodland Sunflower	4" plugs		196
	LR	Liatris aspera	Rough Blazing Star	4" plugs		198
	MD	Monarda didyma	Bergamot	4" plugs		270
	NW	Nepeta x faassenii 'Walkers Low'	Walkers Low Catmint	4" pot		88
	PG	Pennisetum alopecuroides 'Ginger Love'	Fountain Grass	4" pot		178
	RH	Rudbeckia hirta	Black-eyed Susan	4" plugs		108
	SO	Scutellaria ovata	Heartleaf Skullcap	4" plugs		204
	SS2	Solidago speciosa	Showy Goldenrod	4" plugs		155
	SH	Sporobolus heterolepis	Prairie Dropseed	4" pot		600
	SS	Symphotrichum shortii	Short's Aster	4" plugs		277
	TB	Thaspium barbinode	Hairy Meadow Parsnip	4" plugs		83
	UG	Uvularia grandiflora	Merrybells	4" plugs		219
	VR	Veronicastrum virginicum	Culver's Root	4" plugs		86
GRASS MATRIX		Adiantum pedatum	Maidenhair Fern	4" plugs		2' grid
		Carex pensylvanica	Pennsylvania Sedge	4" plugs		2' grid
		Carex swanii	Swan Sedge	4" plugs		2' grid
		Onoclea sensibilis	Sensitive Fern	4" plugs		2' grid
		Schizachyrium scoparium	Little Bluestem	4" plugs		2' grid
Prairie Seed Mix 80% Grasses		Sorghastrum nutans	Indian Grass	4" plugs		2' grid
		Schizachyrium scoparium	Little Bluestem	seed		
20% Forbs		Andropogon gerardii	Big Bluestem	seed		
		Sorghastrum nutans	Indian Grass	seed		
		Amorpha canescens	Lead Plant	seed		
		Liatris pycnostachya	Rough Blazing Star	seed		
		Baptisia australis	Blue Wild Indigo	seed		
		Asclepias tuberosa	Butterfly Weed	seed		

Southern Savanna Restoration and Woodland Garden:

The southern portion of Ahuska Park, currently over grown with weedy invasive species has been proposed to be a native oak savanna and woodland garden. The woodland garden will be located beneath the existing grove of Swamp White Oak and Burr Oak trees on the southwest corner of the property. The specified woodland garden species will not be able to establish prior to ample development of the oak canopy cover. Prior to this it shall receive the same treatment as the oak savanna area.

The invasive plants in the savanna area must be dealt with prior to planting. Suggested methods of invasive removal would be burning and/or herbicidal applications. For burning, schedule burns yearly until successful weed succession, be sure to contact the local fire department for acceptable burn conditions, seasons, and permits required to burn safely and responsibly. It is suggested that groundcover plants be raked in a 6' buffer ring from oak trees in this area to prevent fires from reaching too close to tree trunks. It is recommended that the oak savanna trees be planted following successful removal of invasive species. For herbicidal application, be sure to use Round Up, Rodeo, Garlon 4, or similar product. Be sure to take proper precautions to prevent pollution of the adjacent wetland areas. The nature of the invasive plants in this area require repeated treatments until the species have been totally eradicated.

Once invasive species are brought under control, plant oak savanna seed mix, burr and swamp white oaks, and witch hazels. Oak and witchhazels should be left to grow naturally, limbing only to remove dead or dying branches, allowing for a natural branching structure. The seed mix shall be 80% an equal seed mix of little bluestem, big bluestem, and indian grass; and 20% equal seed mix leadplant, rough blazing star, wild indigo, and butterfly weed. See site map and planting plan for specific seeding areas; as previously mentioned the woodland garden shall initially be planted with the same savanna seed mix. If immediate aesthetic impact is desired; decrease grass seed mix percentage to 50-60%, while increasing the wildflower percentage to 40-50%. Inspect oak canopy coverage in woodland area yearly until it has reached 50-60% average canopy coverage, at which point proceed to plant woodland garden.

To plant woodland garden, savanna plantings must be removed and replaced with woodland matrix plants and seasonal interest plants. The specified shade tolerant matrix plant species shall be planted 2' on center in a grid pattern, subsequent species will be chosen at random to ensure a uniform mix of matrix ground cover. The seasonal interest flowering species will be planted as 4" plugs in and amongst matrix plants. Plants in this area do well with moist soil and should be irrigated if summer conditions become uncharacteristically dry. Oak trees in this area may be limbed up to 6 feet to allow for pedestrian traffic beneath branching, while retaining shade coverage.

Memorial Garden:

The planting bed surrounding the memorial is to be planted with a similar arrangement as the aforementioned woodland garden. This area may be planted during the first phase of landscape installation. The matrix plants, little bluestem and Indian grass shall be placed as 4" plugs on a 2 foot grid pattern. The perennial seasonal interest plants will be placed according to the planting plan on center between the ornamental grasses. Take specific care to place plants as specified to ensure an even dispersion of flowering species throughout the flowering season. At the end of fall, refrain from cutting back perennials to avoid detracting from their winter interest form and texture. Cut back remaining stems come spring.

Boardwalk Area:

During construction of the boardwalk, necessary trees shall be removed but leave all that do not restrict construction or threaten pedestrians. For the boardwalk viewing platform, be sure to remove trees that block the view shed directly east. When possible leave trees that block views of the beltline highway to the south. Existing trees must be removed to make room for the specified birch trees, which will line the pathway to the overlook. Both new and existing trees must be limbed sparingly to create a hallway effect with enclosed views above and to either side of the pedestrian, ultimately opening at the terminus of the overlook walking path.

Parking area

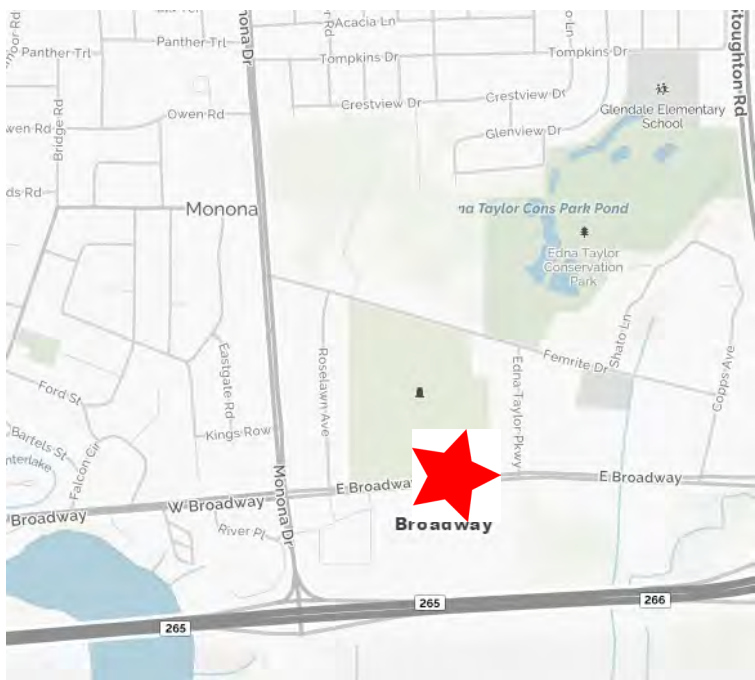
The parking lot trees shall be limbed up 6' off the ground and lightly trimmed to keep good growing form and prevent any intrusion with vehicles and pedestrians. For trees lining the parking lot, trim branches obstructing light poles. Maintain bark mulch under trees to prevent weeds and keep rot areas protected in extreme environment.

Entrance

Keep planting beds free from litter. The median trees shall be lightly pruned to prevent interference with vehicles. Maintain mulch rings around trees. Thin perennial plants annually to prevent overgrown species.



SITE CONTEXT



OPPORTUNITIES

- ABUNDANCE OF OPEN, UNDERUTILIZED GREEN SPACE FOR IMPROVED FACILITY EXPANSION AND REDEVELOPMENT
- SIGNIFICANT SUNLIGHT TO THE SITE FOR INCREASED PLANT SELECTION OPTIONS
- CENTRALLY LOCATED NEAR COMMERCIAL DISTRICTS FOR INCREASED WALKABILITY TO THE SITE

CONSTRAINTS

- INADEQUATE PARKING SPACE
- SIGNIFICANT DRAINAGE ISSUES THROUGHOUT THE SITE
- LIMITED ADA ACCESSIBLE PATHWAYS THROUGHOUT
- ISOLATED PLAY FIELDS
- UNIDEAL SUBSURFACE CONDITIONS

LARGE DEPRESSION - POTENTIAL FOR WATER PURIFICATION AND EDUCATIONAL OPPORTUNITY

AHUSKA PARK MAIN SIGN

PRESENT SITE OF SUNDAY FARMER'S MARKET

POOR QUALITY DECIDUOUS TREE PLANTINGS

WINTER WINDS

SERIOUS PONDING AND DRAINAGE ISSUES

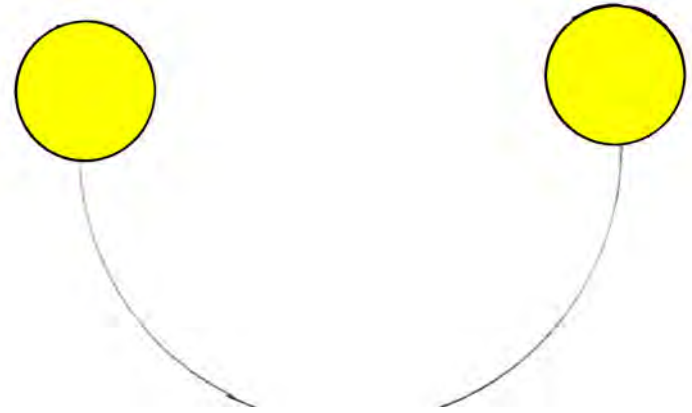


LEGEND

- PLAY FIELD DISTRICT - [purple box]
- PARKING DISTRICT - [grey box]
- GREEN SPACE DISTRICT - [green box]
- WOODED DISTRICT - [dark purple box]
- MARSH DISTRICT - [pink box]
- GATHERING DISTRICT - [blue box]
- VEHICULAR TRAFFIC - [thick red dashed line]
- MAJOR PEDESTRIAN TRAFFIC - [thick pink dashed line]
- SECONDARY PEDESTRIAN TRAFFIC - [thin pink dashed line]
- NODES - [purple asterisk]
- MAJOR LANDMARKS - [yellow star]
- SECONDARY LANDMARKS - [red star]
- UNDERUTILIZED OPEN SPACES - [cyan dashed circle]
- SIGNIFICANT NOISE POLLUTION - [black squiggly arrow]

DISCONNECTED MARSH AREA - POTENTIAL FOR RECREATIONAL PATH

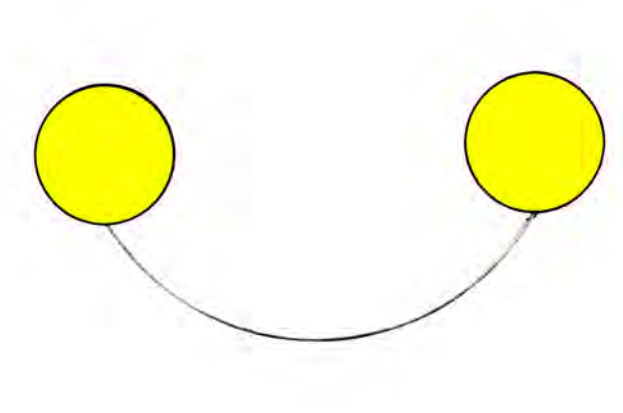
NON-COHESIVE PLANTING SCHEME THROUGHOUT BACK LOT



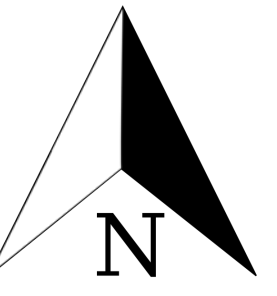
SUMMER SUN PATTERN



SUMMER WINDS



SIGNIFICANT NOISE POLLUTION FROM HIGHWAY

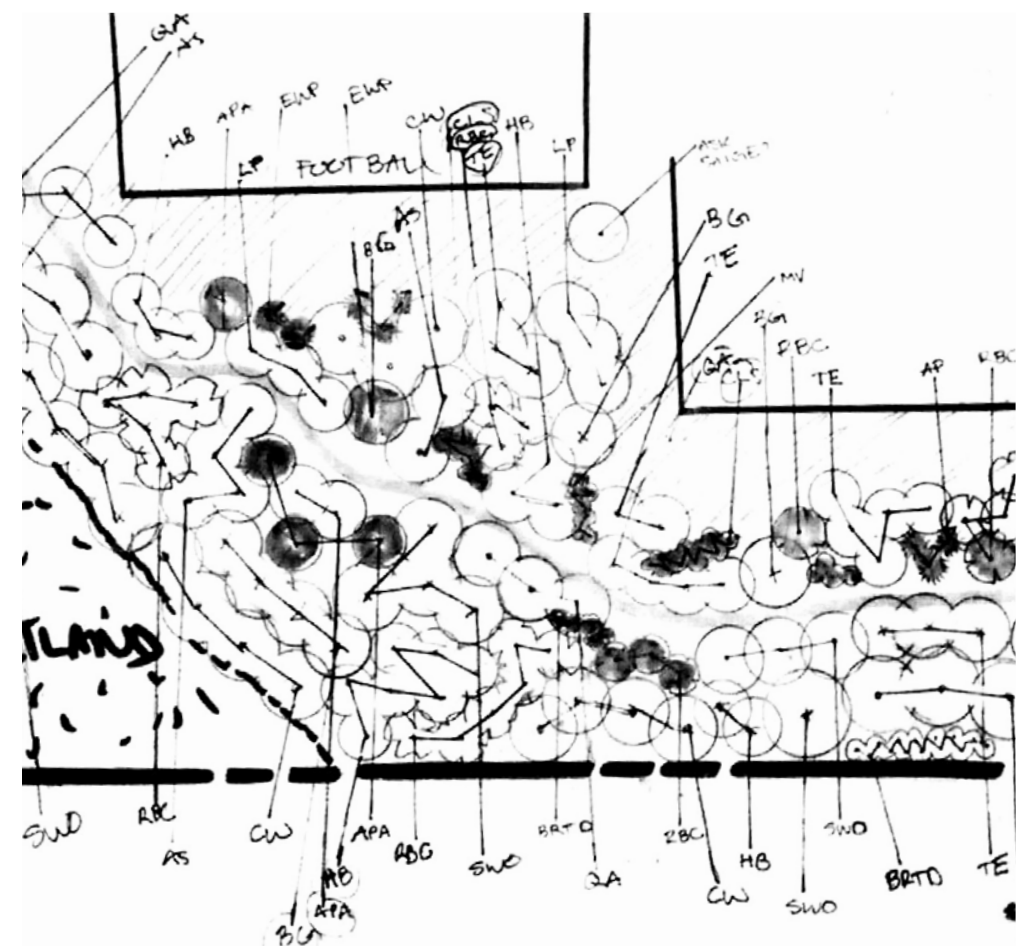
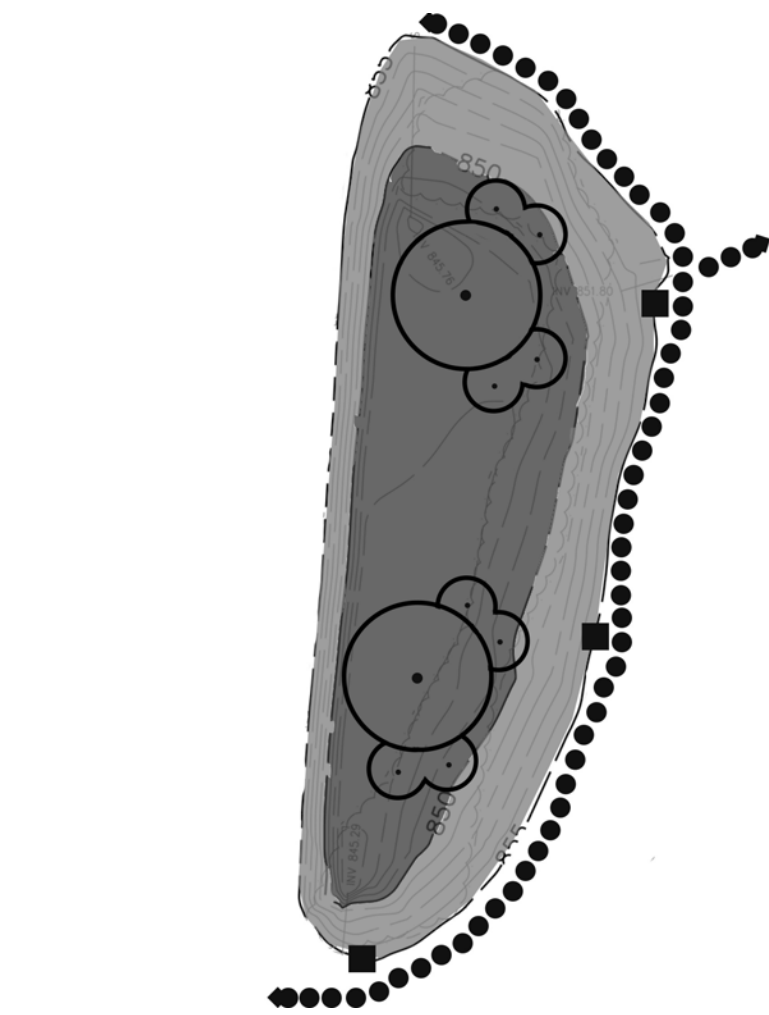
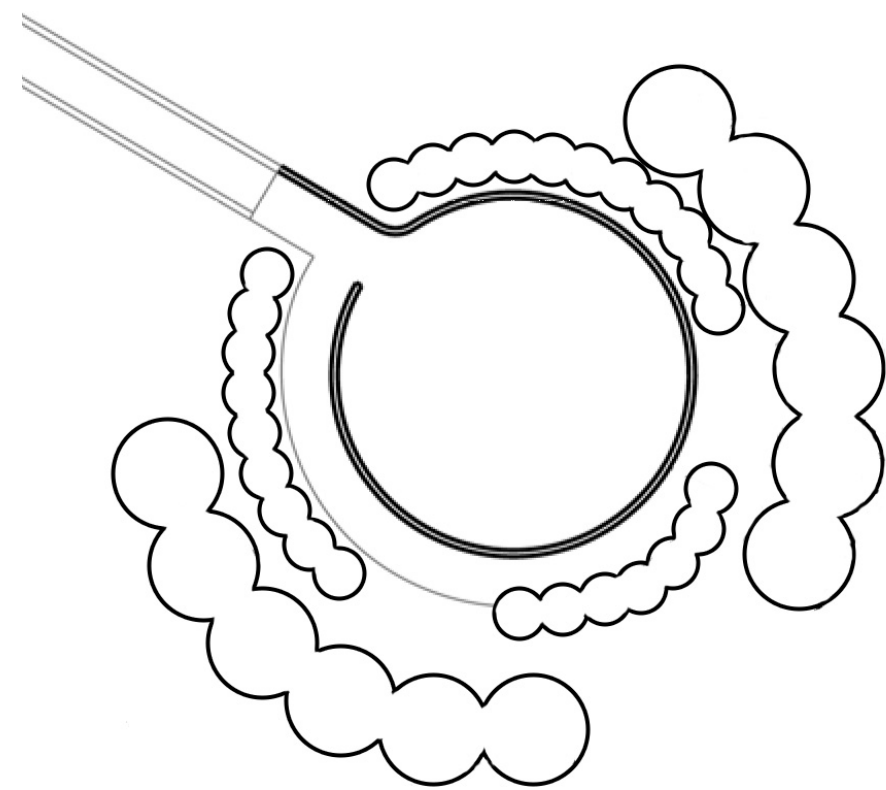


WINTER SUN PATTERN



RECONNECTION

Reconnection is a reaction to an awareness of the disjointed nature of Ahuska Park. It seeks to reintegrate all aspects of the site - the pathways, the plantings, the outdoor rooms and open spaces, and the user - to the surrounding landscapes, to nature, to experiences, to the past, to each other, and to the City of Monona.



CONCEPT DEVELOPMENT & PRECEDENTS

MEMORIAL CONCEPT

'The Musical Garden'

Concentric Plantings

Protected, Not Enclosed

Accent Plantings

Contrasting Textures, Colors



RAIN GARDEN CONCEPT

Brooklyn Botanic Garden

Interpretive Signage

Educational Opportunity

Saturated to Mesic Plantings

Connecting Paths



WOODLAND CONCEPT

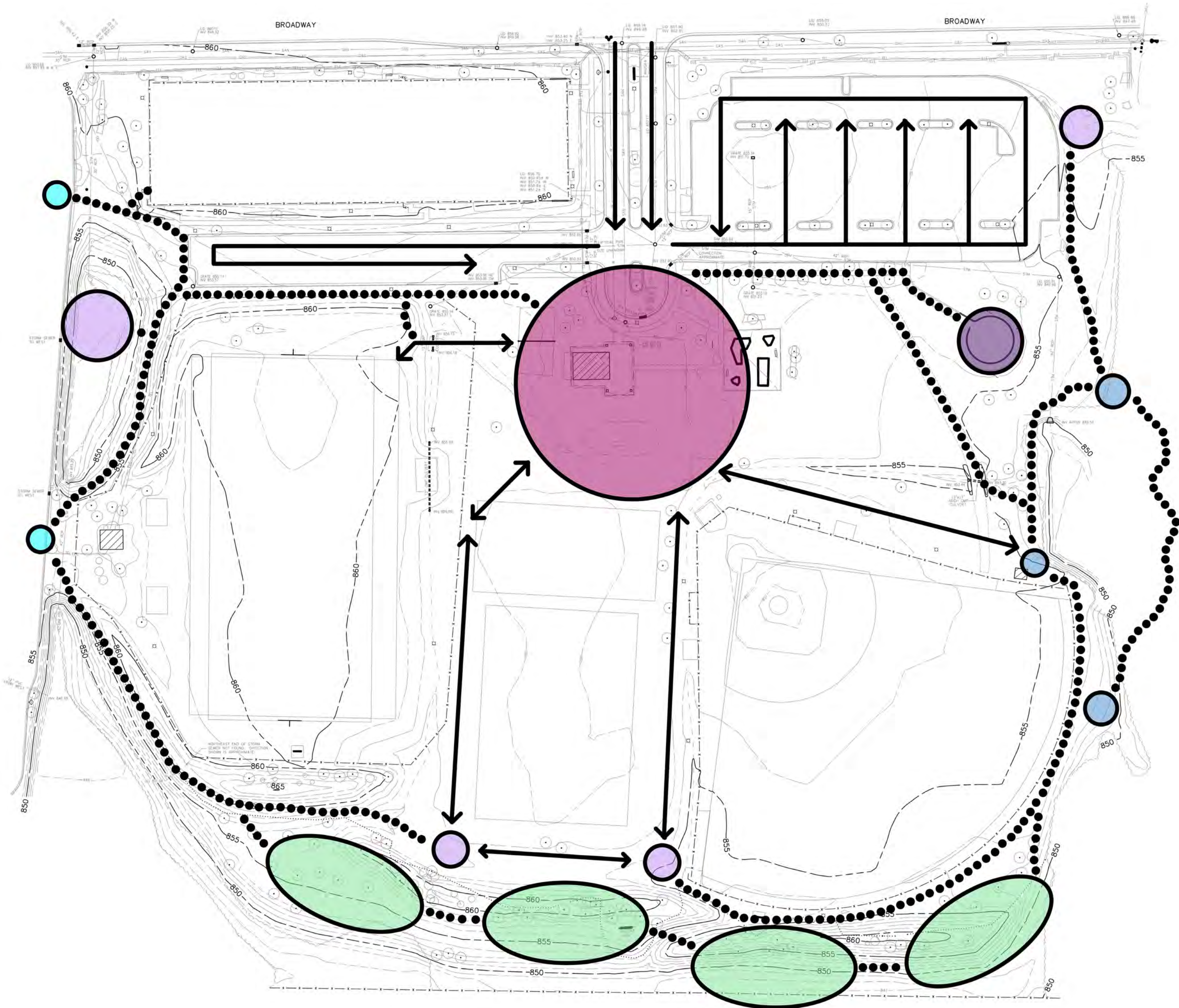
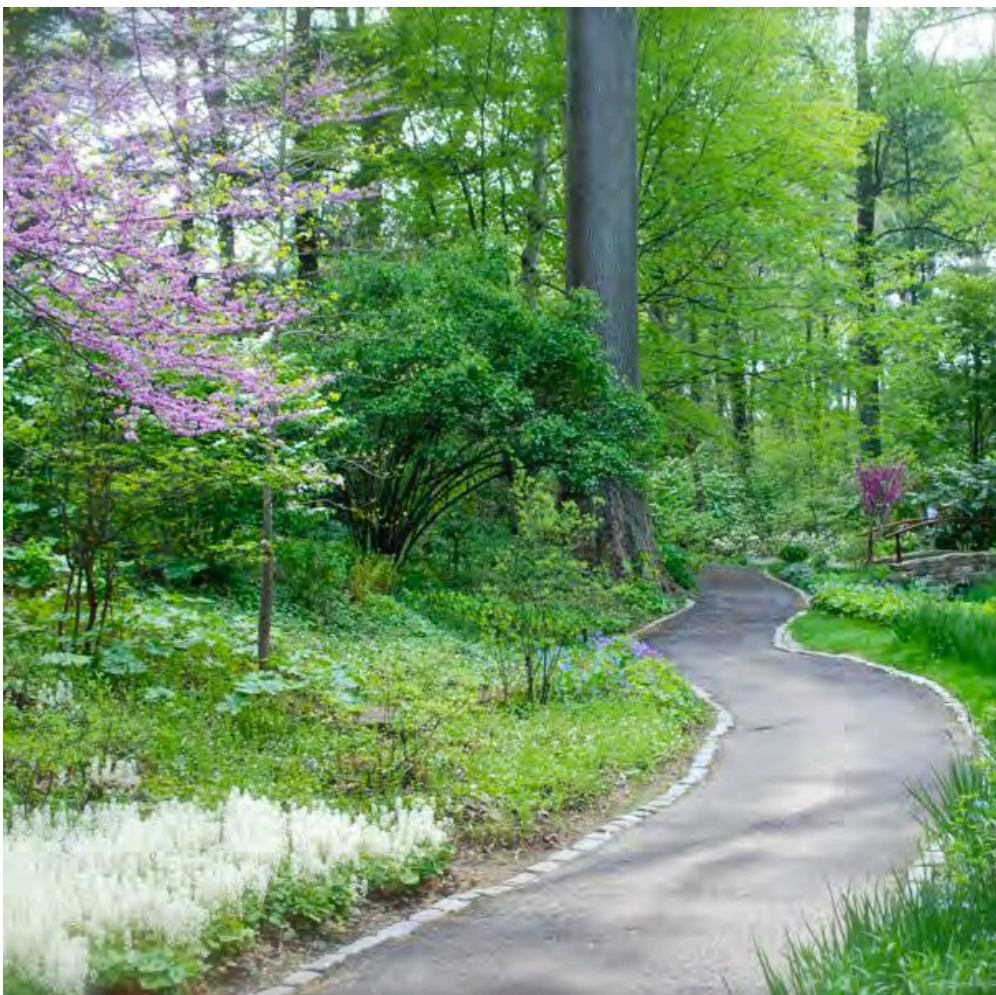
Chanticleer Garden

Winding, Accessible Paths

Bulb Plantings

Dynamic Tree and Understory Plantings

Four Season Interest



LEGEND

MAJOR CONNECTIONS / AXES -

PERIPHERAL CONNECTIONS -

WOODLAND PLANTINGS -

MAIN GATHERING / CENTRAL EMPHASIS -

MEMORIAL POCKET -

RAIN GARDENS -

MARSH CONNECTIONS -

OFF-SITE CONNECTIONS -



SCALE: NTS

SCHEMATIC DEVELOPMENT

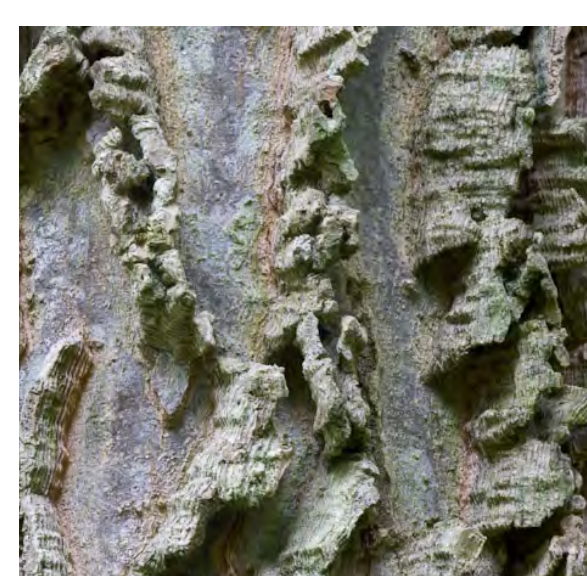


PROGRAM STATEMENT

This project is part of a proposal to redesign and rehabilitate Ahuska Park in Monona, Wisconsin. The project goals include: the improvement of visitor experience through increased pedestrian access, parking, and an updated passive recreation trail, the restoration and revitalization of the site's green space and overall planting quality, and the enhancement of the site's structure, function and management.



PLANT HIGHLIGHTS



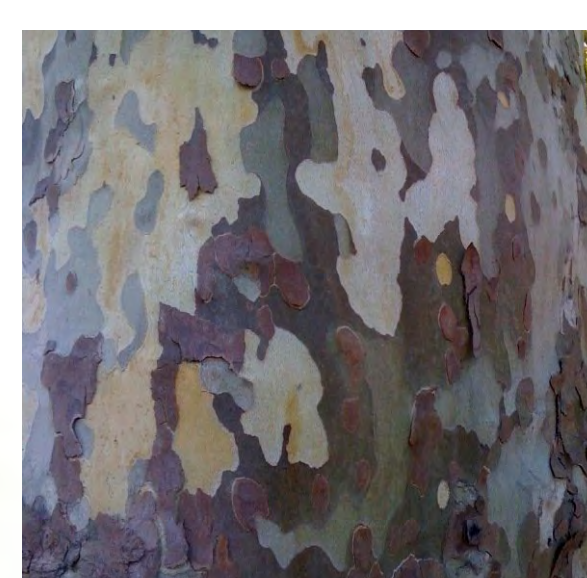
**CELTIS OCCIDENTALIS**  
• 40-60' TALL, 40-60' WIDE  
• FULL SUN - PART SHADE  
• ZONES 2-9  
• APRIL-MAY: GREEN  
• URBAN TOLERANT, GOOD FORM, ATTRACTS BIRDS, EDIBLE FRUIT



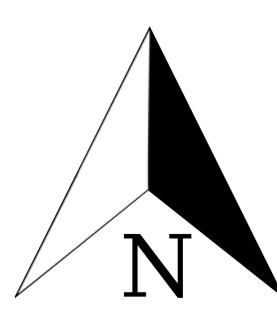
**ULMUS 'MORTON GLOSSY'**  
• 50-60' TALL, 35-40' WIDE  
• FULL SUN - PART SHADE  
• ZONES 4-7  
• INSIGNIFICANT BLOOM  
• GOOD FALL COLOR, NICE FORM, DED RESISTANT CULTIVAR



**PLATANUS OCCIDENTALIS**  
• 75-100' TALL, 75-100' WIDE  
• FULL SUN  
• ZONES 4-9  
• APRIL: YELLOW, RED  
• INTERESTING BARK AND FRUIT, NICE STRUCTURE



**PLATANUS X ACERIFOLIA**  
• 75-100' TALL, 60-75' WIDE  
• FULL SUN  
• ZONES 4-8  
• APRIL: YELLOW, RED  
• INTERESTING BARK, WINTER INTEREST

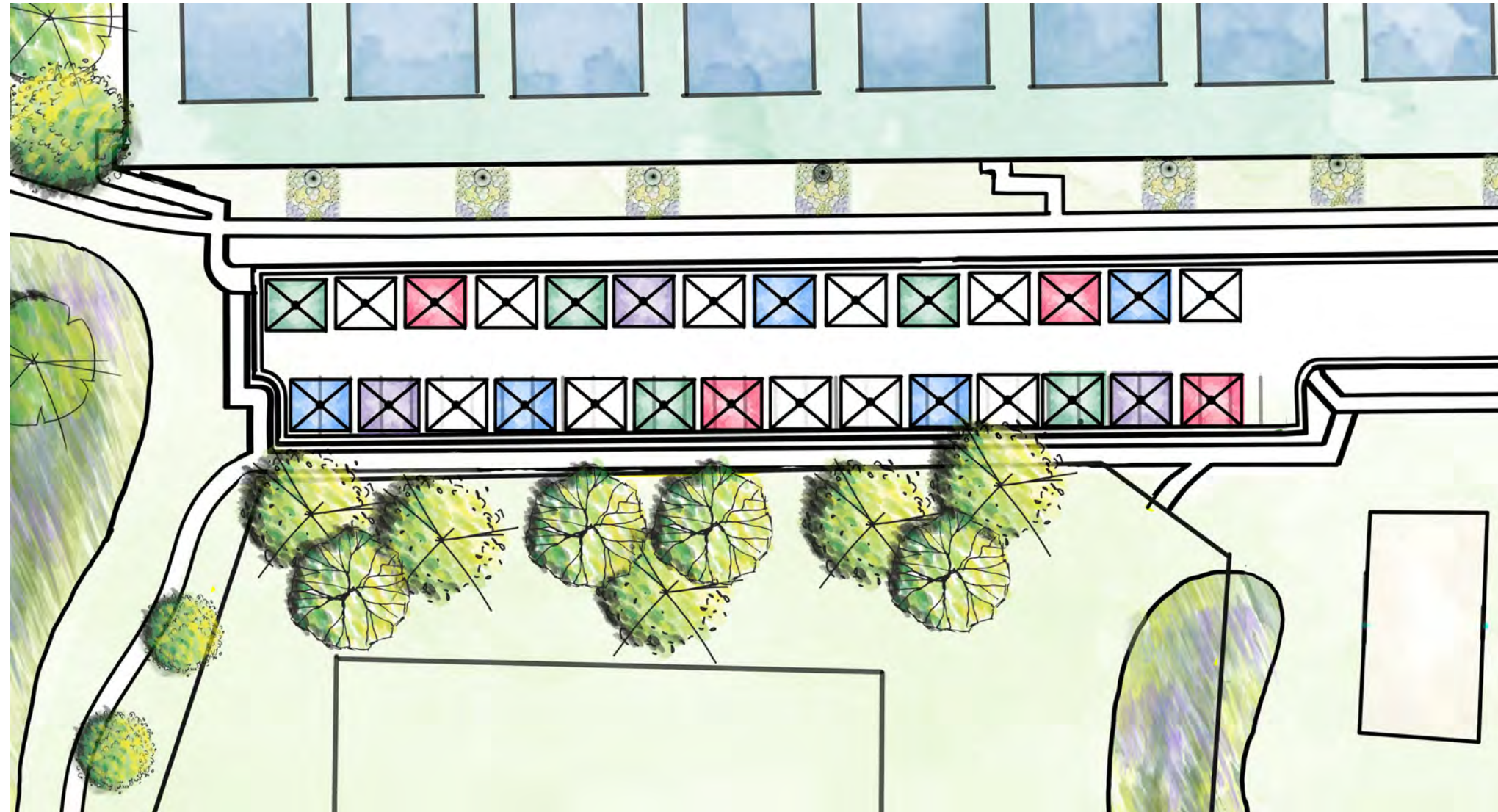


SCALE: NTS

ANNA ELISE SCOTT  
TOM DVORAK  
SAIGE HENKEL  
LA 365  
12.20.16

AHUSKA PARK - MONONA, WI  
MASTER PLAN - PLANT HIGHLIGHTS

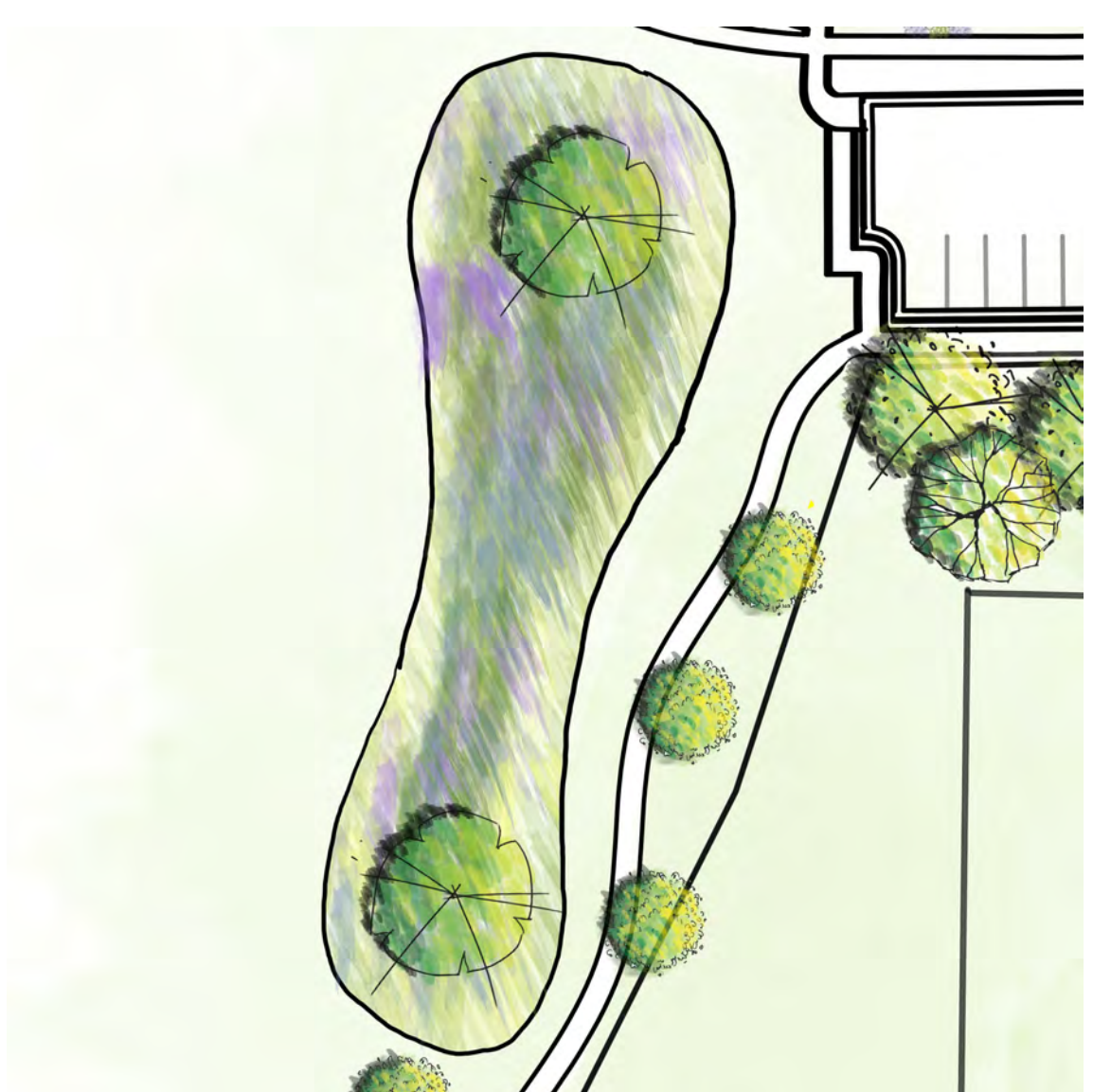




FARMER'S MARKET



MEMORIAL GROVE

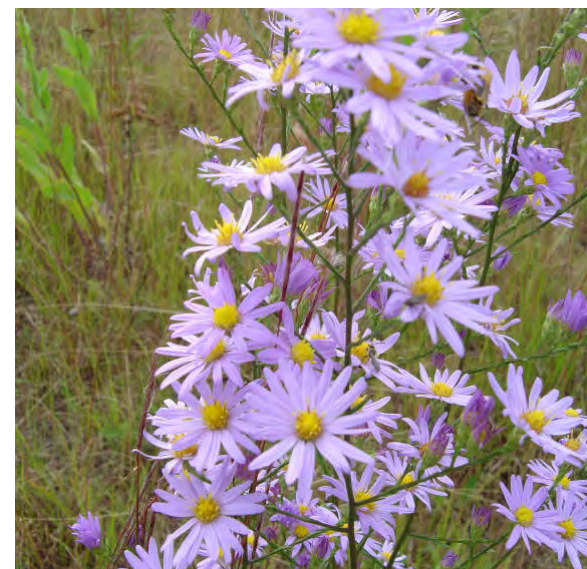


RAIN GARDEN



**C. X ACUTIFLORA 'KARL FOERSTER'**

- 3-5' TALL, 1.5-2.5' WIDE
- FULL SUN
- ZONES 5-9
- MAY-FEB: PINK TO PURPLE
- GOOD STRUCTURE, WINTER INTEREST

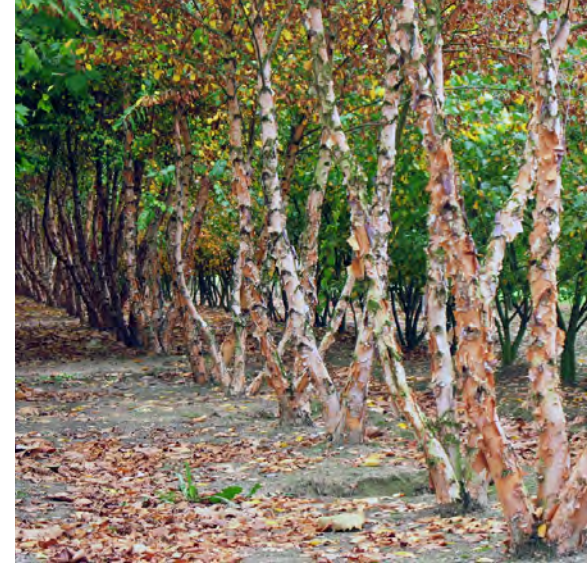


**ASTER AZUREUS**

- 2-3' TALL, 1.5-2' WIDE
- FULL SUN
- ZONES 3-8
- SEPT-OCT: LAVENDAR
- TOLERATES WET SOIL, FALL FLOWERING, GOOD FORM AND HABIT



PERSPECTIVE A - TENNIS COURTS



**BETULA NIGRA**

- 40-70' TALL, 40-60' WIDE
- FULL SUN - PART SHADE
- ZONES 4-9
- APRIL-MAY: GREEN
- SHOWY BARK, TOLERANT TO WET SOILS, WINTER INTEREST



**SALVIA AZUREA**

- 3-5' TALL, 2-4' WIDE
- FULL SUN
- ZONES 5-9
- JULY-OCT: AZURE BLUE
- ATTRACTS POLLINATORS, DROUGHT TOLERANT, EXTENDED BLOOM TIME



PERSPECTIVE B - RAIN GARDEN



**AMELANCHIER X GRANDIFLORA**

- 15-25' TALL, 15-25' WIDE
- FULL SUN - PART SHADE
- ZONES 4-9
- APRIL: WHITE
- FOUR SEASON INTEREST, ATTRACTS BIRDS



**CARPINUS CAROLINIANA**

- 20-35' TALL, 20'35' WIDE
- PART - FULL SHADE
- ZONES 3-9
- FALL: HOP-SHAPED FRUIT
- GOOD FALL COLOR, INTERESTING BARK, NICE STRUCTURE

**ILEX VERTICILLATA 'NANA'**

- 2.5-3' TALL, 2.5-3' WIDE
- FULL SUN - PART SHADE
- ZONES 3-9
- JUNE-JULY: WHITE
- WINTER INTEREST, SHOWY FRUIT, CLUMPING HABIT, ATTRACTIVE FORM



**CLETHRA ALNIFOLIA**

- 3-8' TALL, 4-6' WIDE
- FULL SUN - PART SHADE
- ZONES 3-9
- JULY-AUG: WHITE
- ATTRACTS POLLINATORS, TOLERATES WET SOIL, UNIQUE FLOWERS



**SOLIDAGO RUGOSA 'FIREWORKS'**

- 2.5-3' TALL, 2.5-3' WIDE
- FULL SUN
- ZONES 4-8
- SEPT-OCT: YELLOW
- NICE FORM, SHOWY BLOOM, NATURALIZES



**IRIS VERSICOLOR**

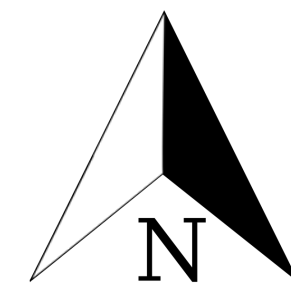
- 2-2.5' TALL, 2-2.5' WIDE
- FULL SUN - PART SHADE
- ZONES 3-9
- MAY-JUNE: VIOLET
- TOLERATES WET SOILS, NATIVE, NATURALIZES, SHOWY FLOWER COLOR

PLANT HIGHLIGHTS



PERSPECTIVE C - WETLAND WALK





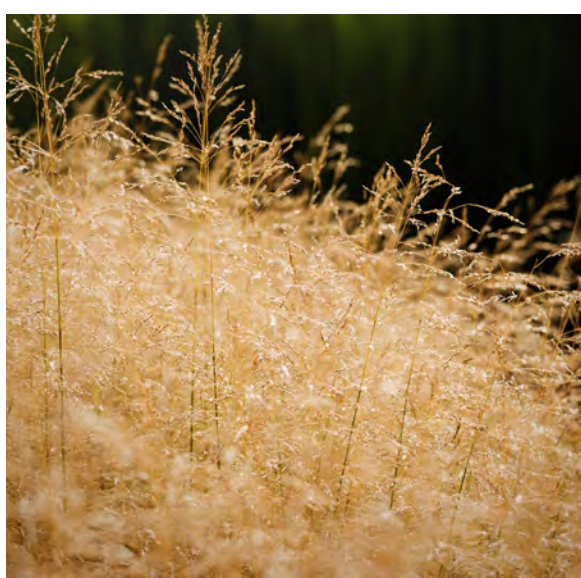
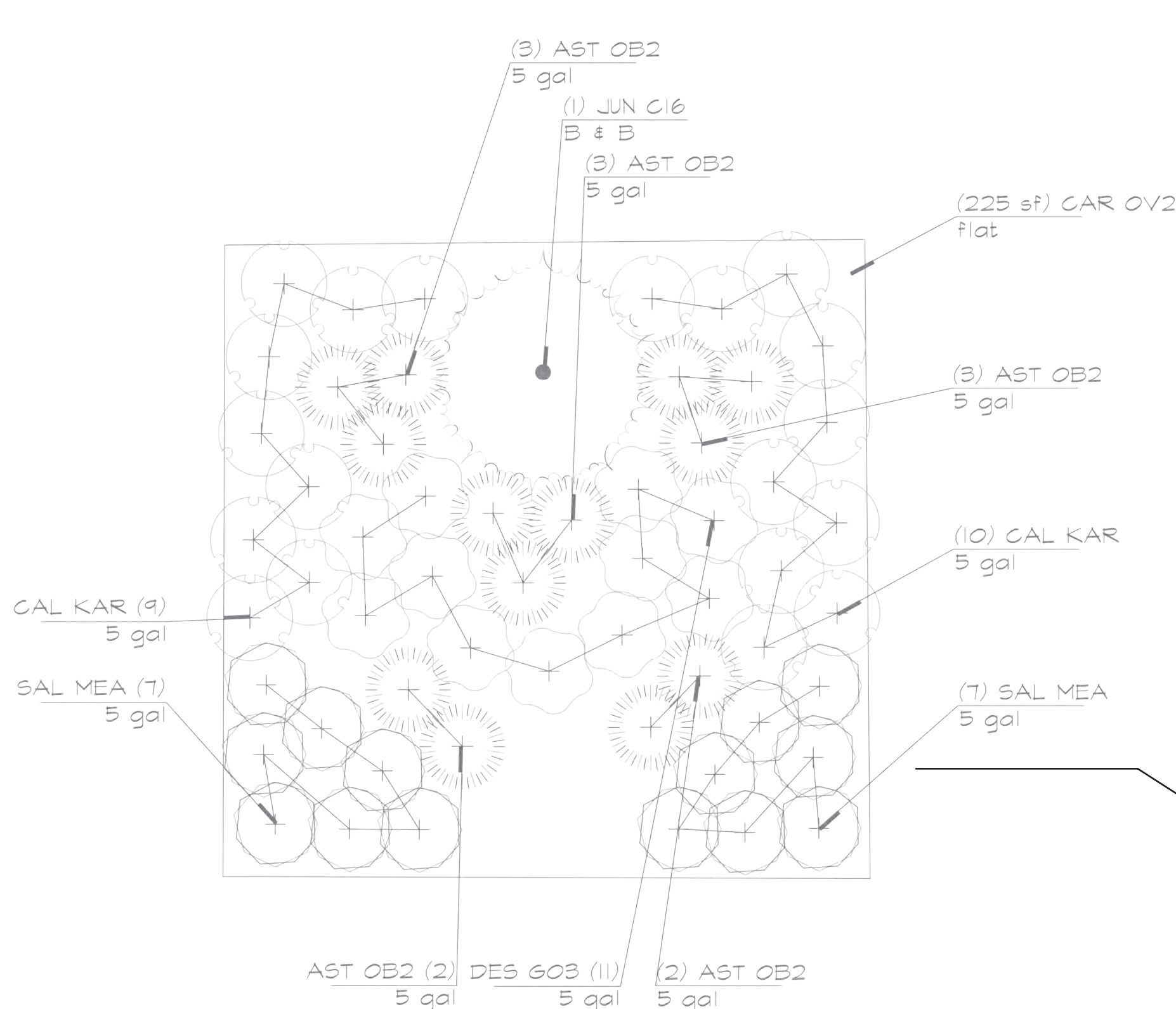
ANNA ELIESE SCOTT  
TOM DVORAK  
SAIGE HENKEL

LA 365  
12.20.16

# AHUSKA PARK - MONONA, WI PLANTING PLAN



TENNIS COURT PLANTINGS



**DESCHAMPSIA CESPITOSA  
'GOLDTAU'**

- 1-2' TALL, 2-3' WIDE
- FULL SUN - PART SUN
- ZONES 4-9
- JULY-OCT: GOLD
- GOOD FALL INTEREST, NICE FORM, COMPACT



**ASTER OBLONGIFOLIUS  
'OCTOBER SKIES'**

- 1.5-2' TALL, 1.5-2' WIDE
- FULL SUN
- ZONES 3-8
- AUG-OCT: LAVENDER
- FRAGRANT, ATTRACTS POLLINATORS

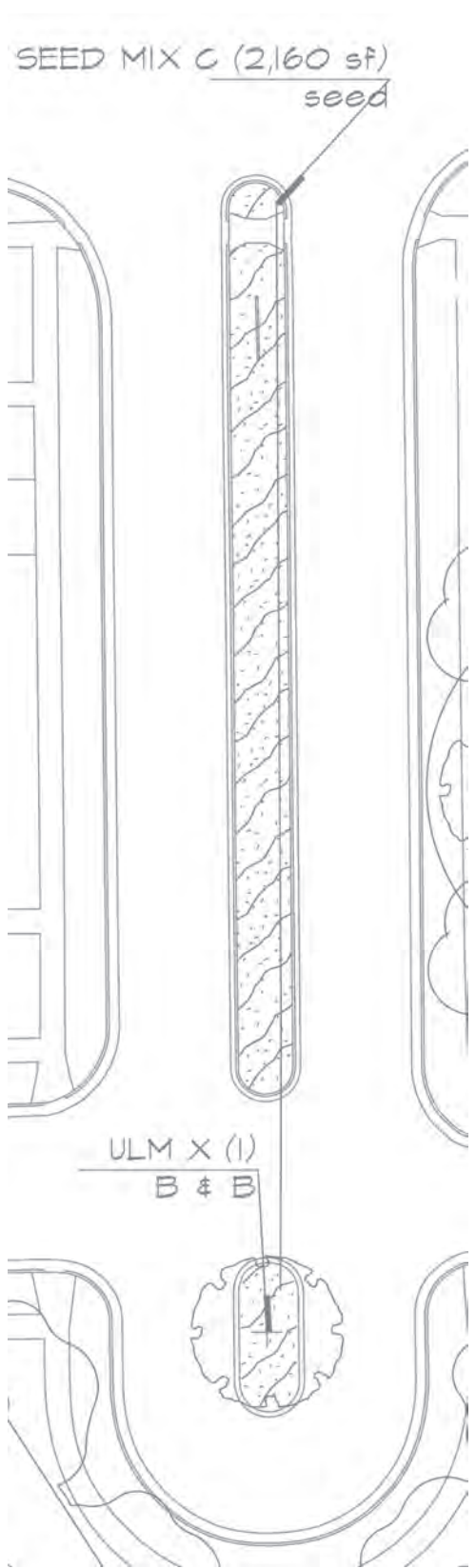
**AMSONIA HUBRICHTII**

- 2-3' TALL, 2-3' WIDE
- FULL SUN - PART SHADE
- ZONES 5-8
- APRIL: POWDERY BLUE
- ATTRACTS POLLINATORS, GOOD FALL COLOR, WINTER INTEREST

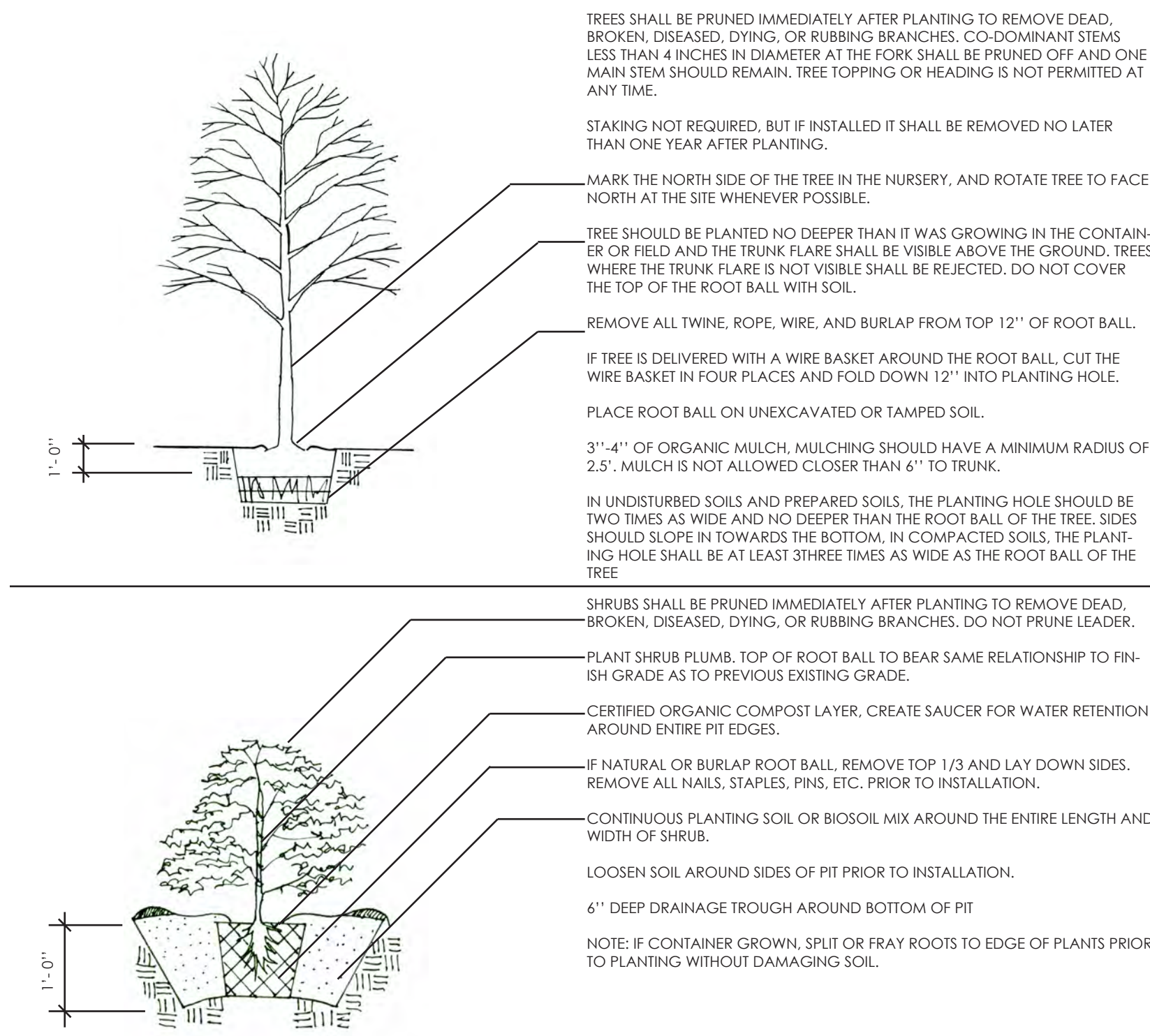
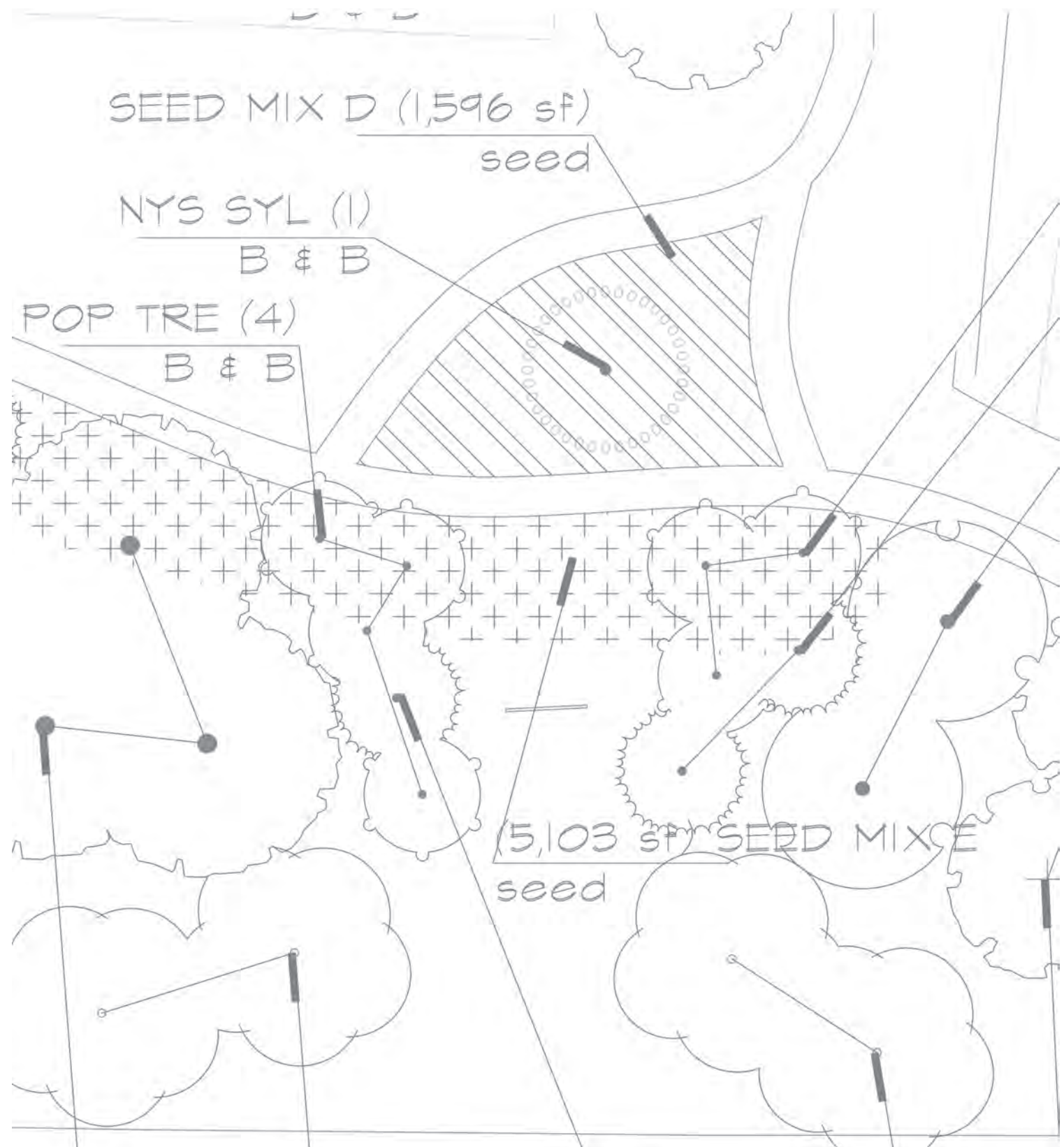
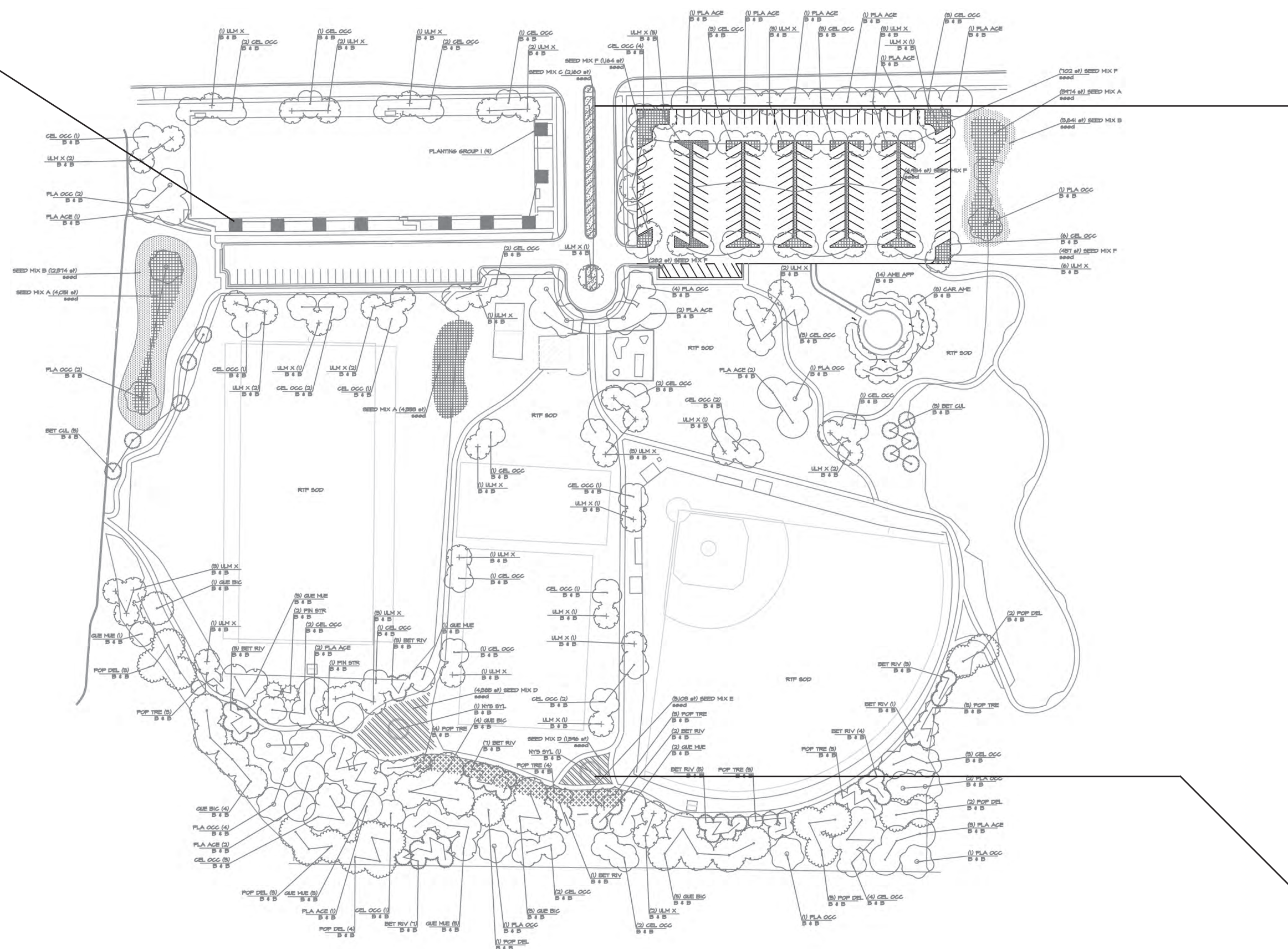


**ECHINACEA PURPUREA  
'EVAN SAUL'**

- 2.5-3' TALL, 1.5-2' WIDE
- FULL SUN - PART SHADE
- ZONES 4-8
- JULY-SEPT: ORANGE, PINK
- ATTRACTS POLLINATORS, COLORFUL BLOOM



ENTRANCE MEDIAN PLANTINGS



TREES SHALL BE PRUNED IMMEDIATELY AFTER PLANTING TO REMOVE DEAD, BROKEN, DISEASED, DYING, OR RUBBING BRANCHES. CO-DOMINANT STEMS LESS THAN 4 INCHES IN DIAMETER AT THE FORK SHALL BE PRUNED OFF AND ONE MAIN STEM SHOULD REMAIN. TREE TOPPING OR HEADING IS NOT PERMITTED AT ANY TIME.

STAKING NOT REQUIRED, BUT IF INSTALLED IT SHALL BE REMOVED NO LATER THAN ONE YEAR AFTER PLANTING.

MARK THE NORTH SIDE OF THE TREE IN THE NURSERY, AND ROTATE TREE TO FACE NORTH AT THE SITE WHENEVER POSSIBLE.

TREE SHOULD BE PLANTED NO DEEPER THAN IT WAS GROWING IN THE CONTAINER OR FIELD AND THE TRUNK FLARE SHALL BE VISIBLE ABOVE THE GROUND. TREES WHERE THE TRUNK FLARE IS NOT VISIBLE SHALL BE REJECTED. DO NOT COVER THE TOP OF THE ROOT BALL WITH SOIL.

REMOVE ALL TWINE, ROPE, WIRE, AND BURLAP FROM TOP 12" OF ROOT BALL.

IF TREE IS DELIVERED WITH A WIRE BASKET AROUND THE ROOT BALL, CUT THE WIRE BASKET IN FOUR PLACES AND FOLD DOWN 12" INTO PLANTING HOLE.

PLACE ROOT BALL ON UNEXCAVATED OR TAMPED SOIL.

3"-4" OF ORGANIC MULCH. MULCHING SHOULD HAVE A MINIMUM RADIUS OF 2.5'. MULCH IS NOT ALLOWED CLOSER THAN 6" TO TRUNK.

IN UNDISTURBED SOILS AND PREPARED SOILS, THE PLANTING HOLE SHOULD BE TWO TIMES AS WIDE AND NO DEEPER THAN THE ROOT BALL OF THE TREE. SIDES SHOULD SLOPE IN TOWARDS THE BOTTOM. IN COMPACTED SOILS, THE PLANTING HOLE SHALL BE AT LEAST THREE TIMES AS WIDE AS THE ROOT BALL OF THE TREE.

SHRUBS SHALL BE PRUNED IMMEDIATELY AFTER PLANTING TO REMOVE DEAD, BROKEN, DISEASED, DYING, OR RUBBING BRANCHES. DO NOT PRUNE LEADER.

PLANT SHRUB PLUMB. TOP OF ROOT BALL TO BEAR SAME RELATIONSHIP TO FINISH GRADE AS TO PREVIOUS EXISTING GRADE.

CERTIFIED ORGANIC COMPOST LAYER. CREATE SAUCER FOR WATER RETENTION AROUND ENTIRE PIT EDGES.

IF NATURAL OR BURLAP ROOT BALL, REMOVE TOP 1/3 AND LAY DOWN SIDES. REMOVE ALL NAILS, STAPLES, PINS, ETC. PRIOR TO INSTALLATION.

CONTINUOUS PLANTING SOIL OR BIOSOIL MIX AROUND THE ENTIRE LENGTH AND WIDTH OF SHRUB.

LOOSEN SOIL AROUND SIDES OF PIT PRIOR TO INSTALLATION.

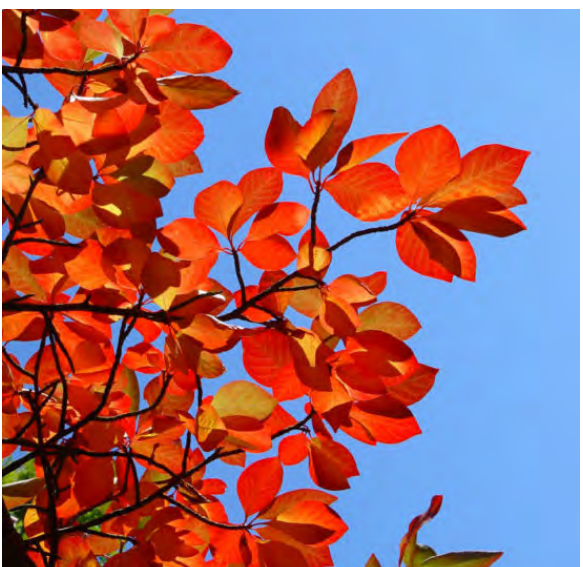
6" DEEP DRAINAGE TROUGH AROUND BOTTOM OF PIT

NOTE: IF CONTAINER GROWN, SPLIT OR FRAY ROOTS TO EDGE OF PLANTS PRIOR TO PLANTING WITHOUT DAMAGING SOIL.

PLANTING DETAILS

**NYSSA SYLVATICA**

- 30-50' TALL, 20-30' WIDE
- FULL SUN - PART SHADE
- ZONES 3-9
- MAY-JUNE: GREEN, WHITE
- GOOD FALL COLOR, HORIZONTAL FORM, SPECIMEN PLANTING



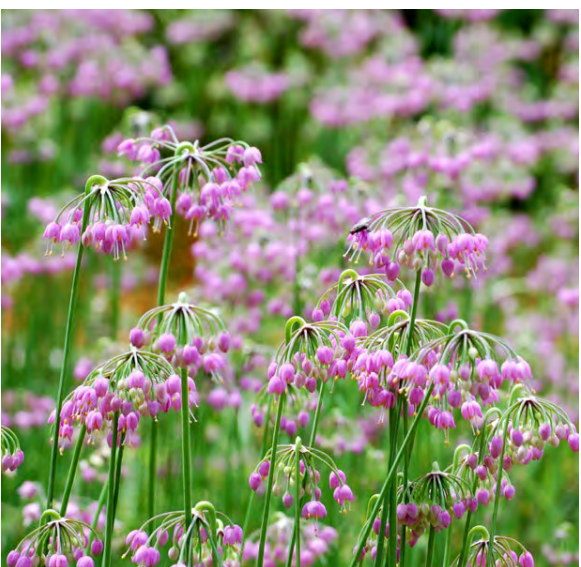
**CALTHA PALUSTRIS**

- 1-1.5' TALL, 1-1.5' WIDE
- FULL SUN - PART SHADE
- ZONES 3-7
- APRIL-JUNE: YELLOW
- TOLERANT OF WET SOIL, SHOWY FLOWER, NATURALIZES



**ALLIUM CERNUUM**

- 1-1.5' TALL, .25-.5' WIDE
- FULL SUN - PART SHADE
- ZONES 4-8
- JUNE-AUG: PINK
- NATURALIZES, ATTRACTS POLLINATORS, INTERESTING FORM



**MERTENSIA VIRGINICA**

- 1.5-2' TALL, 1-1.5' WIDE
- PART - FULL SHADE
- ZONES 3-8
- MARCH: BLUE
- PEST TOLERANT, NATURALIZES, NICE COLOR

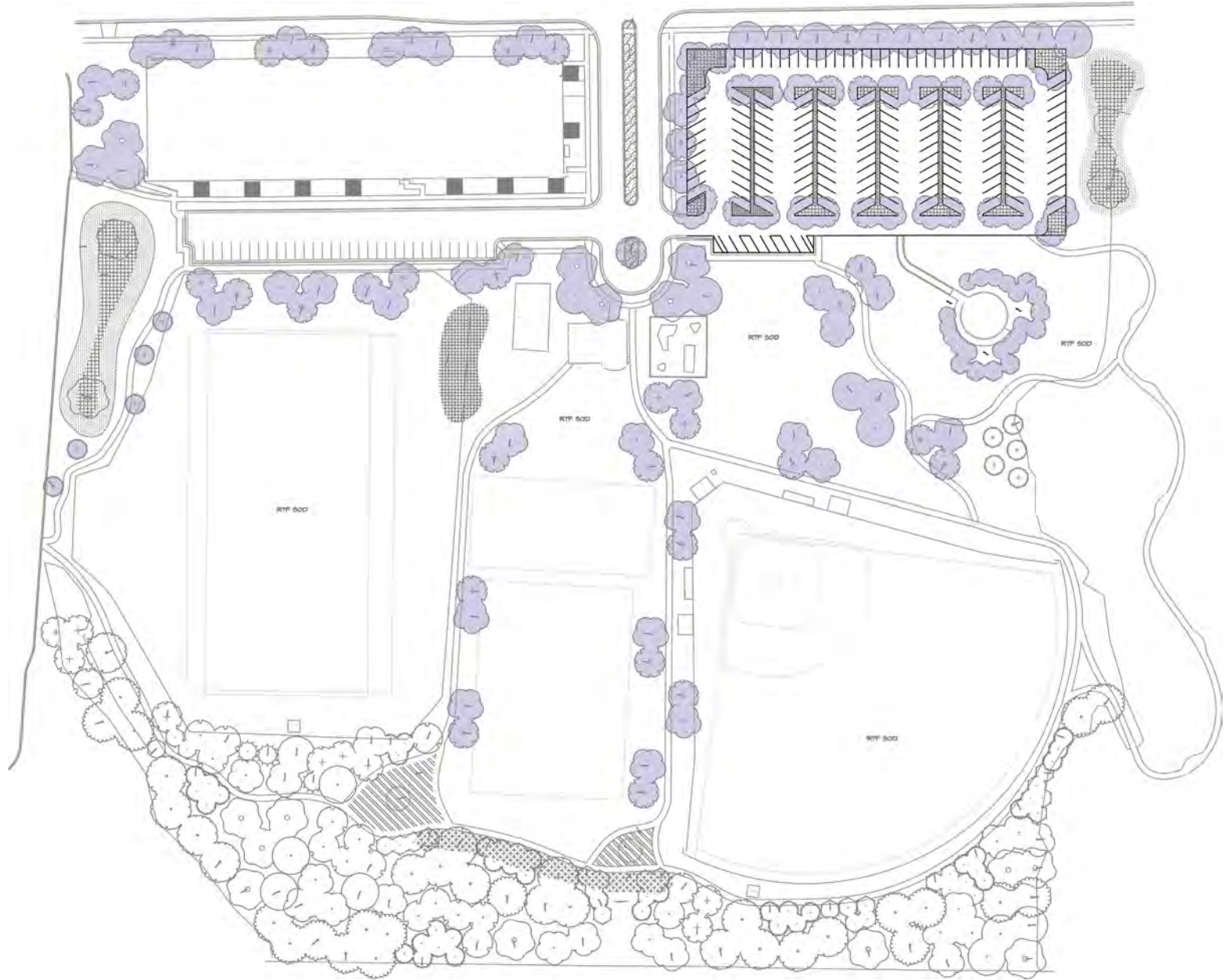


BULB HILLSIDE & NYSSA PLANTINGS

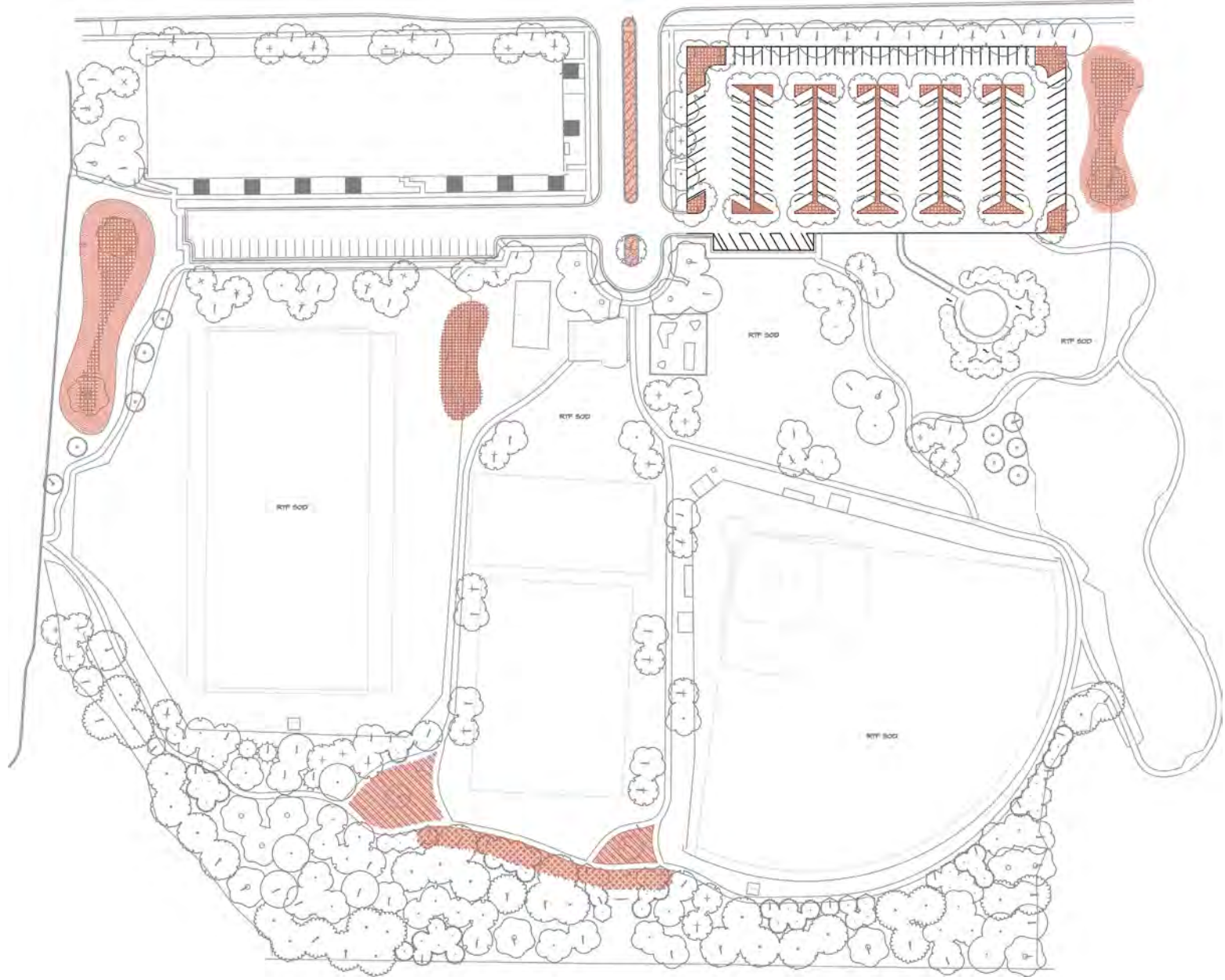


Trees	Symbol	Scientific Name	Common Name	Quantity	Size	Root Condition	Spacing	Remarks
	AME APP	Amelanchier x grandiflora	Apple Serviceberry	15	2.5"Cal	B & B	12' o.c.	Multi-stemmed
	BET RIV	Betula nigra	River Birch	38	2.5"Cal	B & B		Multi-stemmed
	BET CUL	Betula nigra 'Cully'	HERITAGE™ River Birch	10	2.5"Cal	B & B		Multi-stemmed
	CAR AME	Carpinus caroliniana	American Hornbeam	8	2.5"Cal	B & B	17' o.c.	
	CEL OCC	Celtis occidentalis	Common Hackberry	65	2.5"Cal	B & B		
	NYS SYL	Nyssa sylvatica	Black Gum	2	2.5"Cal	B & B		
	PIN STR	Pinus strobus	Eastern White Pine	3	2.5"Cal	B & B		
	PLA OCC	Platanus occidentalis	American Sycamore	19	2.5"Cal	B & B		
	PLA ACE	Platanus x acerifolia	London Plane Tree	19	2.5"Cal	B & B		
	POP DEL	Populus deltoides 'Siouxland'	Siouxland' Eastern Cottonwood	18	2.5"Cal	B & B		Male cultivar
	POP TRE	Populus tremuloides	Quaking Aspen	29	2.5"Cal	B & B		
	QUE BIC	Quercus bicolor	Swamp White Oak	17	2.5"Cal	B & B		
	QUE MUE	Quercus muehlenbergii	Chinkapin Oak	17	2.5"Cal	B & B		
	ULM X	Ulmus x 'Morton Glossy'	TRIUMPH™ Elm	57	2.5"Cal	B & B		DED resistant
Seed Mix	Symbol	Scientific Name	Common Name	Quantity	Size	Root Condition	Spacing	Remarks
A		Aronia melanocarpa 'Morton'	IROGUOIS BEAUTY™ Black Chokeberry	25	1'-0"	5 gal	24" o.c.	
		Carex stricta	Tussock Sedge	20%		Seed		
		Ilex verticillata 'Jim Dandy'	Jim Dandy' Winterberry	2	1'-6"	5 gal	24" o.c.	
		Ilex verticillata 'Nana'	RED SPRITE™ Winterberry	6	1'-6"	5 gal	24" o.c.	
		Iris versicolor	Blue Flag	35%		Seed		
B		Solidago rugosa 'Fireworks'	Fireworks' rough goldenrod	45%		Seed		
		Amsonia tabernaemontana	Eastern Blue Star	20%		Seed		
		Aster azureus	Sky Blue Aster	25%		Seed		
		Carex pensylvanica	Pennsylvania Sedge	10%		Seed		
		Ceanothus americanus	New Jersey Tea	25	1'-0"	5 gal	24" o.c.	
C		Clethra alnifolia	Sweet Pepperbush	25%		Seed		
		Iris versicolor	Blue Flag	20%		Seed		
		Amsonia hubrichtii	Threadleaf Blue Star	10%		Seed		
		Aster azureus	Sky Blue Aster	20%		Seed		
		Calamagrostis x acutiflora 'Karl Foerster'	Karl Foerster' Feather Reed Grass	30%		Seed		
D		Echinacea purpurea 'Evan Saul'	SUNDOWN™ Coneflower	20%		Seed		
		Schizachyrium scoparium	Little Bluestem	20%		Seed		
		Caltha palustris	Marsh Marigold	25%		Seed		
		Carex stricta	Tussock Sedge	25%		Seed		
		Chelone glabra	White turtlehead	25%		Seed		
E		Ilex verticillata 'Jim Dandy'	Jim Dandy' Winterberry	2	1'-6"	5 gal	24" o.c.	
		Ilex verticillata 'Nana'	RED SPRITE™ Winterberry	6	1'-6"	5 gal	24" o.c.	
		Iris versicolor	Blue Flag	25%		Seed		
		Allium cernuum	Nodding Onion	25%		Seed		
		Colchicum autumnale	Autumn Crocus	25%		Seed		
F		Dodecatheon meadia	Shooting Star	25%		Seed		
		Mertensia virginica	Virginia Bluebells	25%		Seed		
		No-mow fescue mix		100%		Seed		
		Bouteloua gracilis	Blue Grama	20%		Seed		
		Calamagrostis canadensis	Bluejoint Grass	25%		Seed		
Groundcover	Symbol	Scientific Name	Common Name	Quantity	Size	Root Condition	Spacing	Remarks
		Festuca arundinacea	Rhizomatous' RTF® Sod	100%		Seed		
Planting Group	Symbol	Scientific Name	Common Name	Quantity	Size	Root Condition	Spacing	Remarks
1		Aster oblongifolius 'October Skies'	October Skies' Aromatic Aster	117		Flat	18" o.c.	
		Calamagrostis x acutiflora 'Karl Foerster'	Karl Foerster' Feather Reed Grass	171		Flat	18" o.c.	
		Carex brevior	Oval Sedge	50%		Seed		
		Deschampsia cespitosa 'Goldtau'	Gold Dew Tufted Hair Grass	99		Flat	18" o.c.	
JUN C16		Juniperus virginiana 'Corcorcor'	EMERALD SENTINEL™ Eastern Red Ceda	9	2.5"Cal	B & B		
		Salvia x sylvestris 'Blue Hill'	Blue Hill' Meadow Sage	126		Flat	18" o.c.	

PHASE ONE



PHASE TWO



PHASE THREE





1

- Aesthetic planting between individual tennis courts which are view-able from the parking lot and inside the tennis court fence
- Juniperus virginiana 'Corcorcor' has a pyramidal form to complement the Nyssa sylvatica on the south side of the site. It is a more urban tolerant species to increase longevity since it is close to a parking lot and sidewalk.
- Branches of the large shade trees shall be maintained to prevent interference with the fence or play once large enough. Any hazardous or dead branches must be removed as soon as possible.
- Juniperus virginiana 'Corcorcor' shall be replaced with the same species, if needed

2

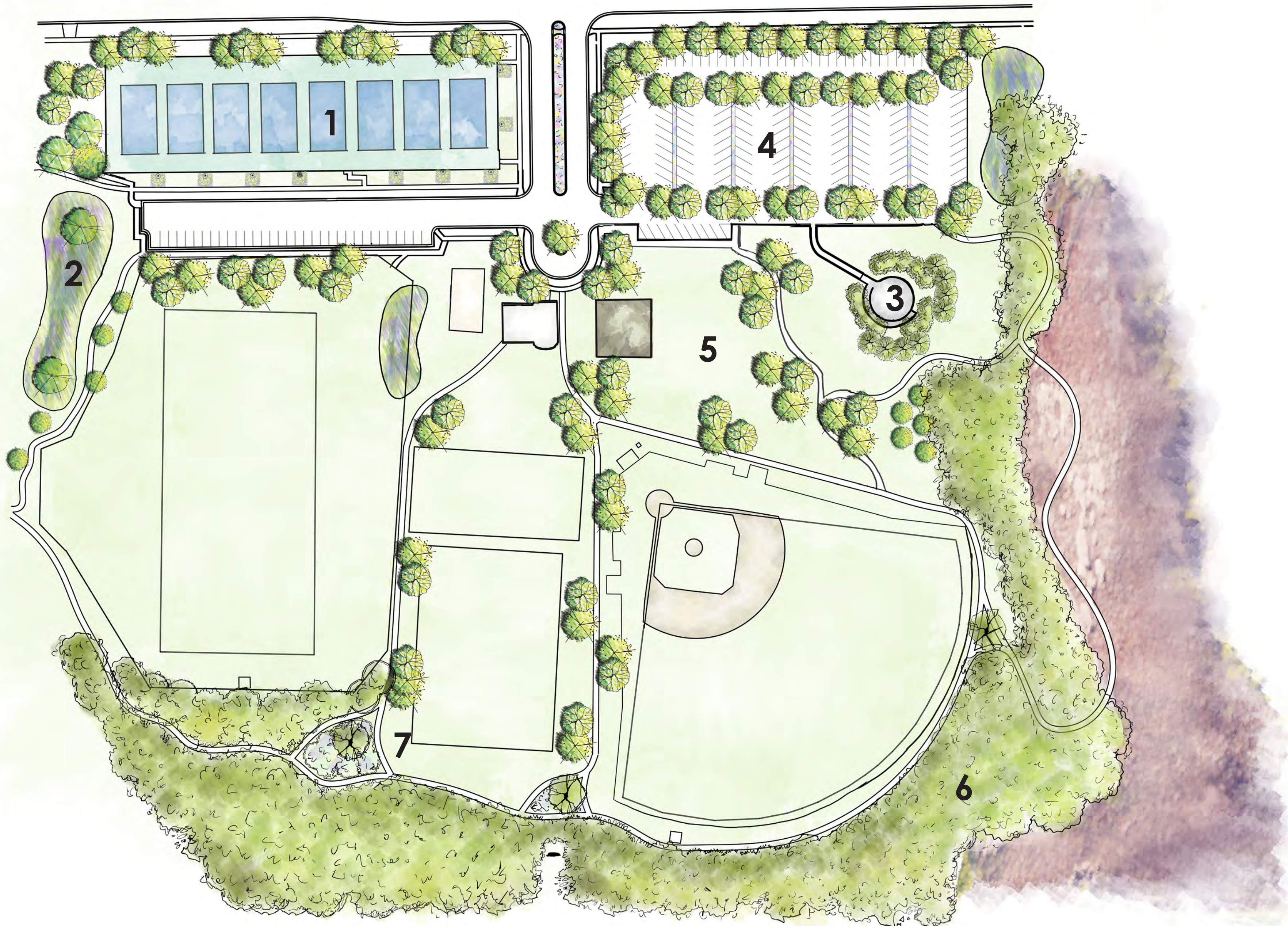
- These areas have wet soil and poor drainage
- Plants were chosen to naturalize the space and to create an educational op-portunity for visitors to become acquaint-ed with the function and species of rain gardens

3

- Planted close to each other to create upright form
- Create height hierarchy with Carpi-nus caroliniana behind Amelanchier x grandiflora
- Complement form of memorial
- Multi-stemmed branches provide dynamic screening opportunity
- Remove leaf litter from memorial space to keep a clean, formal sense of place

4

- Celtis occidentalis and Ulmus x 'Morton Glossy' are large shade trees tolerant of urban conditions. They shall maintain their vase form with lower branches trimmed prevent interference with vehicles and visitors. The tree branches shall not inhibit the lights of the light posts.
- Seed mix in medians and outer pockets create aesthetic screen from other vehicles
  - o Does not interfere with visibility at ends of rows
  - o Can burn every other year
    - Rejuvenates herbaceous species



7

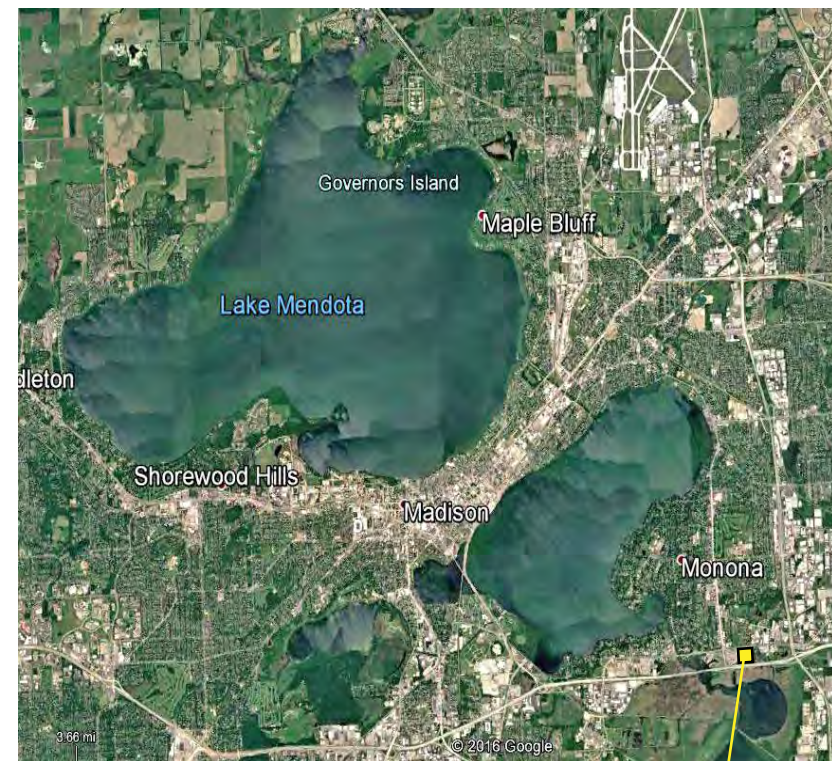
- Nyssa sylvatica is used as a statement plant as users walk the path because of its spectacular scarlet fall color and unique habit. It shall remain in its natural form to create strong horizontal branching and pyramidal form. The base may be trimmed to 4' to allow the herbaceous species to encroach and surround the trunk of the Nyssa sylvatica
- The seed mix used was chosen for species with upright form to prevent path overhang and obstruction

5

- Trees to grow naturally – create shade pockets for seating opportunities
- Must keep open area for recreation
- Remove hazardous and/or dead branches as needed to prevent potential injury
- RTF Sod
  - o Mowed three times a season to maintain water retention and durability of sod
  - o Mower blades to be sharpened prior to cutting to provide a clean, even cut and attractive appearance
- 6
  - The woodlands is a natural zone where all species are intended to grow without human influence. The species close to the pedestrian path may be trimmed to avoid encroachment and all hazardous branches shall be removed
  - 80-90% canopy cover after 20 years
  - Remove invasive species prior to planting proposed species. This will avoid future encroachment of invasive species and ensure the natural appearance pro-posed
  - Establish a canopy before implement-ing seed mix and bulbs as the species selected prefer a partly shady environment
  - Populus deltoides 'Siouxland' is a male cultivar that will not produce seeds
  - If some individual trees are removed, do not replace, attempt to promote sense of being in a natural woodland area
  - Leaf litter shall be allowed to accumulate and degrade naturally to replenish soil nutrients



## CONTEXT

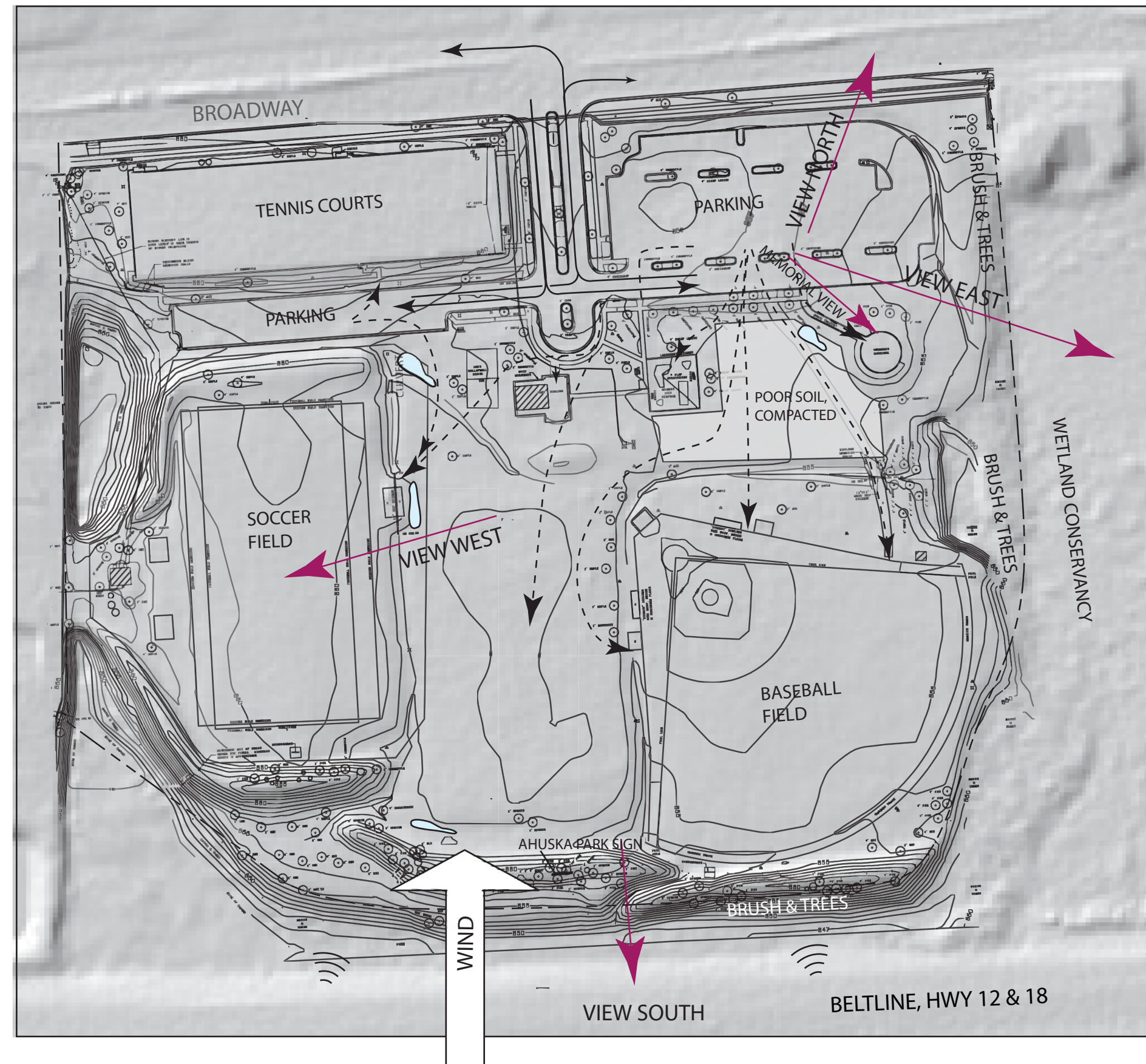


## SITE ANALYSIS

- AFFORDANCES/OPPORTUNITIES**
- FULL SUN, 6-12 HRS./DAY
  - PLANT HARDINESS ZONE IS 5a
  - MANY TREES ALREADY PLANTED ON SITE
  - CLOSE TO CONSERVANCY
  - EASILY ACCESSIBLE
  - FAIRLY LEVEL LAND
  - WIND ANNUAL AVE. 5-15 MPH
  - SMALL OAK SAVANNAH

- CONSTRAINTS**
- FORMER LANDFILL SITE, CAP & TOPFILL ONLY 2-3'
  - HIGH GROUNDWATER LEVEL, STANDING WATER
  - TRAFFIC NOISE FROM THE BELTLINE

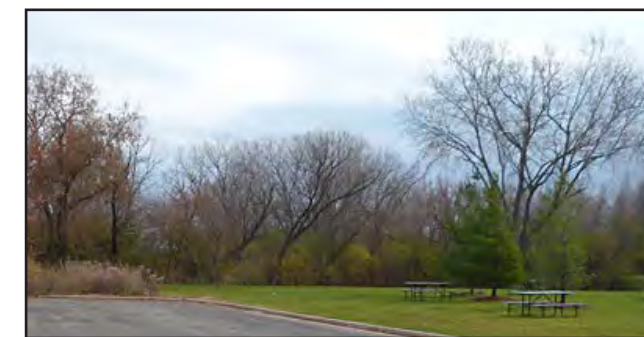
- PEDESTRIAN TRAFFIC  
— VEHICLE TRAFFIC  
— VIEW  
→ WIND DIRECTION  
☹ SOURCE OF SOUND  
○ STANDING WATER  
□ POOR, COMPACTED SOIL
- 0 50 100 150 200



VIEW NORTH



VIEW EAST



VIEW SOUTH



VIEW WEST



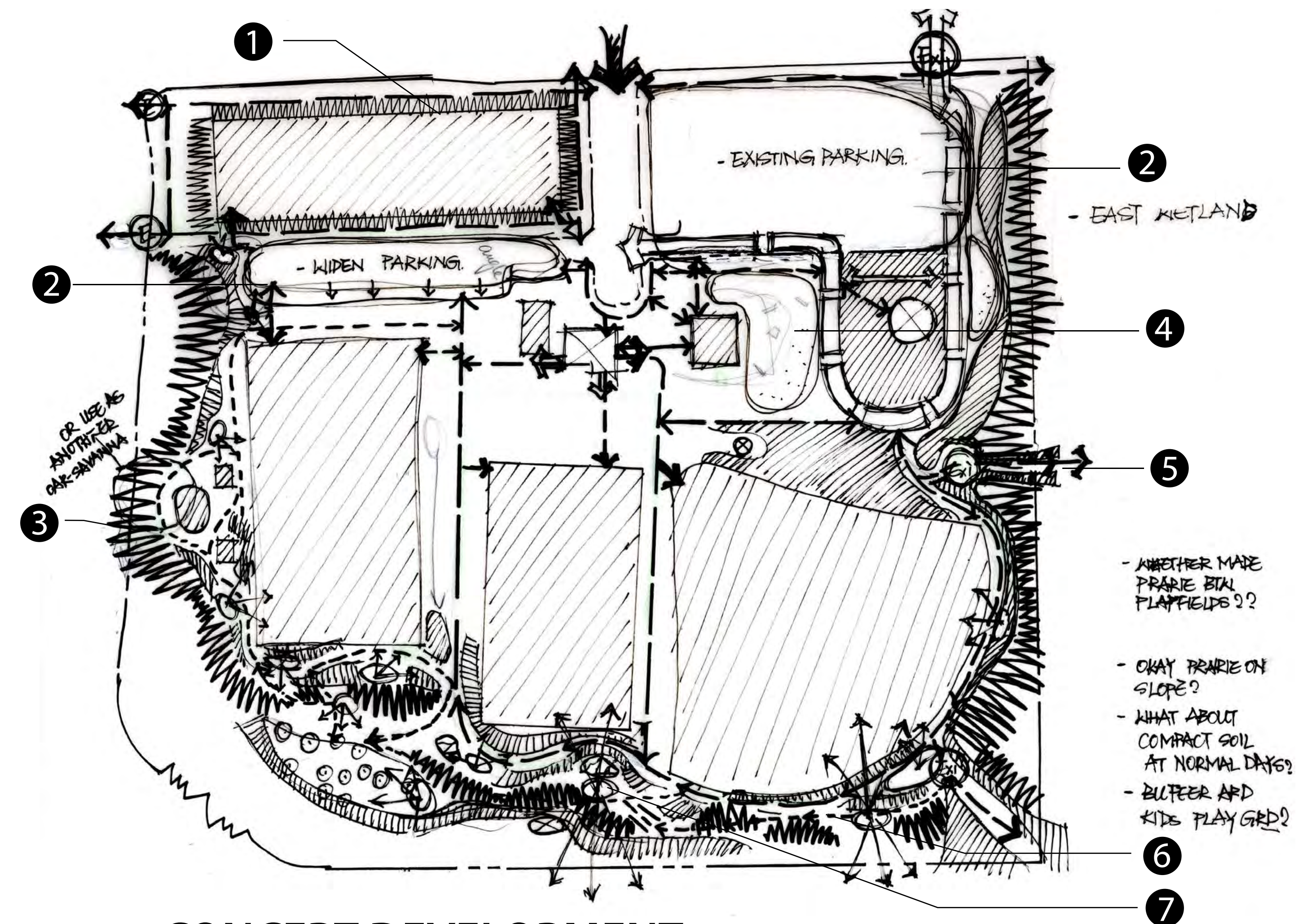
## SITE ANALYSIS

### Opportunities

- Varied topography provides different views and recreational opportunities.
- Memorial provides cultural engagement and a sense of place.
- Evergreens provide winter greenery.
- Berms on the southern edge provide views of the entire site.
- Existing trees provide an opportunity for natural engagement, which can be enhanced by re-design.
- Areas for bioswale development that would attract wildlife.
- Additional parking in the shopping center on the west side.

### Constraints

- Soil is very poor, was originally a landfill.
- Many wild areas of brush on the south side. Visually unappealing.
- Highway noise from the beltline needs to be abated.
- Swales are scattered on the site. Unsafe, especially for children.
- East side visually unappealing as well, wild areas of brush. No entrance to the wetland.
- Unorganized wayfinding, poor circulation.
- Tennis courts lack a windscreen.
- No appropriate area for the farmer's market.
- Barren, unguided views



## CONCEPT DEVELOPMENT

### Creation of transition zones

- From natural to urban settings.
- From daily routine to recreation.

### Concept sketch

1. Adds a natural wind screen around the tennis court using evergreens.
2. Parking areas are enlarged on the east and west sides.
3. Paved entrance and path are added to provided better access from west side parking, ADA accessible.
4. Farmer's market is moved out of the parking lot into the unused site center.
5. Eastern wetland entrance added.
6. Secondary paths on the southern berm are created that follow the ridges, creating new spaces and views.
7. Added nodes for gathering/resting zones.

**Designers:**  
SUSAN MANSKE  
SHIQI TANG  
JARYD SCHIMITZ

# BELT OF TRANSITION

## Replanning of Ahuska Park, Monona, WI

DEC, 19TH/2016  
LA 354  
FINAL PROJECT

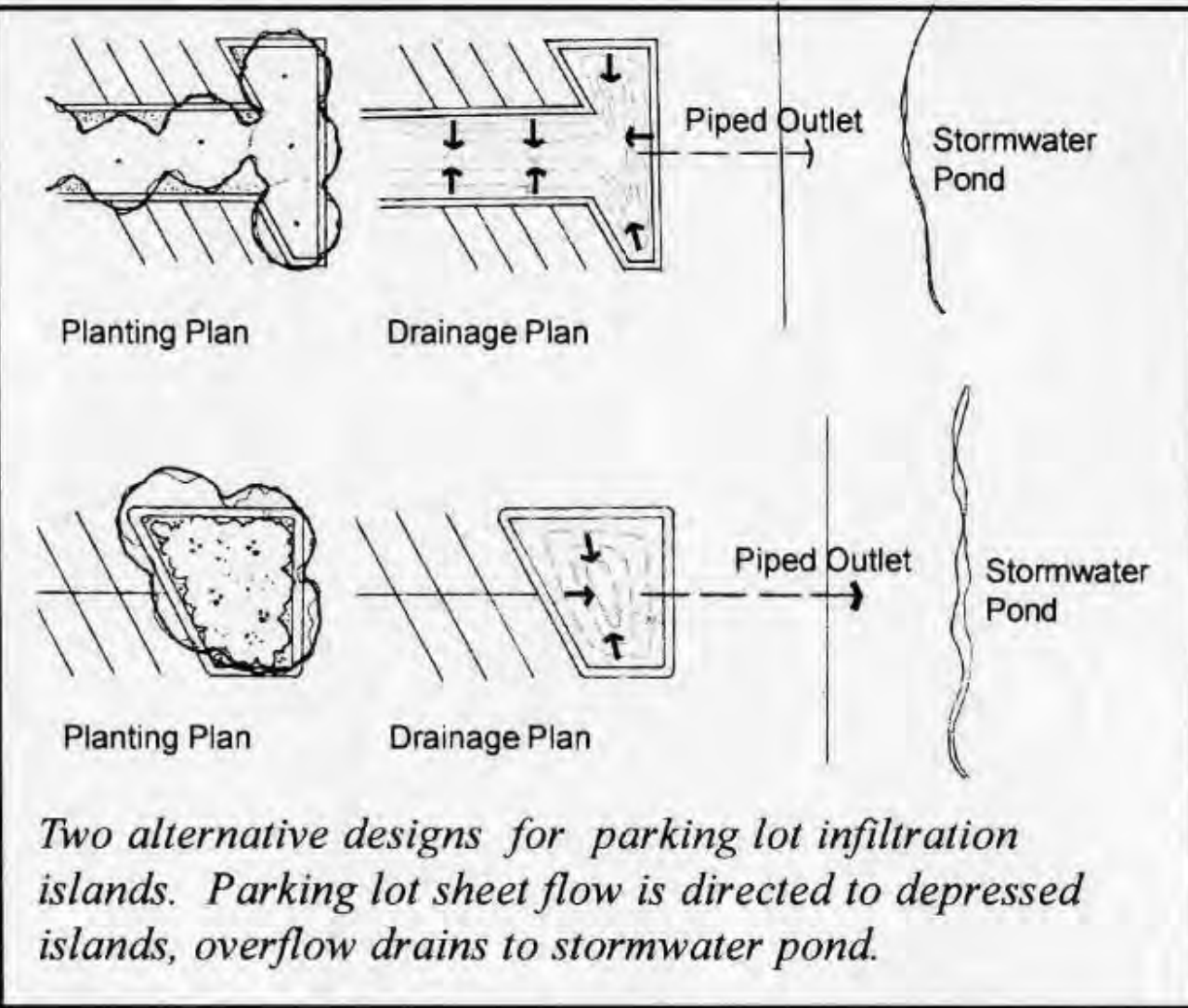
**Page 2**  
**Site Analysis**  
**& Concepts**



PRECEDENT STUDIES

PARKING LOT PRECEDENT

- Show 2 Ways of reducing runoff
- Pavement reduction
  - Bioswales to collect run-off
- Suggests the following design applications:
- A mature canopy that covers at least 50% of the paved area.
  - Use of plants with deep roots to anchor soil.
  - Grass paver extension to provide a surface that will increase sustain ability, filtration and decrease run-off.
  - Angled parking near the tennis courts to increase parking and improve circulation.



TENNIS COURT WIND SCREEN PRECEDENT

- Provide wind blockage.
- Dark, even background for better ball visibility.
- Combined natural and artificial fence can provide wind blockage and improve ball visibility.
- Evergreen clusters provide a more natural environment. ▶
- More effective to combine the evergreen clusters with a dark green artificial background. ▶

PATHWAYS, CIRCULATION PRECEDENT



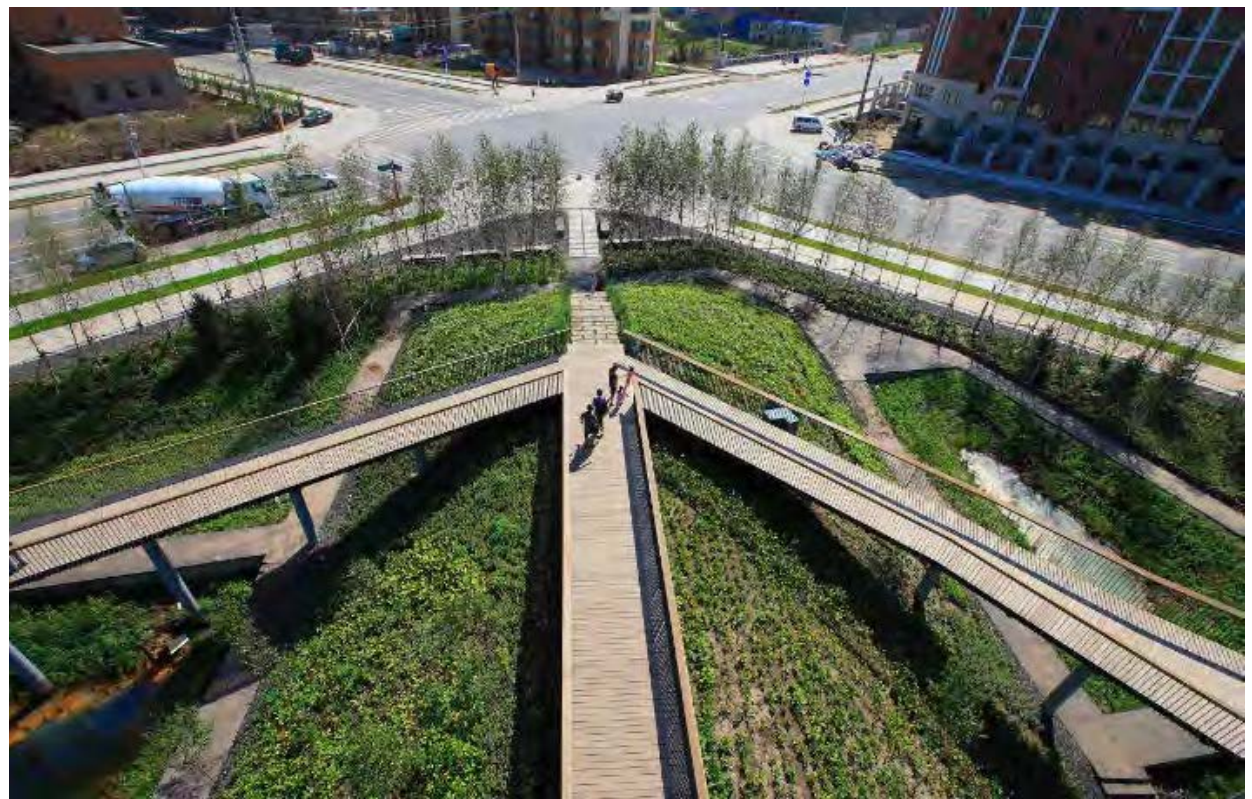
Minnesota Univ. Mankato Athletic Master Plan

- Has both an organic and a more geometric circulation plan.
  - Combines natural and artificial paving.
- Suggests the following design applications:
- A similar circulation design in our plan to provide easier wayfinding and provide a more simple boardwalk design.
  - Concrete to provide better ADA accessibility.



WETLAND PRECEDENT

- Turenscape Wetland Designs
- Swales serve an aesthetic and ecological purpose
  - Both wetland and park are area used to create wildlife habitat and recreational areas
  - Creates a transition area in the city.
  - Combines geometric and natural vegetal forms
- Suggests the following design applications:
- A combination/contrast in the plan design. Puts emphasis on our transitions theme.
  - Paths and decks through natural areas to provide a pleasant experience.
  - Large groups of trees of a single species to create a more manicured feel.
  - Variety in elevation to create a richer experience.
  - Prairie grasses to help keep people on the path.



BOARDWALK PRECEDENT

- Seating nodes along the boardwalk
- Decks for viewing and gathering.



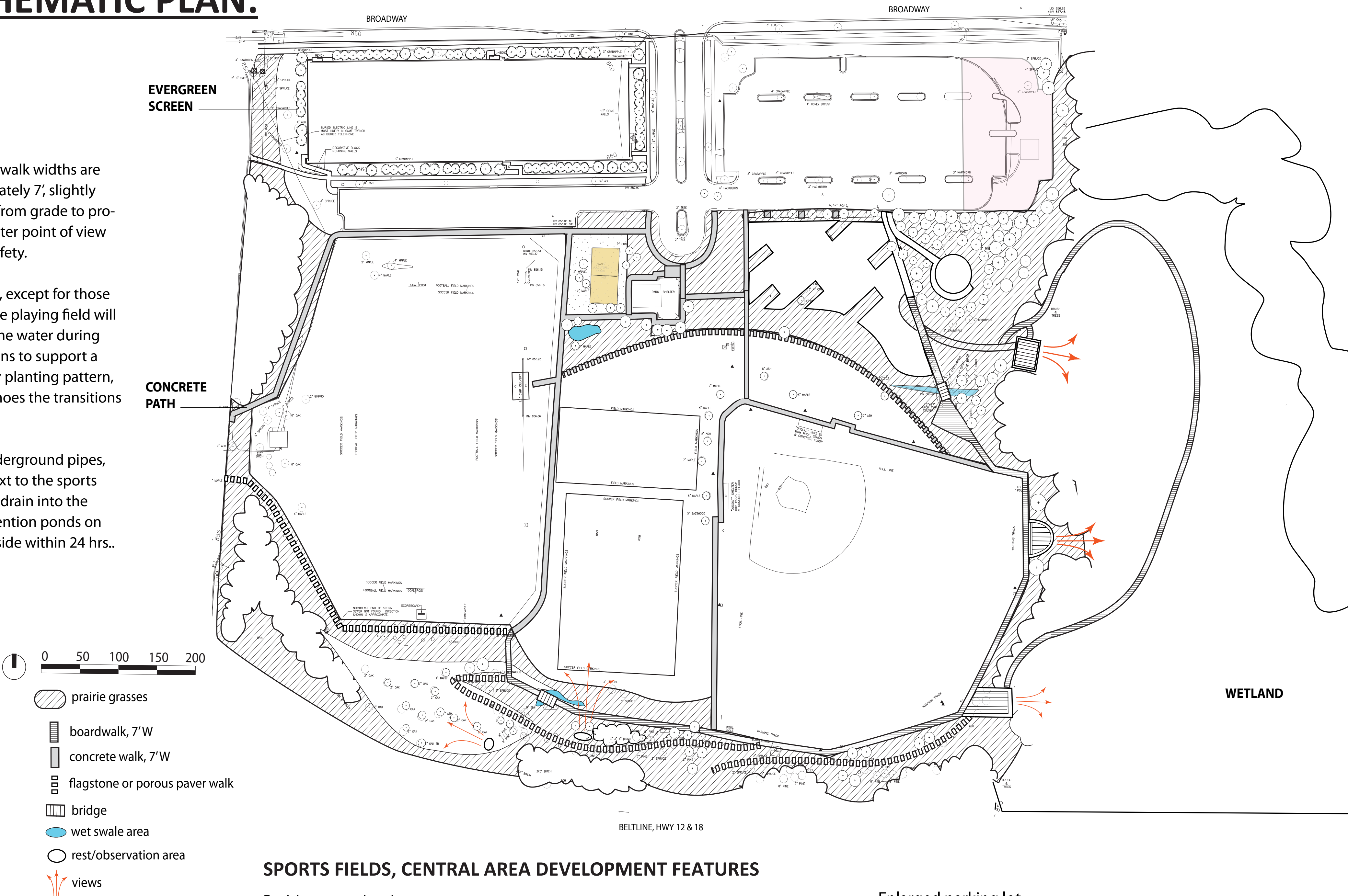


SCHEMATIC PLAN:

Notes:  
All boardwalk widths are approximately 7'; slightly elevated from grade to provide a better point of view and for safety.

All swales, except for those next to the playing field will retain some water during wet seasons to support a mesic/dry planting pattern, which echoes the transitions theme.

Using underground pipes, swales next to the sports fields will drain into the water retention ponds on the west side within 24 hrs..



SPORTS FIELDS, CENTRAL AREA DEVELOPMENT FEATURES

- Prairie grass plantings
- A transitional element between the turf and the wetland.
  - Helps to keep visitors on the paths.
  - Directs the view to the entrance of the sports field on the west side.
  - Reflects the shape of the farmers' market on the east side.
- Central flagstone path
- Helps define the edge of the prairie plantings and adds an attractive border.
  - Reflects and strengthens the shape of the winding prairie.
  - Flagstone represents a transition from concrete to the wood of the boardwalk

- Enlarged parking lot
- Tennis court screen
- Natural and artificial screens are used.
  - Use of evergreens provides year-round color and screening.
- Transitional plaza
- Transitional paving pattern reflects the theme.
  - Tree islands
  - Setbacks for farmers' market carts.

EAST PARK DEVELOPMENT FEATURES

- Original shrubs and trees
- Clear 3 areas for entrances and views into the wetland.
  - Keep most of the trees and shrubs to maintain a visual buffer and background for the park.

- Prairie grass areas
- Between the shrubs and the boardwalks.
  - Greatly improves the views
  - Provides a transitional element from turf to wetland.

- Trees in groups or as individuals in the prairie plantings
- Mimic the natural landscape in Wisconsin.
  - Create a fluent transition from the more wooded areas to a more open prairie/savanna-like area.
  - Provide shade.

- Geometric boardwalks
- Straight/geometric shape in contrast with the softer shapes and feel of the prairie.
  - Geometric shape reflects the transition theme, from artificial to natural.
  - Decks serve as nodes for resting and viewing.
  - Benches are scattered along the boardwalks.

- Decks as boardwalk entrances
- Are elevated or below grade, depending on slope.
  - Ramps provide ADA access.
  - Provides wetland views.

- Council ring
- Gathering/resting place for larger groups.
  - Provides wetland views
  - Shape reflects that of the Memorial.

SOUTH PARK DEVELOPMENT FEATURES

- NATURAL BAND w/BOARDWALK AND EDUCATION NODES
- Areas planted to attract
    - pollinators (w/signs)
    - birds (w/feeders and signs)
    - amphibians (with signs)
  - Area planted with trees to create sound (e.g., quaking aspen).

- SECONDARY (UNPAVED) RIDGE PATH FEATURES
- More natural areas for exploration
  - A deck at higher points for viewing
  - Existing oak savannah, used for exploration and as a trail's end marker.

WESTERN PARK DEVELOPMENT FEATURES

- Two entrances that connect with the shopping center parking lot on the west side, ADA accessible.
- Concrete paving and grading, TBD.





## PROJECT GOALS:

- Provide a transition zone from
- An urban to a natural environment.
  - A working to a recreational setting

### Goal-oriented design features

- Combined artificial, geometric features with natural, planned plantings.
- A transitional paving pattern
- A transitional, interwoven planting pattern.

## HIGHLIGHTS

### Plantings

- Mixed prairie plantings featuring
- contrasts in height, color and texture
- different flowering seasons to provide spring through fall color
- winter interest provided by
- dormant plantings,
- tree shapes,
- bark colors,
- retained berries
- evergreens.

**A transitional plaza** provides space for community and recreational gatherings and for a farmer's market on weekends.

**The geometric shape** of boardwalks and decking contrast with the softer shapes and texture of the plantings.

**Benches** along the paths provide resting/observing areas for visitors of all ages and abilities.

**The educational area** along the south side is focused on attracting and observing wildlife.

**Designers:**  
SUSAN MANSKE  
SHIQI TANG  
JARYD SCHIMITZ

# ***BELT OF TRANSITION***

## Replanning of Ahuska Park, Monona, WI

DEC, 19TH/2016  
LA 354  
FINAL PROJECT

**Page 4**  
**Master Plan**





## **PERSPECTIVE #1:**

### **MIXED PRAIRIE BED PATHS**

- Medium height prairie plantings encourage use of the walkways.
- Plants will provide color, texture and interest all seasons.

## **PAVING MATERIALS:**



Wood panel paving  
along the ridge



Boardwalk paving & concrete paths:  
similar color integrates the design



## **PERSPECTIVE #2:**

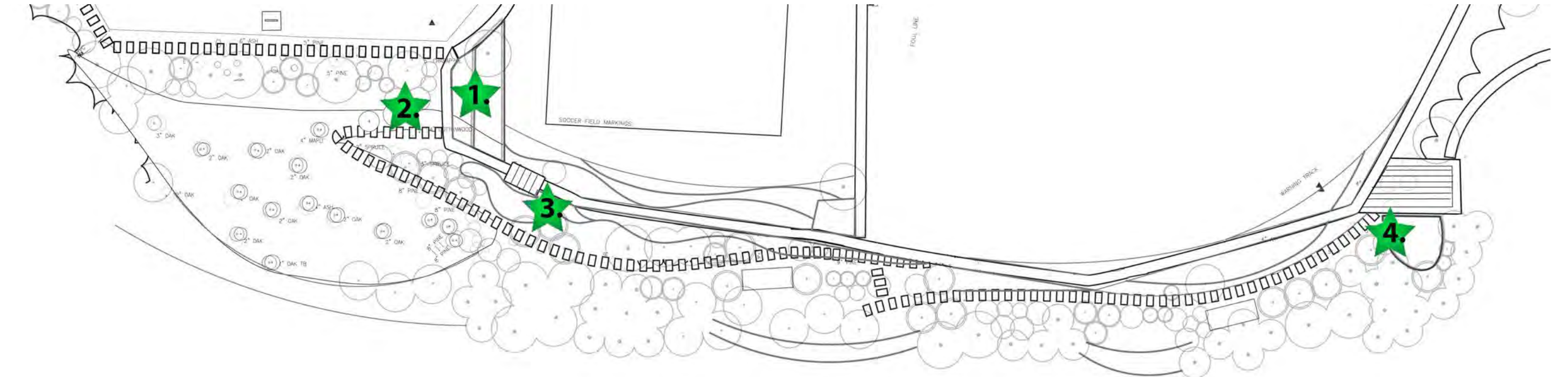
### **WETLAND PATH**

- 7' min. width to provide ADA. accessibility
- Strength and width to accommodate maintenance vehicles.
- Straight lines contrast with natural shapes.
- Scattered seating along the path.

## **EDUCATIONAL BOARDS:**



Along South Band: Education Board



1. Prairie plantings, pollinator habitat.
2. Oak savanna, squirrel, bird, tree-dwellers.
3. Swale, amphibian habitat.
4. Native Prairie species exhibition zone.

# ***BELT OF TRANSITION***

Replanning of Ahuska Park, Monona, WI

**Designers:**  
SUSAN MANSKE  
SHIQI TANG  
JARYD SCHIMITZ

DEC, 19TH/2016  
LA 354  
FINAL PROJECT

**Page 5**  
***Perspectives***  
***& Details***





Rhus aromatica 'Gro-Low';  
Zone: 3 to 9  
Height: 1.50 to 2.00 feet  
Spread: 6.00 to 8.00 feet  
Bloom Time: April to May  
Bloom Description: Yellowish  
Sun: Full sun to part shade  
Water: Dry to medium



Gleditsia triacanthos f. inermis 'Skycolor';  
Zone: 3 to 9  
Height: 1.50 to 2.00 feet  
Spread: 6.00 to 8.00 feet  
Bloom Time: April to May  
Bloom Description: Yellowish  
Sun: Full sun to part shade  
Water: Dry to medium



Gymnocladus dioicus;  
Zone: 3 to 8  
Height: 60.00 to 80.00 feet  
Spread: 40.00 to 55.00 feet  
Bloom Time: May to June  
Bloom Description: Greenish-white  
Sun: Full sun



Carex pennsylvanica;  
Zone: 3 to 8  
Height: 0.50 to 1.00 feet  
Spread: 0.50 to 1.00 feet  
Bloom Time: May  
Bloom Description: Greenish  
Sun: Part shade to full shade



Carex siderosticha 'Banana Boat';  
Zone: 5 to 9  
Height: 0.50 to 1.00 feet  
Spread: 0.50 to 1.00 feet  
Bloom Time: April to May  
Bloom Description: Tan-brown  
Sun: Part shade to full shade



Muhlenbergia reverchonii 'Autumn Embers';  
Zone: 5 to 9  
Height: 2.00 to 3.00 feet  
Spread: 1.50 to 2.00 feet  
Bloom Time: August to November  
Bloom Description: Pink  
Sun: Full sun to part shade

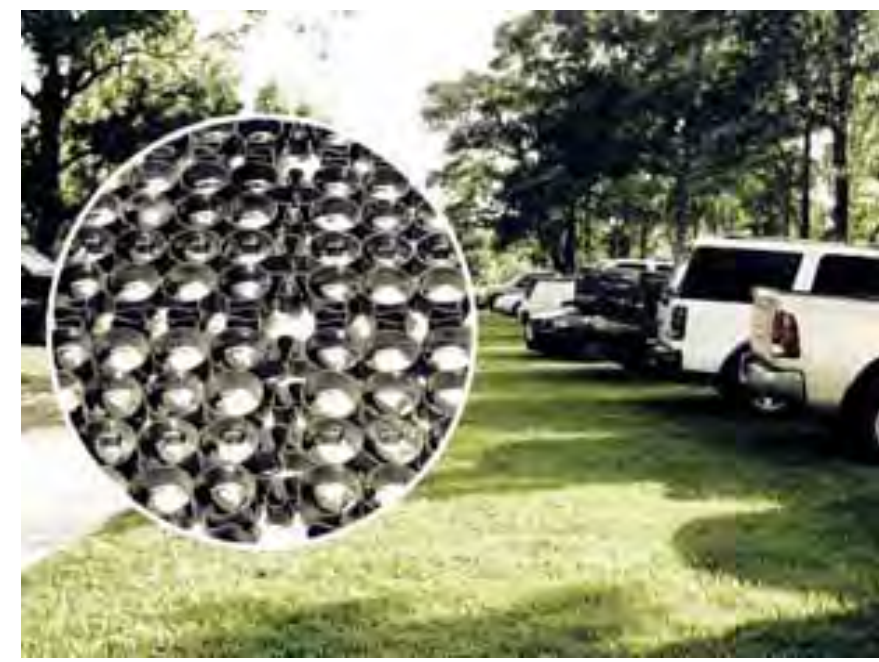
PARKING LOT DESIGN:

- Intended to extend the maximum parking capacity while maintaining existing circulation and function.
- The East portion of the parking lot is extended to include twenty-two more spots, while the parking south of the tennis courts is now angled to sixty percent on both sides to accomodate traffic entering and exiting.
- Increased parking capacity to thirty available spots adjacent to both the soccer and tennis areas, with a round-about.
- Roundabout enables less congestion and increased traffic flow during multiple events on the site.
- Plantings in the lot will not exceed three feet in maximum height in both sun and shade islands, aside from the honey locust and the coffee tree.
- Promotes safety within the lot and improves circulation, as no viewsheds are blocked when driving.

ISLAND PLANTER DESIGNS:

- islands that include Kentucky coffee tree and thornless honeylocust are going to be recieve partial shade.
- Therefore, 'Gro-Low' frangrant sumac placed underneath these canopies to enable them to spread and create a groundcover surrounding trees.
- Full sun areas include 'Autumn Ember' muhly grass (will grow to three feet) and provide a mix of both sun and shade as the day progresses.
- The two sedges used are similar in height and spread, will contrast with one another in color and texture.
- blooms of these two grasses, though relatively insignificant, occur in May, followed by bright pink, lacy texture created by 'Autumn Ember' muhly grasss August into November.

PLANTING KEY FOR PARKING LOT ADDITION:						
Botanical Name	Common Name	Size	Quantity	Roots	Symbol	Comments
DECIDUOUS TREE SPECIES						
Gleditsia triacanthos f. inermis 'Skycolor'	'thornless honeylocust	3" Cal.	4	Cont.	GT	match form/size
Gymnocladus dioicus	Kentucky coffee tree	3" Cal.	4	Cont.	GD	Male trees only, match size
GRASSES AND GROUNDCOVERS						
Carex pennsylvanica	Pennsylvania sedge	1 Gal.	24	Cont.	CP	Match size
Carex siderosticha 'Banana Boat'	'Banana Boat' sedge	1 Gal.	24	Cont.	CS	Match size/form
Muhlenbergia reverchonii 'Autumn Embers	muhly grass	1.5 Gal.	12	Cont.	MR	Match size/form
Rhus aromatica 'Gro-Low'	'Gro-Low' frangrant sumac	1 Gal.	5	Cont.	RA	Match size



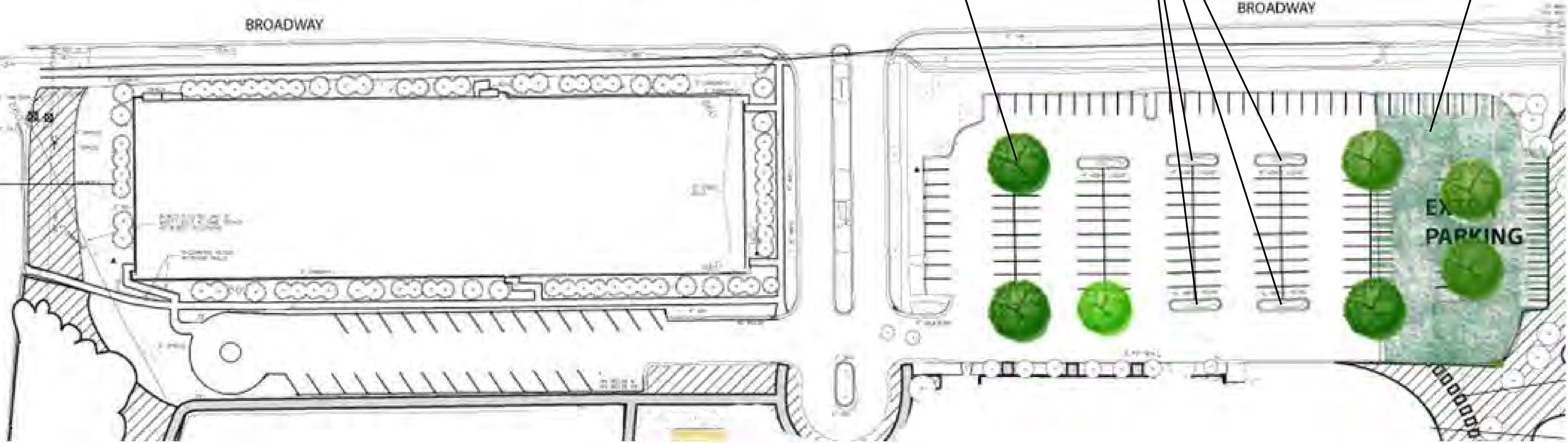
<https://www.truegridpaver.com/grass-paver/>



GRASS FILLED PAVERS IN PARKING LOT EXTENSION:

- Shown in green on the plan to the right.
- Support any substantial kind of weight for an extended period of time.
- Pavers stabilize the soil, preventing the grass from rutting and improves infiltration.

PARKING LOT DESIGN LAYOUT



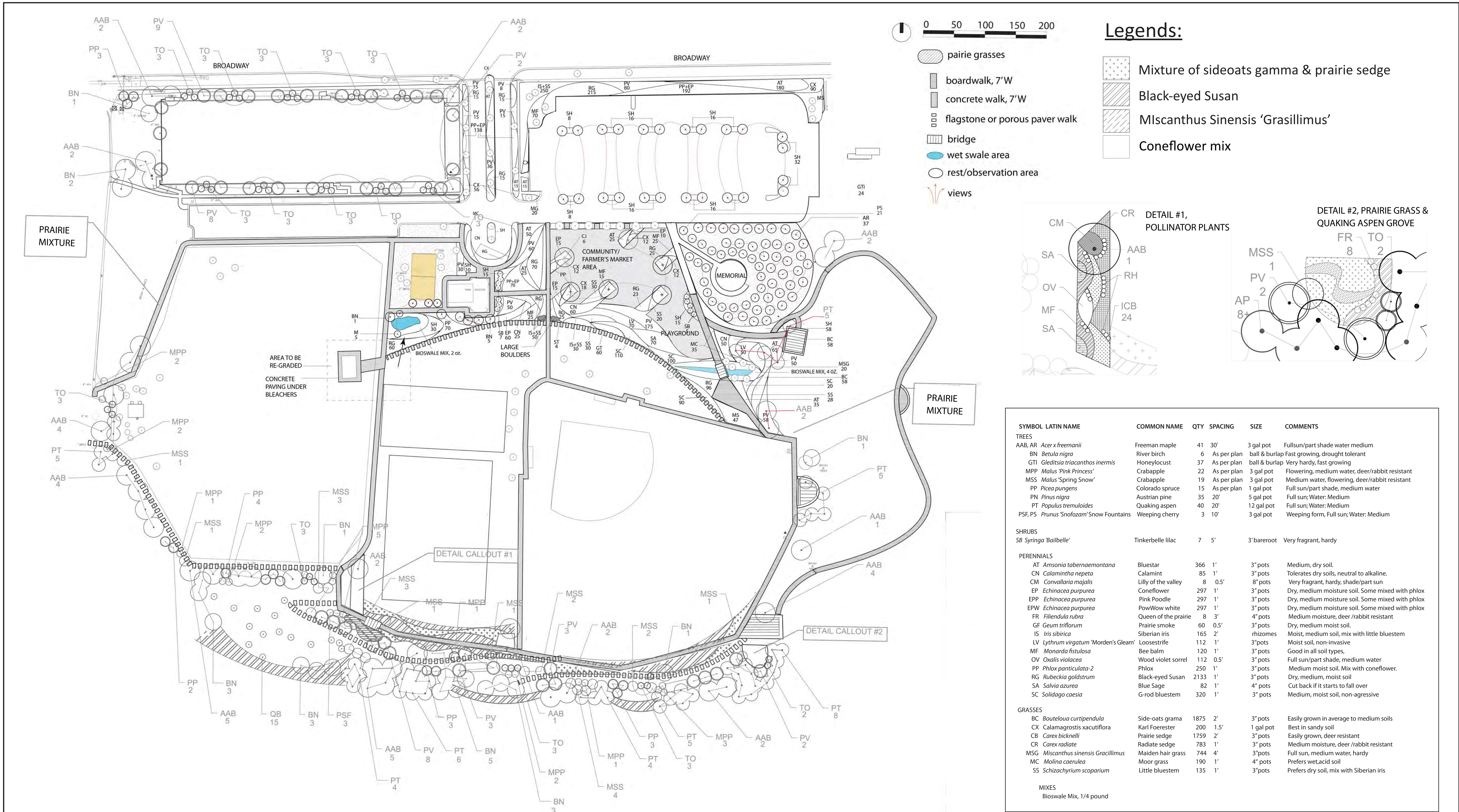
**Designers:**  
SUSAN MANSKE  
SHIQI TANG  
JARYD SCHMITZ

**BELT OF TRANSITION**  
Replanning of Ahuska Park, Monona WI

DEC. 19/2016  
LA354  
FINAL PROJECT

PAGE 6  
PARKING LOT LAYOUT  
AND DESIGN





**Designers:**  
SUSAN MANSKE  
SHIQI TANG  
JARYD SCHIMITZ

# BELT OF TRANSITION

## Replanning of Ahuska Park, Monona, WI

DEC, 19TH/2016  
LA 354  
FINAL PROJECT

**Page 7**  
**Planting Plan**  
**& Details**



TREES



*Acer x freemani*  
Freeman's maple  
SIZE: 60'H x 40'W  
BLOOM: Red-orange fall color  
Durable and adaptable, tolerating a wide range of soil conditions as well as drought, and road salt, and has a lovely yellow fall color.



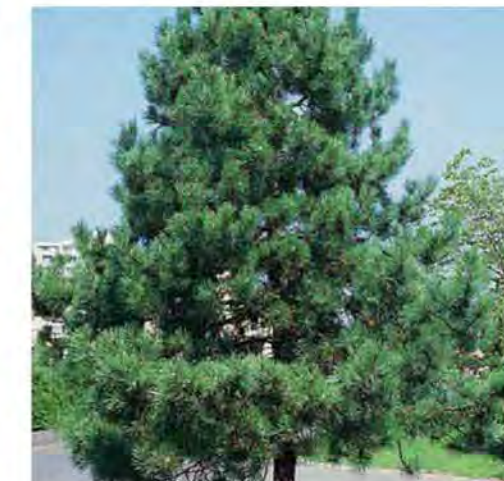
*Betula nigra*, River birch  
SIZE: 70'H x 40'W  
BLOOM: Yellow fall color  
This tree is durable and adaptable, tolerating a wide range of soil conditions as well as drought, and road salt, and has a lovely yellow fall color. .



*Gleditsia triacanthos, inermis*  
Thornless honeylocust  
SIZE: 50'H x 50'W  
BLOOM: Yellow fall color  
Easy to plant, grows fast, nice shape and color. Provides a light, dappled shade that allows grass to grow beneath. Tolerates compact soil.



*Malus*, Pink Princess crabapple  
SIZE: 8'-10'  
BLOOM: Pink spring blooms  
Attracts pollinators, is disease resistant. Blooms profusely in the spring, red berries in the fall.



*Pinus nigra*, Austrian pine  
SIZE: 50'H x 20'W  
Darkest green of all the pines. Heavy, long needle with strong "Northwoods" fragrance. Vigorous, dense grower. Tolerates heat, cold, and adverse conditions.



*Picea pungens*, Colorado spruce  
SIZE: 30'H x 20"W  
Silvery blue-green coloring and perfect Christmas tree shape make this tree a great landscaping focal point .



*Populus tremuloides*, Quaking aspen  
SIZE: 50'H x 20'W  
BLOOM: Yellow fall color  
Thrives in cold climates and poor soil and bit's also a brightly colored tree. Has bright yellow leaves in the fall and white bark all year.



*Prunus snofozan*, Weeping cherry tree  
SIZE: 12'H x 8'W  
BLOOM: White blossoms, spring  
Snow Fountains Cherry features cascading branches that dip all the way to the ground, giving it the appearance of a white fountain when covered with pure white flowers in early spring.



*Geum triflorum*, Prairie smoke  
SIZE: 12"-15"  
BLOOM: Pale pink, Late spring  
Geum's pink spring flowers give rise to feathery, smoky-pink seed heads in mid-summer. Spreading slowly from its roots, Prairie Smoke is also a small-scale groundcover. Grows easily average fertility garden soils. A good companion for prairie grasses like Little Blue Stem. Extremely cold hardy.



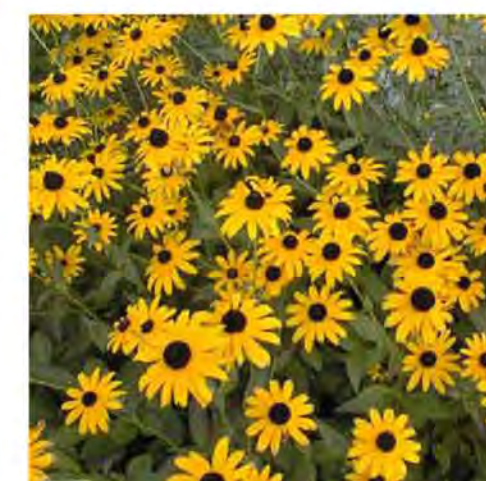
*Lythrum virgatum 'Morden's Gleam'*  
Loosestrife  
SIZE: 4'-5' H  
BLOOM: Pin, purple, Late spring  
Seedless, non-invasive. Bears beautiful tall spikes of star-shaped, rose-pink flowers. Has a shrub-like appearance, but dies back each year. 'Morden's Gleam' has stunning color which attracts butterflies, bees, and hummingbirds.



*Monarda fistulosa*, Bee balm  
SIZE: 2'-4' H  
BLOOM: Purple, Mid-summer  
Dark green, 4- to 6-in.-long leaves have a strong, pleasant odor like a blend of mint and basil. In summer, upright stems are topped by tight clusters of long-tubed flowers much visited by hummingbirds.



*Phlox paniculata-2*, Phlox  
SIZE: 2'-5' H  
BLOOM: Pink, Mid-summer  
A clump forming plant with upright, multiple stems arising from a central crown. Provides fragrant blooms for two or more months during the heat of summer.



*Rubeckia goldstrum*, Black-eyed Susan  
SIZE: 2'-3' H  
BLOOM: Yellow, Mid-summer  
A common Wisconsin native wildflower which typically occurs in open woods, prairies, fields, roadsides and waste areas throughout the State. Blooms throughout the summer atop stiff, leafy, upright stems growing. Attracts pollinators.



*Salvia azurea*, Blue Sage  
SIZE: 5' H  
BLOOM: Blue, Late summer  
Blue sage is an easy and beautiful plant for medium to somewhat dry soils. This is a Salvia that has no trouble overwintering without winter protection. If you rub or brush against the leaves they will emit the aromatic smell typical of Salvia species.



*Iris sibirica*, Siberian iris  
SIZE: 10-24"  
BLOOM: Blue, Late spring  
An intricately marked flower. Their strong upright lines provide a welcoming architectural element. These plants develop into size-able clumps over time.



*Solidago caesia*, Goldenrod, bluestem  
SIZE: 1.5'-3'  
BLOOM: Yellow, Late summer-fall  
Native bees, wasps and pollinating flies seek nectar and pollen from the flowers. Plants host caterpillars of several moth species. Seed are eaten by songbirds.



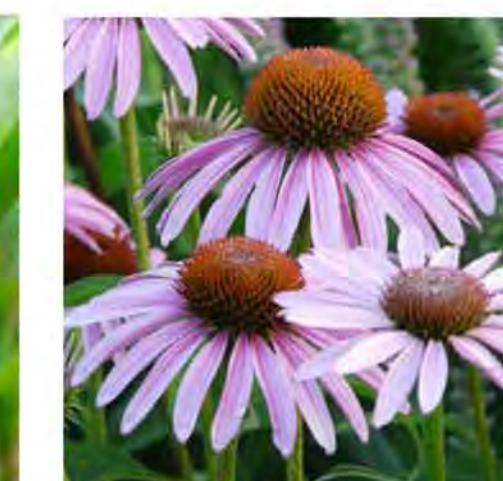
*Amsonia tabernaemontana*, Bluestar  
SIZE: 2'-3' H  
BLOOM: Light blue, Spring  
An erect, clump-forming plant that is primarily grown for its blue spring flowers, feathery green summer foliage and golden fall color.



*Calamintha nepeta*, Calamint  
SIZE: 18" H  
BLOOM: Lavender, Late summer  
Wiry, 18" stems present a cloud of dainty, lavender-and-white flowers that start blooming in August and continue until frost. The leaves are a soft mid-green. When crushed, they give off a rush of tart, minty fragrance.



*Convallaria majalis*, Lily-of-the-valley  
SIZE: 4'-6" H  
BLOOM: White, Spring  
One of the most fragrant blooming plants in the spring and early summer. Ground cover with spear-shaped leaves easy care.



*Echinacea purpurea*, Coneflower  
SIZE: 3'-4'  
BLOOM: Purple, Mid-late summer  
Attracts butterflies, songbirds, and hummingbirds. Blooms profusely for up to two months.

Bloom schedule

- Spring
- Summer
- Late summer
- Late fall-winter

SHRUBS



*Syringa 'Tinkerbelle'*  
SIZE: 4'-6' H  
BLOOM: Spring, bright pink  
Very fragrant, dense rounded habit. It has a second, smaller bloom later in the summer

GRASSES



*Calamagrostis xacutiflora*, Karl Foerester  
SIZE: 3'-5' h  
BLOOM: Pale pink, Late spring  
Narrow and upright growth. At only 18 inches wide and up to 5 feet tall, a grouping creates a dramatic vertical element in gardens. Blooms turn a golden tan in the fall.



*Molina caerulea*, Moor grass  
SIZE: 8"-12" H  
BLOOM: White, Summer  
Mound forming plants that produce masses of tiny fragile looking flowerstems in summer that are at first so delicate they are almost invisible. The shorter moor grasses produce simply masses of these stems that together form a floating sea of flower and movement.



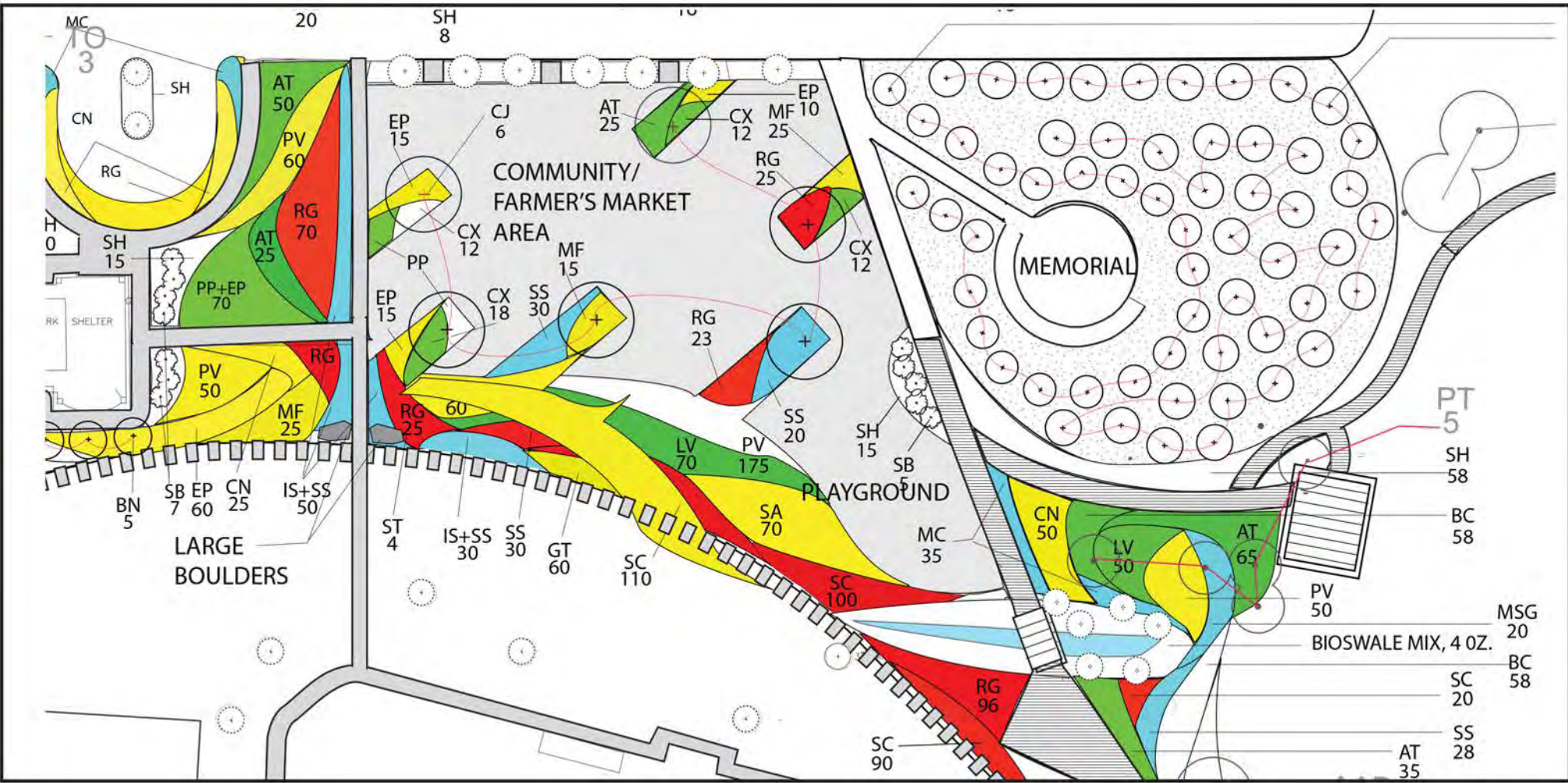
*Schizachyrium scoparium*, Little bluestem  
SIZE: 2' H  
BLOOM: White, Late summer  
A tidy, finely textured clumping grass with a blue-green summer color. Its silvery seed heads rise to a height of nearly 2 feet in late summer and are at their best when backlit in the morning or afternoon sun. In fall, the grass turns a rosy rust color that lasts all winter.



*Miscanthus sinensis Gracillimus*  
Maiden Hair Grass  
SIZE: 4'-6'  
IBLOOM: Late summer-fall  
Gracillimus is a superb selection of Chinese Maidenhair grass that blooms with a massive display of copper colored flowers in late summer. The seedheads age to white giving the grass a wonderful look in fall and early winter.



*Panicum virgatum*  
Shenadoah Switch Grass  
SIZE: 4'-5'  
BLOOM: Late summer-fall  
This switch grass is valued for its red foliage. By mid-summer the grass blades are colored green and tipped with red. In the fall the color intensifies as the entire plant turns a striking blend of reds and oranges.



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DEC, 19TH/2016  
LA 354  
FINAL PROJECT

Page 8  
Planting  
Board



**Acer x freemanii ‘Autumn Blaze’**

- tough in drought conditions
- no serious insect or disease issues
- no pruning necessary usually
- may need staking when establishing

**Betula nigra**

- avoid pruning in spring
- one of the most disease resistant birches
- roots in shade and canopy in full sun
- adapts well to heavy soils

**Bouteloua curtipendula**

- no serious disease or insect problems
- can be mown to 2-4” tall
- cut clumps to the ground in late winter

**Carex bicknelii**

- during hot summers foliage may die back
- no serious insect or disease problems

**Convallaria majalis**

- can be propagated in spring or fall by root division
- all parts of plant are poisonous
- foliage decline in hot summers

**Carex radiata**

- cut foliage to ground in winter
- propagate by division
- needs supplemental water in hot/dry weather
- no serious insect or disease problems

**Fillipendula rubra**

- though tall, this plant does not need staking
- no serious insect or diseases
- likes moist areas

**Iris ‘Caesar’s Brother’**

- can remove seed heads after flowering
- plant rizomes in fall
- can divide as needes as well

**Monarda fistulosa**

- need good air circulation
- powdery mildew and rust may be problems

**Malus ‘Pink Princess’**

- avoid spring pruning due to fireblight
- prune in late winter
- scab, fireblight, rusts, leaf spot may be problems

**Miscanthus sinensis**

- cut in late winter just before shoots appear
- mature clumps (3-4 yrs old) may need support
- no serious insect or disease problems

**Malus ‘Spring Snow’**

- no fruit drop
- very susceptible to apple scab

**Oxalis violacea**

- no insect or disease problems
- very low maintenance

**Picea pungens**

- soil should be kept moist in early years
- no serious disease or pest problems

**Prunus ‘Snofazam’**

- prune if necessary after flowering
- susceptible to borers, aphids, and tent caterpillar

**Populus tremuloides**

- no pruning usually needed
- susceptible to many diseases like leaf spot, rust, powdery mildew, and cankers

**Pinus nigra**

- susceptible to Diplodia
- no pruning necessary

**Quercus bicolor**

- no pruning needed
- susceptible to anthracnose
- good drought resistance
- chlorosis if soils not properly acidic

**Salvia azurea**

- cut down to 2” in late spring to promote stiff stems and tighter form
- no serious insect or disease problems

**Thuja occidentalis**

- avoid full shade and exposed areas
- no serious insect or disease problems

**Coneflower Mixing Beds**

- freely self seeds if seed heads are left in place
- susceptible to Japanese beatle and leaf spot

**Gleditsia Triacanthos f. inermis**

- leaf spot, canker, witches’ broom, powdery mildew and rust
- tolerant to heavy soils

**Gymnocladus dioicus**

- no fruit drop
- no serious insect or disease problems

**Rhus aromatica ‘Gro-Low’**

- no insect or disease problems
- very low maintenance
- will spread readily up to 7’

**Carex pensylvanica**

- during hot summers foliage may die back
- no serious insect or disease problems

**Carex siderosticha ‘Banana Boat’**

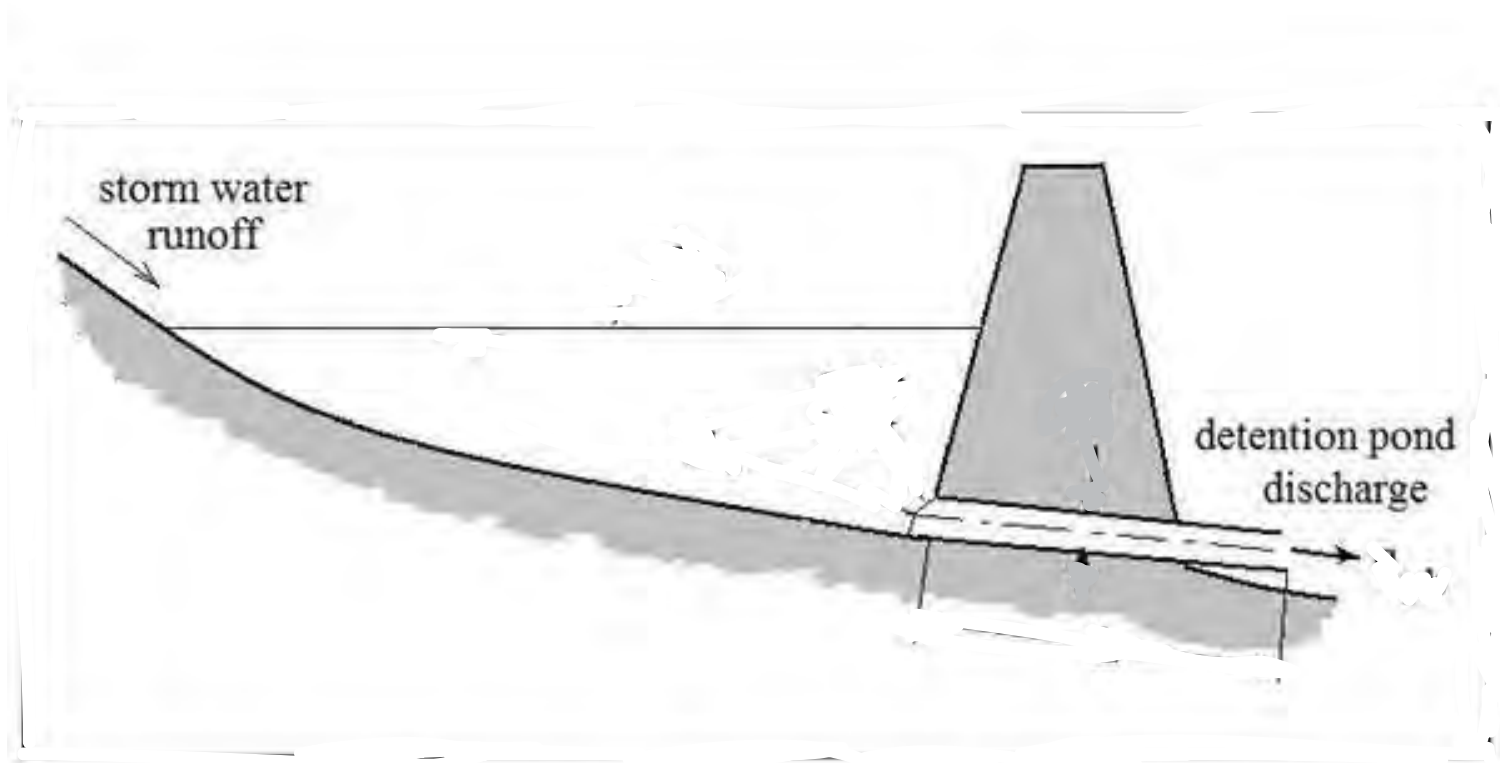
- no serious insect or disease problems
- propagate by division
- cut back to ground and remove cuttings in late winter

**Muhlenbergii reverchonii**

- no pruning usually needed
- no serious insect or disease problems

**Schizachyrium scoparium**

- cut back to ground in late winter or very early spring time
- no serious insect or disease issues



**STORM WATER DETENTION POND WITH PIPE OUTLET;**

The detention ponds onsite are to be equipped with perforated piping at the bottom of the ponds as to not cause pooling and attract pests such as mosquitos.

**PROJECT PHASING PLAN:**

**PHASE 1;** Layout building structures, parking lot extensions, pave concrete walkway and plaza. Install wooden decks and walks as well. Transplant existing shrubs or take out as needed and grade to lay the walkways as well.

**PHASE 2;** Install large deciduous and coniferous tree species after remoiving invasice grass and shrub species. Clean up plants that are to be removed or replaced with other species. Install benches and seating features along the pathways as well.

**PHASE 3;** Plant remaining prairie grass species and perennials to fill the remaining portion of the specified planting beds according to the planting design.

**PROPER TREE PLANTING METHOD**

1. Dig a shallow, broad planting hole. Make the hole wide, as much as three times the diameter of the root ball but only as deep as the root ball.
2. Identify the trunk flare. The trunk flare is where the roots spread at the base of the tree.
3. Place the tree at the proper height. Before placing the tree in the hole, check to see that the hole has been dug to the proper depth—and no more.
4. Straighten the tree in the hole.
5. Fill the hole gently but firmly. Fill the hole about one-third full and gently but firmly pack the soil around the base of the root ball.
6. Stake the tree, if necessary. If the tree is grown and dug properly at the nursery, staking for support will not be necessary
7. Mulch the base of the tree. Mulch is simply organic matter applied to the area at the base of the tree. It acts as a blanket to hold moisture
8. Provide follow-up care. Keep the soil moist but not soaked



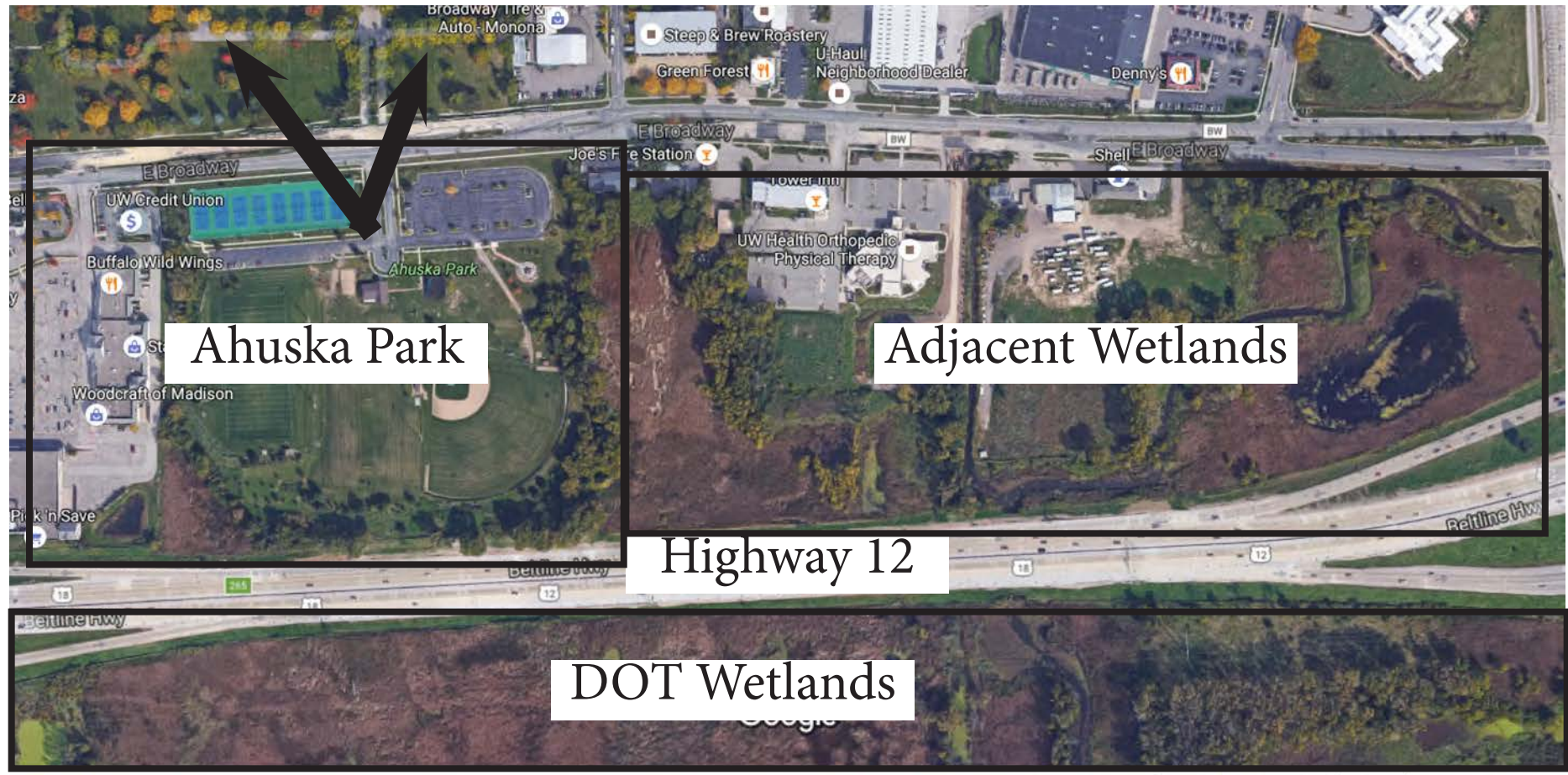
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DEC. 19/2016  
LA354  
FINAL PROJECT

PAGE **9**  
PLANT CULTURAL  
REQUIREMENTS





- Opportunities / Constraints
- Opportunities for the creation of new paths
  - Opportunities to add to and modify existing plantings
  - Opportunities to create cohesion between the site and adjacent wetlands
  - Limited by the existing vegetation, need for removal to modify
  - Limited by grade and by proximity to highway

- Opportunities / Constraints
- Opportunities to introduce more plants
  - Opportunities to enhance existing drainage options and to collect water on site
  - Opportunities to increase circulation and create more connections on site
  - Limited by poor drainage
  - Limited by existing structures and fields which much be preserved
  - Limited by existing grade

### Legend

- • • • ► Vehicular Traffic
- ■ ■ ■ ► Pedestrian Traffic
- ○ ○ ○ Activity Nodes / Common Spaces
- Wetland / Natural Areas, Potential Paths
- Areas with Drainage Difficulty
- Positive Views



Soil Data:  
The soil on the site will be a constraining factor of the design because of its structure and poor drainage. All selected plants will have to be able to tolerate moisture extremes as well as drought extremes.



Imagery ©2016 Google, Map data ©2016 Google 100 ft



Concept: Renewed Recreation

## Site Goals

- Bring green design to the park
- Renew the park with new activities / connections
- Reduce the environmental footprint of the site
- Enhance natural drainage / storm-water capacity
- Increase the number and size of trees on the site
- Add new experiences and amplify current ones
- Increase the park's potential ecological benefits
- Create a strong sense of community
- Increase access throughout the park with new paths
- Encourage visitors to interact with the site in new ways
- Make the park a top destination for Monona residents



Precedent Image: Wetland Board Walk / Planting Terrace



Precedent Image: Nature / Adventure Playground



Precedent Image: Storm-Water Swale Along Path

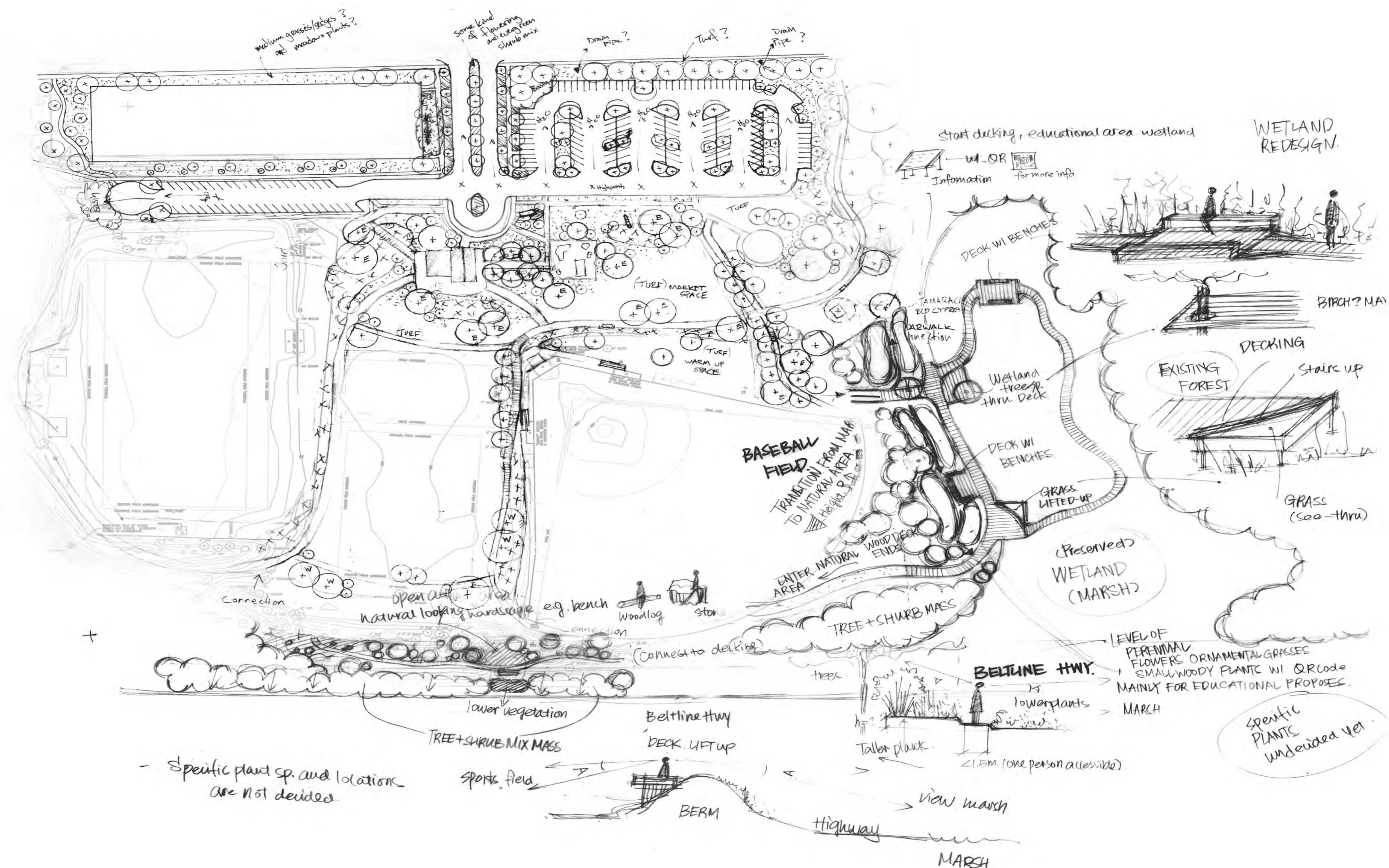


Precedent Image: Wetland Educational Sign



Precedent Image: Parking Lot with Shade Trees

### Schematic Drawings







# AHUSKA PARK AND WETLANDS

MONONA, WISCONSIN

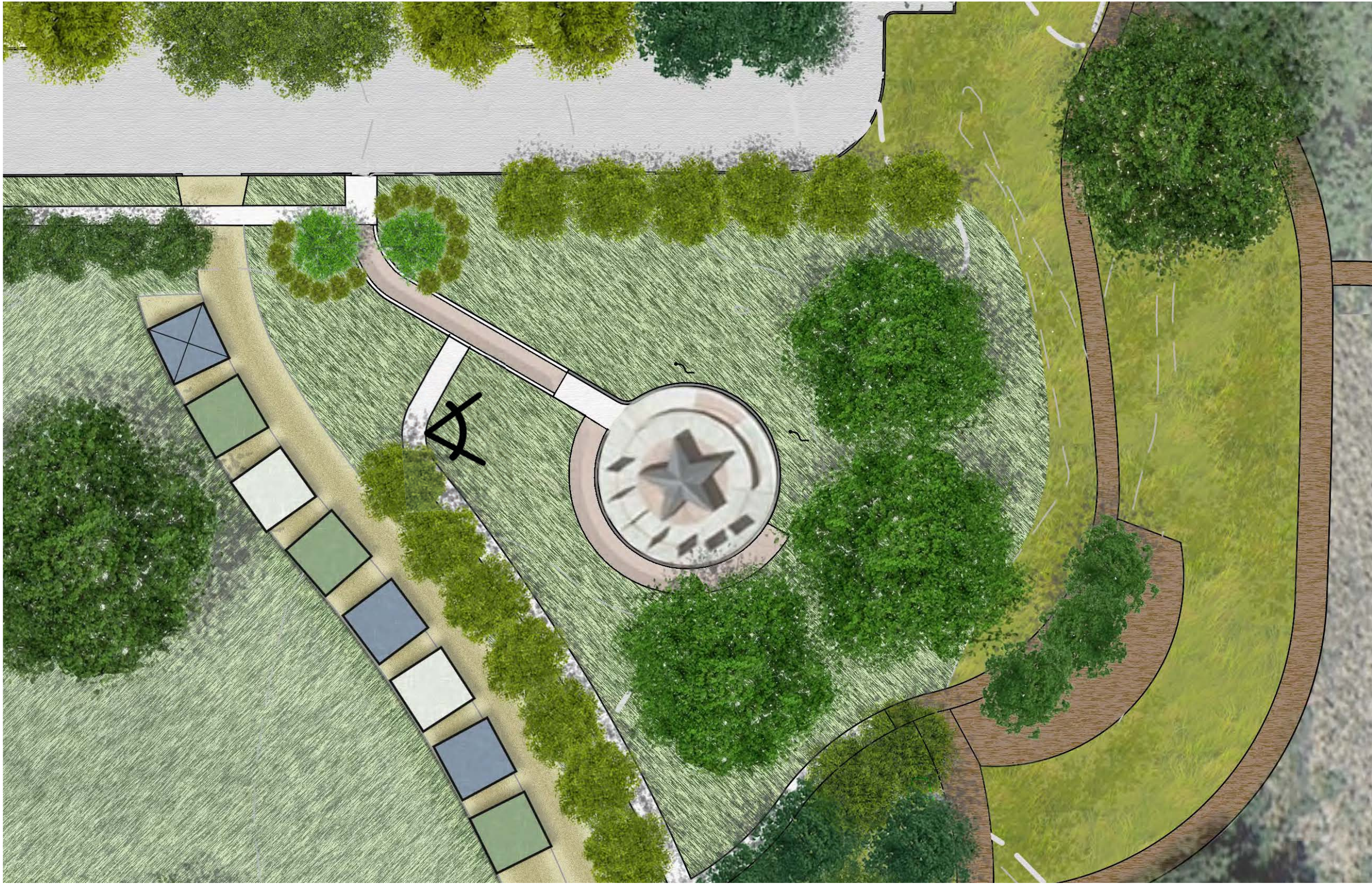
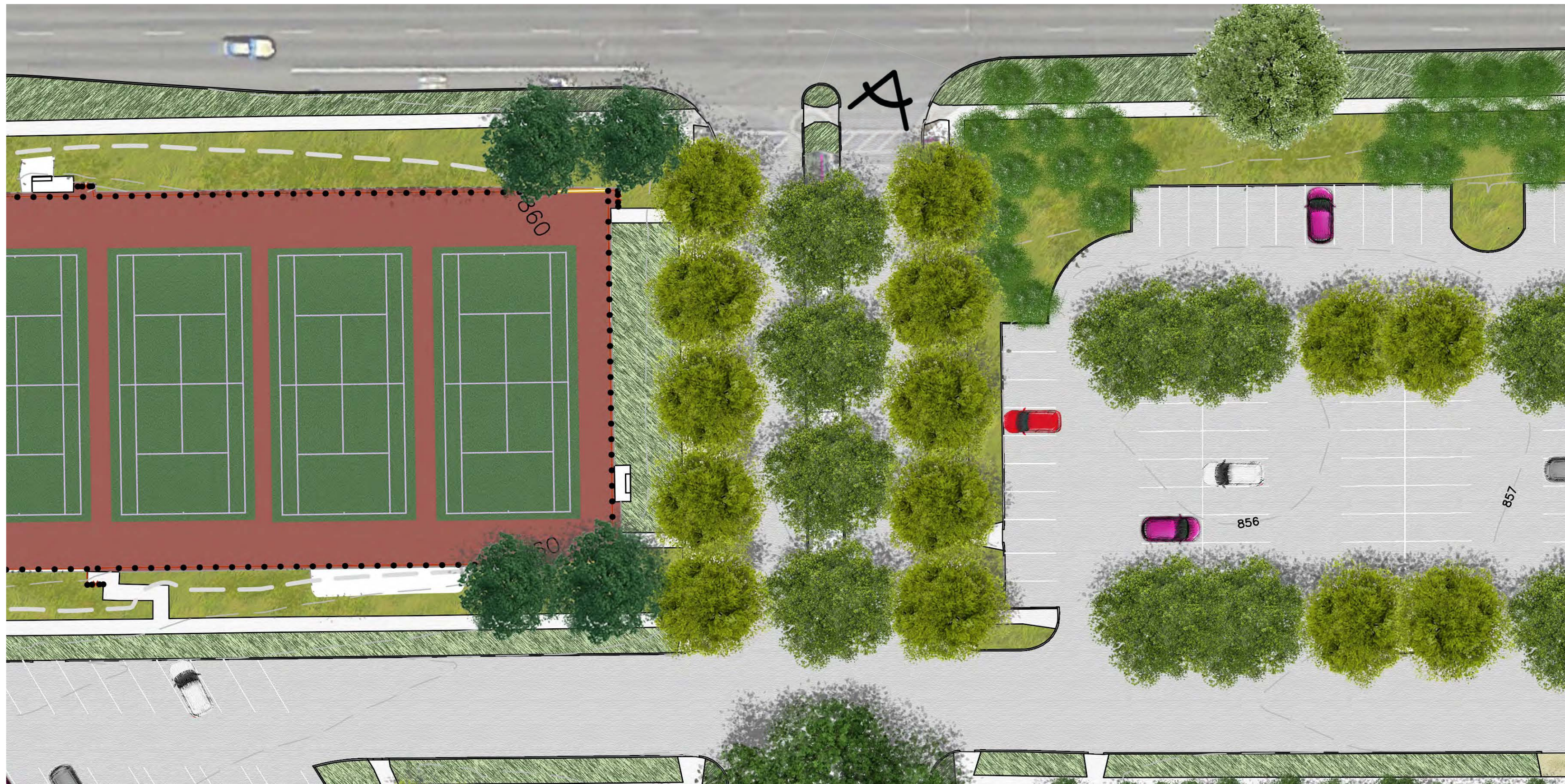
DECEMBER 18,  
2016

MASTER PLAN



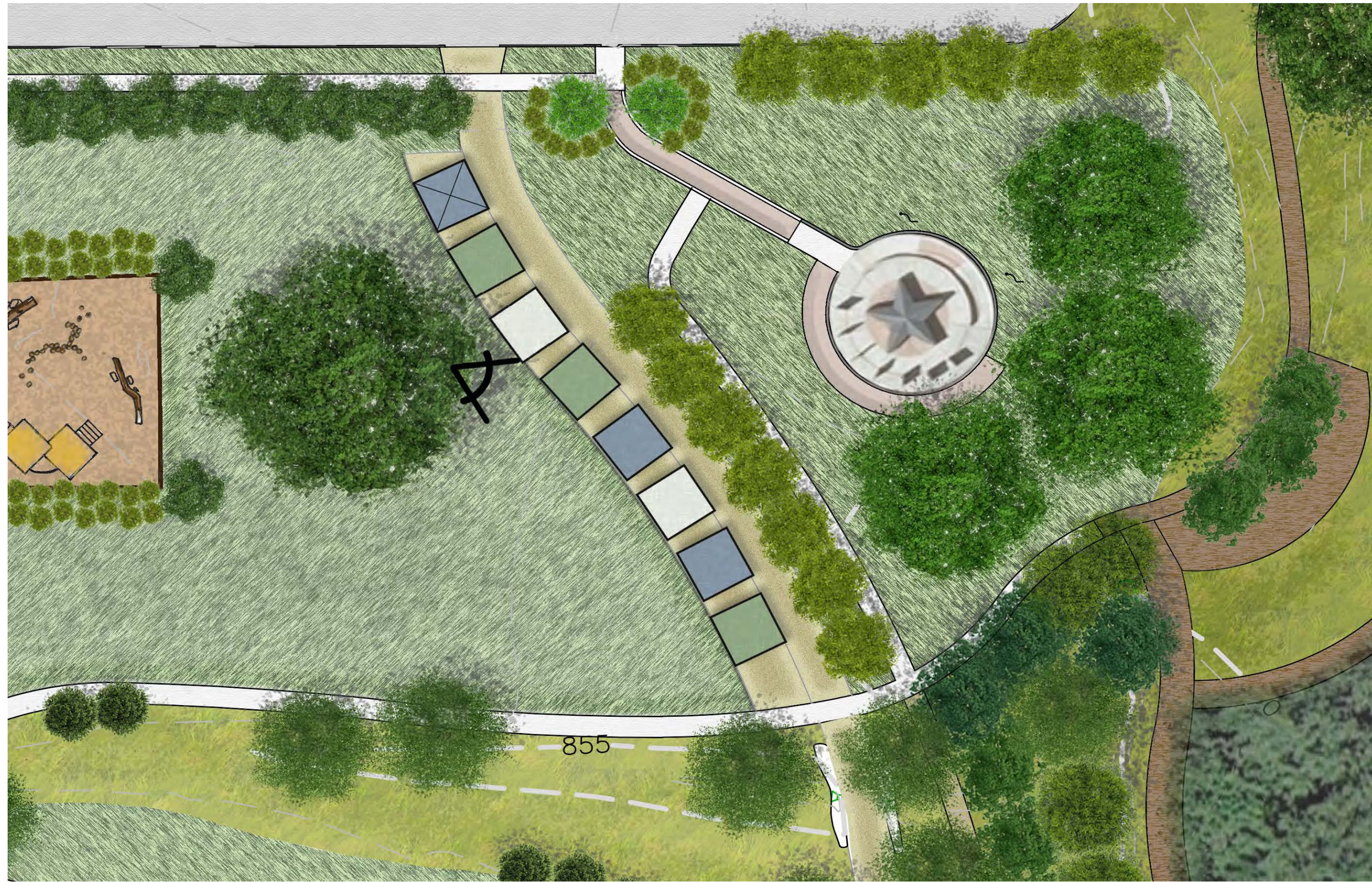


Entry Drive Perspective



Memorial Approach Perspective

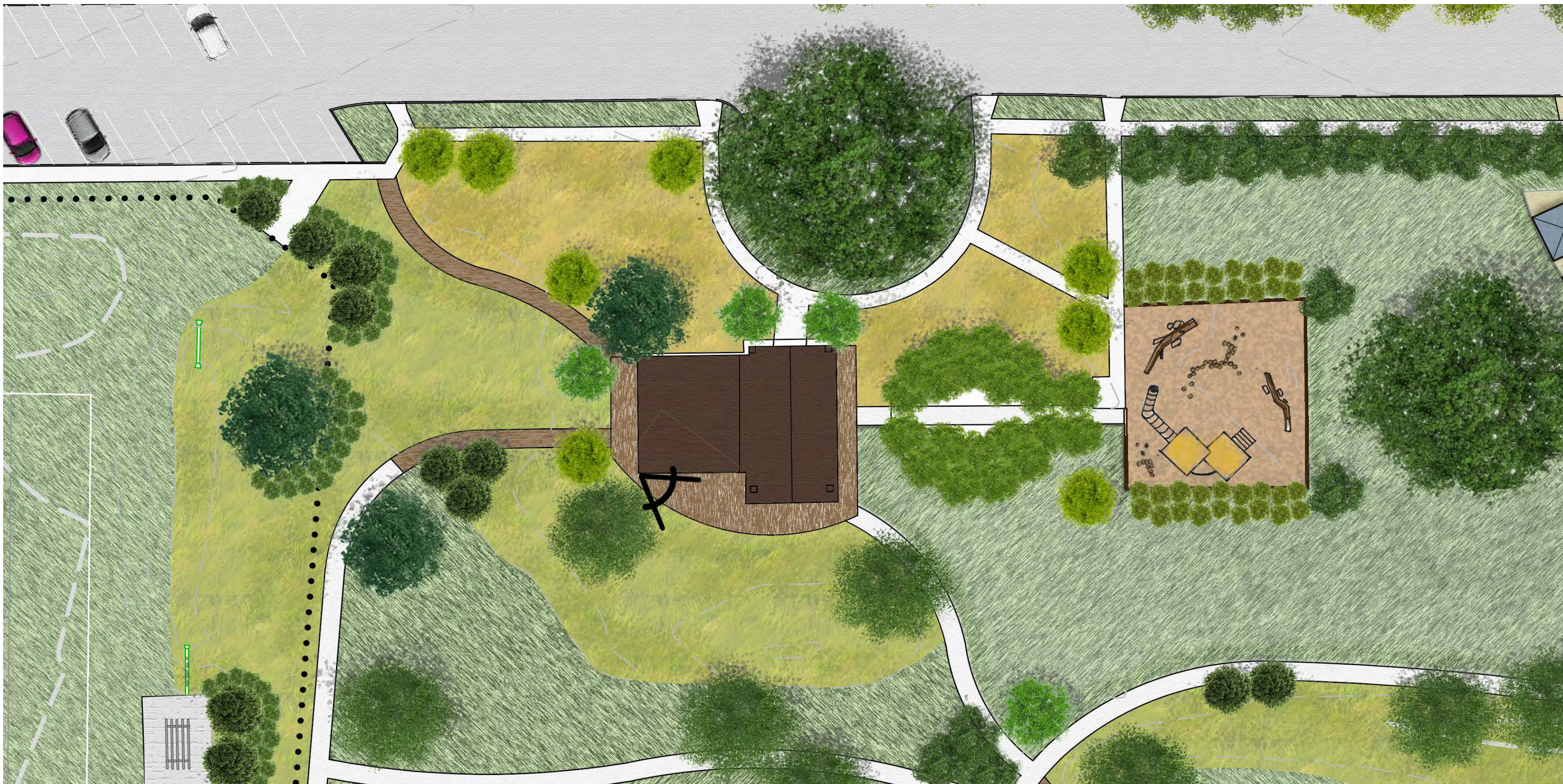




Farmer's Market Perspective



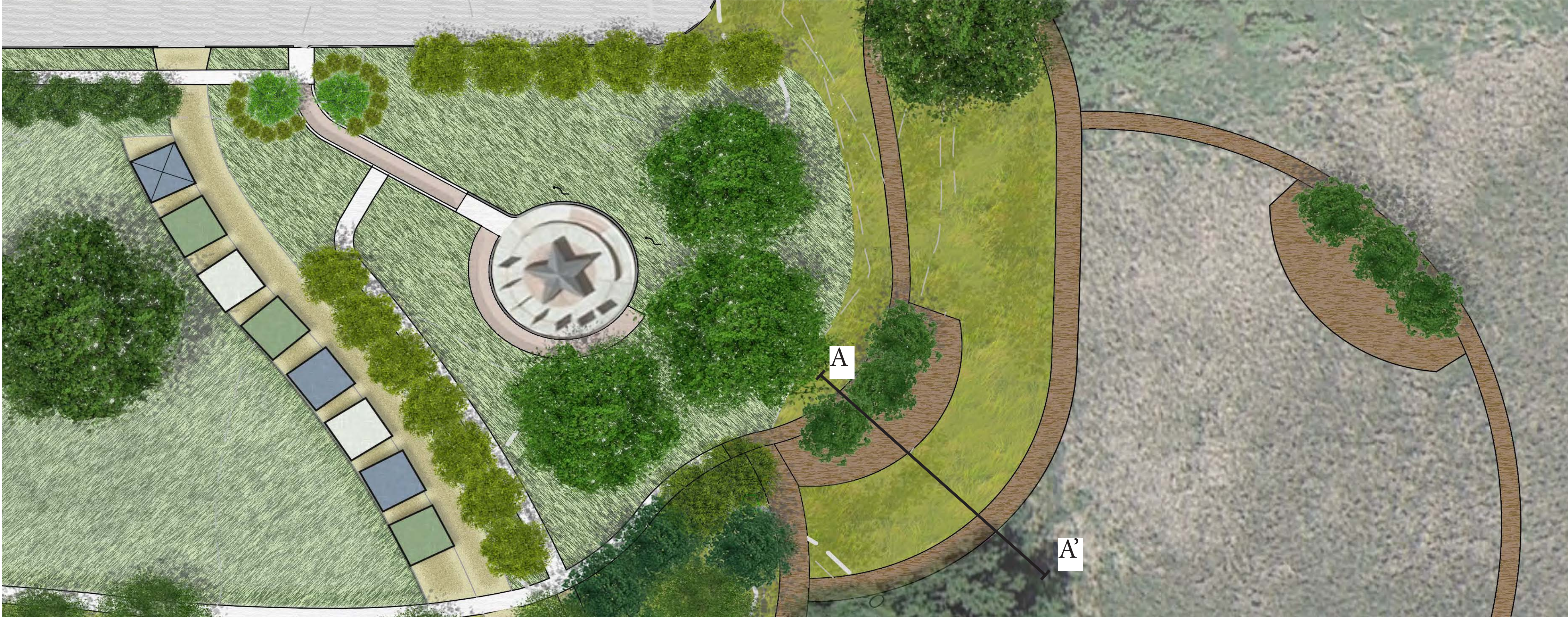
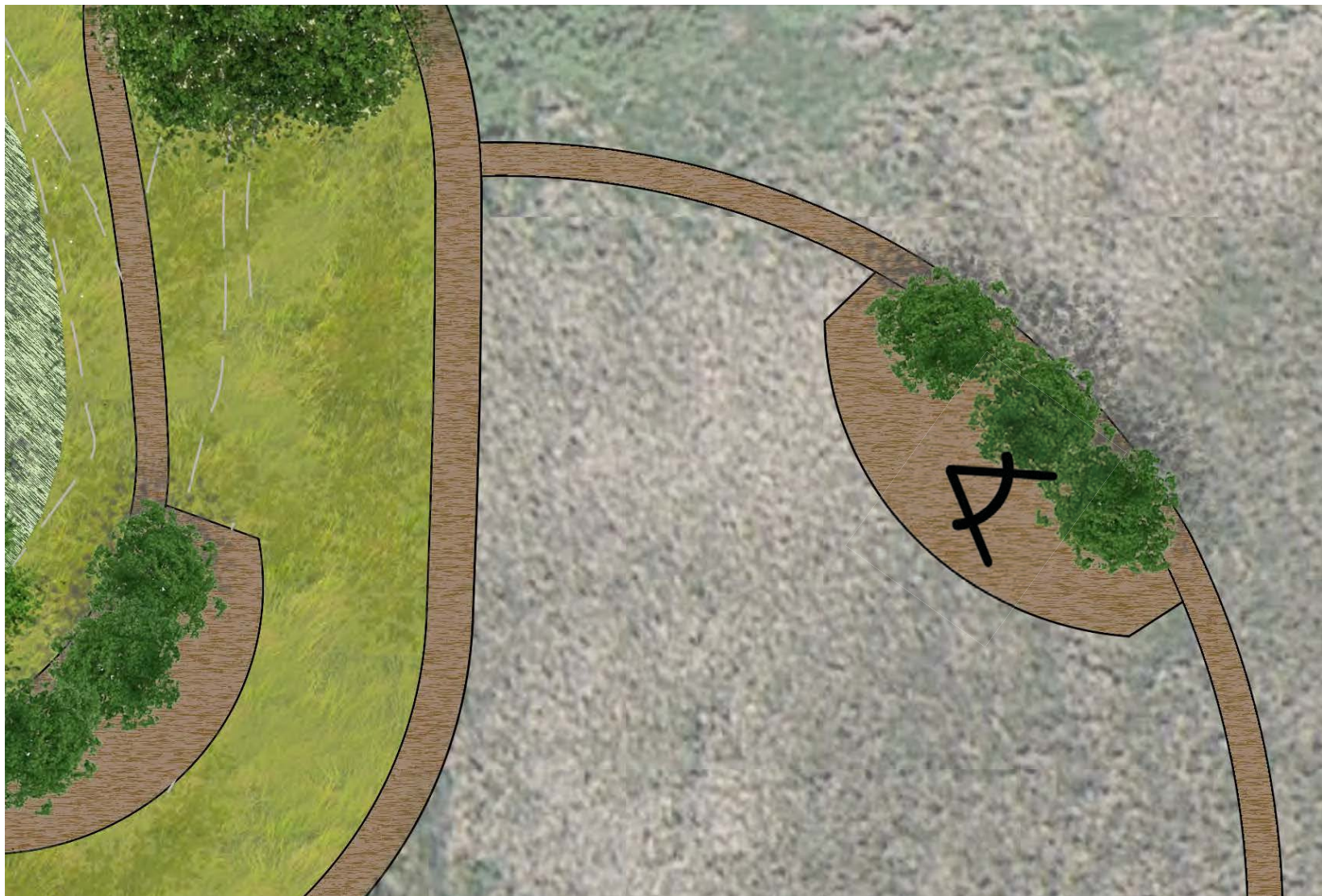
Shelter Addition Perspective







Boardwalk Lookout Perspective



Terraced Garden Section





JULES WEST, LI ZHUANG, ZACH MEYER	AHUSKA PARK AND WETLANDS MONONA, WISCONSIN	
DECEMBER 18, 2016	MASTER PLAN	P - 7



DECIDUOUS TREES



Betula nigra  
River Birch  
Zone: 4 - 9  
Height: 40’ - 70’  
Spread: 40’ - 60’  
Fall Color: Yellow  
Interest: Exfoliating bark, catkins



Carpinus betulus  
‘Fastigiata’  
Upright European Hornbeam  
Zone: 4 - 8  
Height: 30’ - 40’  
Spread: 20’ - 30’  
Fall Color: Yellow / Orange  
Interest: Catkins, growth shape, foliage



Carya ovata  
Shagbark Hickory  
Zone: 4 - 8  
Height: 70’ - 90’  
Spread: 50’ - 70’  
Fall Color: Yellow  
Interest: Bark, fruit, natural look, salt tolerance



Gleditsia triacanthos  
f. inermis  
Thornless Honeylocust  
Zone: 4 - 9  
Height: 30’ - 70’  
Spread: 30’ - 70’  
Fall Color: Yellow  
Interest: Foliage, salt tolerance



Gymnocladus dioicus  
‘Espresso - JFS’  
ESPRESSO Kentucky Coffee Tree  
Zone: 3 - 8  
Height: 40’ - 50’  
Spread: 25’ - 35’  
Fall Color: Yellow  
Interest: Fruitless, see above



Nyssa sylvatica  
Black Gum  
Zone: 3 - 9  
Height: 30’ - 50’  
Spread: 20’ - 30’  
Fall Color: Red  
Interest: Fruit, growth shape



Ostrya virginiana  
Ironwood  
Zone: 3 - 9  
Height: 25’ - 40’  
Spread: 20’ - 30’  
Fall Color: Yellow / Orange  
Interest: Fruit, growth shape



Populus tremuloides  
Quaking Aspen  
Zone: 2 - 7  
Height: 60’ - 80’  
Spread: 30’  
Fall Color: Yellow  
Interest: Foliage sound, bark, salt tolerance, spreading ability



Quercus bicolor  
Swamp White Oak  
Zone: 3 - 8  
Height: 50’ - 60’  
Spread: 50’ - 60’  
Fall Color: Yellow / Red  
Interest: Acorns, branching structure, size, salt tolerance



Quercus macrocarpa  
Burr Oak  
Zone: 3 - 8  
Height: 60’ - 80’  
Spread: 60’ - 80’  
Fall Color: Yellow  
Interest: Acorns, branching structure, size, salt tolerance



Taxodium distichum  
‘Mickelson’  
SHAWNEE BRAVE Bald Cypress  
Zone: 4 - 9  
Height: 50’ - 75’  
Spread: 15’ - 20’  
Fall Color: Red  
Interest: Upright, see above



Ulmus ‘New Horizon’  
New Horizon Elm  
Zone: 4 - 9  
Height: 30’ - 40’  
Spread: 20’ - 25’  
Fall Color: Red  
Interest: Growth shape, foliage, size, salt tolerance

EVERGREEN TREE



Pinus strobus  
Eastern White Pine  
Zone: 3 - 8  
Height: 50’ - 80’  
Spread: 20’ - 40’  
Fall Color: N / A  
Interest: Foliage, foliage sound, bark, size, cones



Ilex verticillata  
Winterberry  
Zone: 3 - 9  
Height: 3’ - 12’  
Spread: 3’ - 12’  
Fall Color: Red  
Interest: Showy fruit, salt tolerance, white flowers (June)



Prunus tomentosa  
Nanking Cherry  
Zone: 2 - 7  
Height: 6’ - 10’  
Spread: 6’ - 10’  
Fall Color: Yellow / Orange  
Interest: Showy fruit, white / pink flowers (April)

DECIDUOUS SHRUBS



Aronia melanocarpa  
Black Chokeberry  
Zone: 3 - 8  
Height: 3’ - 6’  
Spread: 3’ - 6’  
Fall Color: Red  
Interest: White flowers (May), showy fruit, salt tolerance



Salix discolor  
Pussy Willow  
Zone: 4 - 8  
Height: 6’ - 15’  
Spread: 4’ - 12’  
Fall Color: Yellow  
Interest: Flower (March), catkins, foliage, rapid transpiration



Betula pumila  
Bog birch  
Zone: 4 - 7  
Height: 9’  
Spread: 6’ - 12’  
Fall Color: Yellow / Red  
Interest: Catkins, bark, foliage



Salix purpurea ‘Nana’  
Purple Willow  
Zone: 4 - 8  
Height: 3’ - 5’  
Spread: 3’ - 5’  
Fall Color: Purple / Red  
Interest: Bark color, foliage, twig winter color



Cornus mas ‘Golden Glory’  
Golden Glory Cornelian  
Cherry Dogwood  
Zone: 4 - 8  
Height: 15’ - 25’  
Spread: 15’ - 20’  
Fall Color: Red  
Interest: Yellow flowers (March), showy fruit, bark



Viburnum prunifolium  
Black Haw Viburnum  
Zone: 3 - 9  
Height: 12’ - 15’  
Spread: 6’ - 12’  
Fall Color: Red  
Interest: Showy fruit white flowers (May - June)



Hamamelis vernalis  
Vernal Witch Hazel  
Zone: 4 - 8  
Height: 6’ - 10’  
Spread: 8’ - 15’  
Fall Color: Yellow / Red  
Interest: Yellow flowers (January - April), growth shape



PERENNIALS AND MIXES



Mix A

Insert plugs at random according to following percentages:	
Baptisia lactea:	2%
Carex bebbii:	20%
Carex comosa:	15%
Carex hystericina:	15%
Cassia hebecarpa:	2%
Eupatorium perfoliatum:	2%
Iris versicolor:	4%
Liatris pycnostachya:	2%
Lolium multiflorum:	20%
Panicum virgatum:	5%
Rudbeckia triloba:	2%
Solidago ohioensis:	2%
Sorghastrum nutans:	5%
Thalictrum rochebruneanum:	2%
Zizia aurea:	2%



Mix B

Insert plugs at random according to following percentages:	
Aesculus parviflora var. serotina ‘Rogers’:	10%
Asclepia tuberosa:	20%
Baptisia lactea:	15%
Clethra alnifolia ‘Hummingbird’:	15%
Liatris pycnostachya:	20%
Panicum virgatum ‘Shenandoah’:	20%



Mix C

Insert plugs at random according to following percentages:	
Asclepia incarnata:	15%
Calamagrotis acutiflora ‘Karl Foerster’:	15%
Clethra alnifolia ‘Hummingbird’:	20%
Echinacea pallida:	10%
Eupatorium perfoliatum:	10%
Liatris pycnostachya:	15%
Panicum virgatum ‘Shenandoah’:	15%



Mix D

Insert plugs at random according to following percentages:	
Carex elata:	20%
Dodecatheon meadia:	20%
Geum triflorum:	15%
Iris ‘Pink Haze’:	20%
Liatris pycnostachya:	10%
Rudbeckia hirta:	15%



Mix E

Insert plugs at random according to following percentages:	
Astrantia major ‘Claret’:	20%
Calamagrotis acutiflora ‘Karl Foerster’:	20%
Echinacea purpurea:	15%
Liatris pycnostachya:	10%
Rudbeckia hirta:	15%
Salvia pratensis:	20%



Mix F

Insert plugs at random according to following percentages:	
Carex bebbii:	15%
Carex bicknellii:	30%
Eryngium yuccifolium:	5%
Iris versicolor:	10%
Juncus effusus:	10%
Liatris pycnostachya:	10%
Lobelia cardinalis:	5%
Monarda fistulosa:	5%
Schizachyrium scoparium:	10%



Mix G

Insert plugs at random according to following percentages:	
Carex bebbii:	10%
Eryngium yuccifolium:	10%
Liatris pycnostachya:	10%
Schizachyrium scoparium:	40%
Sporobolis heterolepis:	20%
Symphyotrichum laeve:	5%
Veronicastrum virginicum:	5%

Parking Lot and East Broadway:

General:

All plants should be allowed to grow into natural forms.

Specific:

Allow Quaking Aspens to sucker and fill in drainage basins, ensure that trees all have appropriate clearance for pedestrians to pass underneath. Allow oaks, particularly the oak at the end of the drive near the shelter, to develop massive spreading branches and wild shape.

Wet Swales:

General:

All grasses and perennial plants shall be allowed to grow and spread as typical in the wild. Plant percentages were chosen with specific regard to their reproductive tendencies, and therefor will spread proportionally.

Specific:

These swales will have a distinct perennial flow with several flowing plants kept in the middle and in clusters to give the appearance of waves of color. Plants that have a tolerance for wetter conditions were also kept in the center, while plants with drier, more well drained culture, were kept on the edges.

Dry Swales:

General:

All grasses and perennial plants shall be allowed to grow and spread as typical in the wild. Plant percentages were chosen with specific regard to their reproductive tendencies, and therefor will spread proportionally.

Specific:

The dry swales attempt to distribute plants in a random pattern that shows pockets of color, while not appearing to have any specific pattern. The combination of Prairie Blazing Star and Rattlesnake Master are key to the distribution of the plants. Since these are dry swales that will not have to harvest large amounts of storm water, dry prairie plants were chosen and are not accustomed prolonged saturation. For long term care, cutting back all growth down to 6” at the end of the growing season every 3 years is advised.

Memorial Area:

General: The memorial area attempts to have a clean formal look by using rows of Upright European Hornbeam on either side of the walk, along with three Black Gum in a half arc to highlight the circular form of the memorial.

Specific: Since the Upright European Hornbeam are in formal rows on both sides of the walk, their foliage shall be limbed in hedge like forms and shall not be allowed to grow into irregular shapes. The Black gum however, do not need much care as their habit creates broad horizontal branching, but should be monitored to assure they are growing accordingly.

Wetland Boardwalk and Natural Area:

General:

All trees and shrubs should be allowed to grow into natural forms. The percentage of each perennial plant and ornamental grass should be displayed as planting schedule indicated, medium management and replacement are required when one is species starting to take over another.

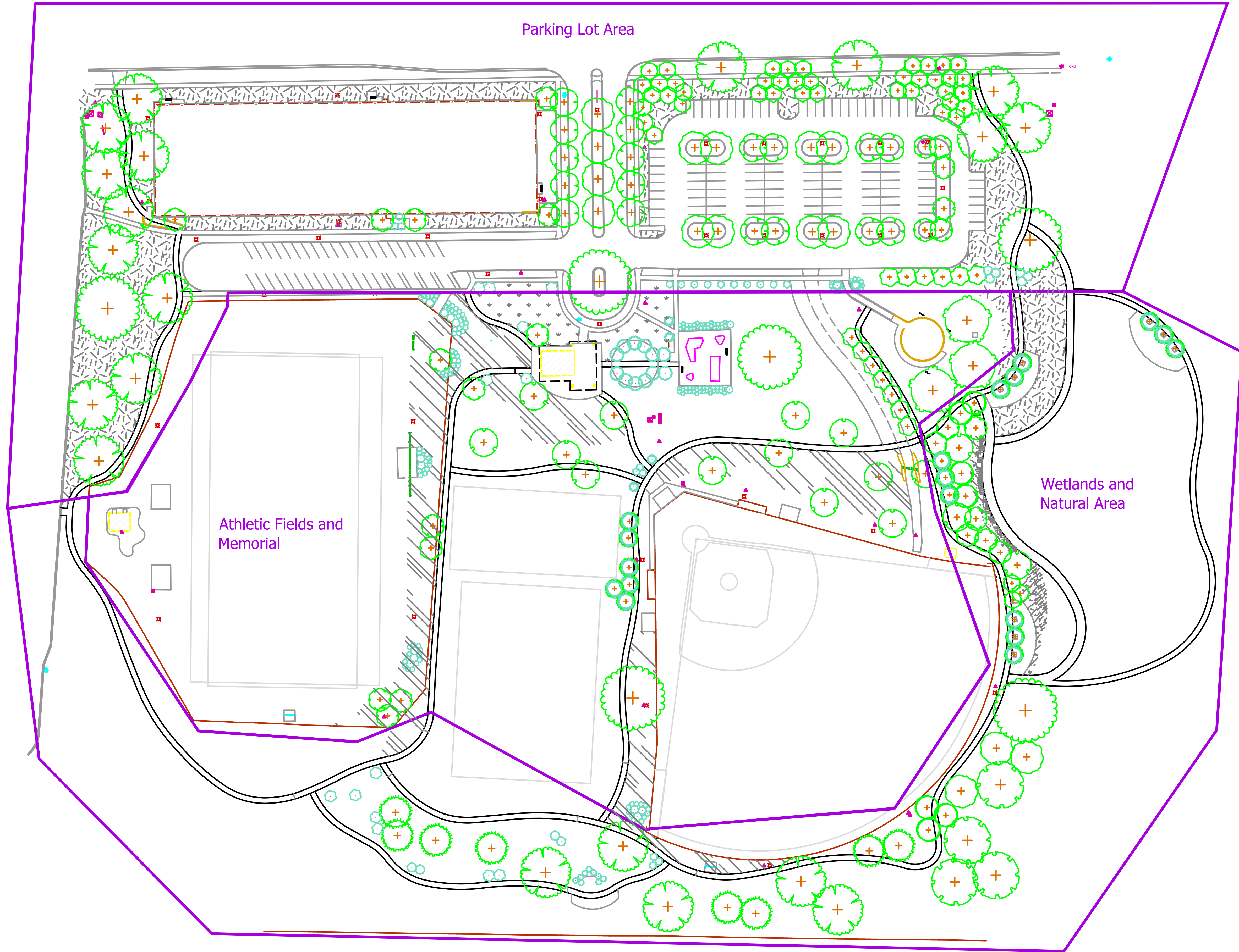
Specific:

Constantly monitor and remove invasive species in wetland area to avoid disturbance with growing of natural species. Apply appropriate treatments to control weeds in natural area, as they may be more flammable and disturb growth of desired plants. Replace any hazard trees with the same species to maintain the original appearance.

Image Sources:

Avtreefarm.com, Bachmanslandscaping.com, Blogs.ubc.ca, Chicagolandgrows.org, Davesgarden.com, Discoverylife.com, Fineartamerica.com, Florafinder.com, Gobotany.com, Greenleafnursery.com, Hortepedia.com, Prairienursery.com, Royalhorticulturalsociety.org, Treetopics.com, Wikimedia.com

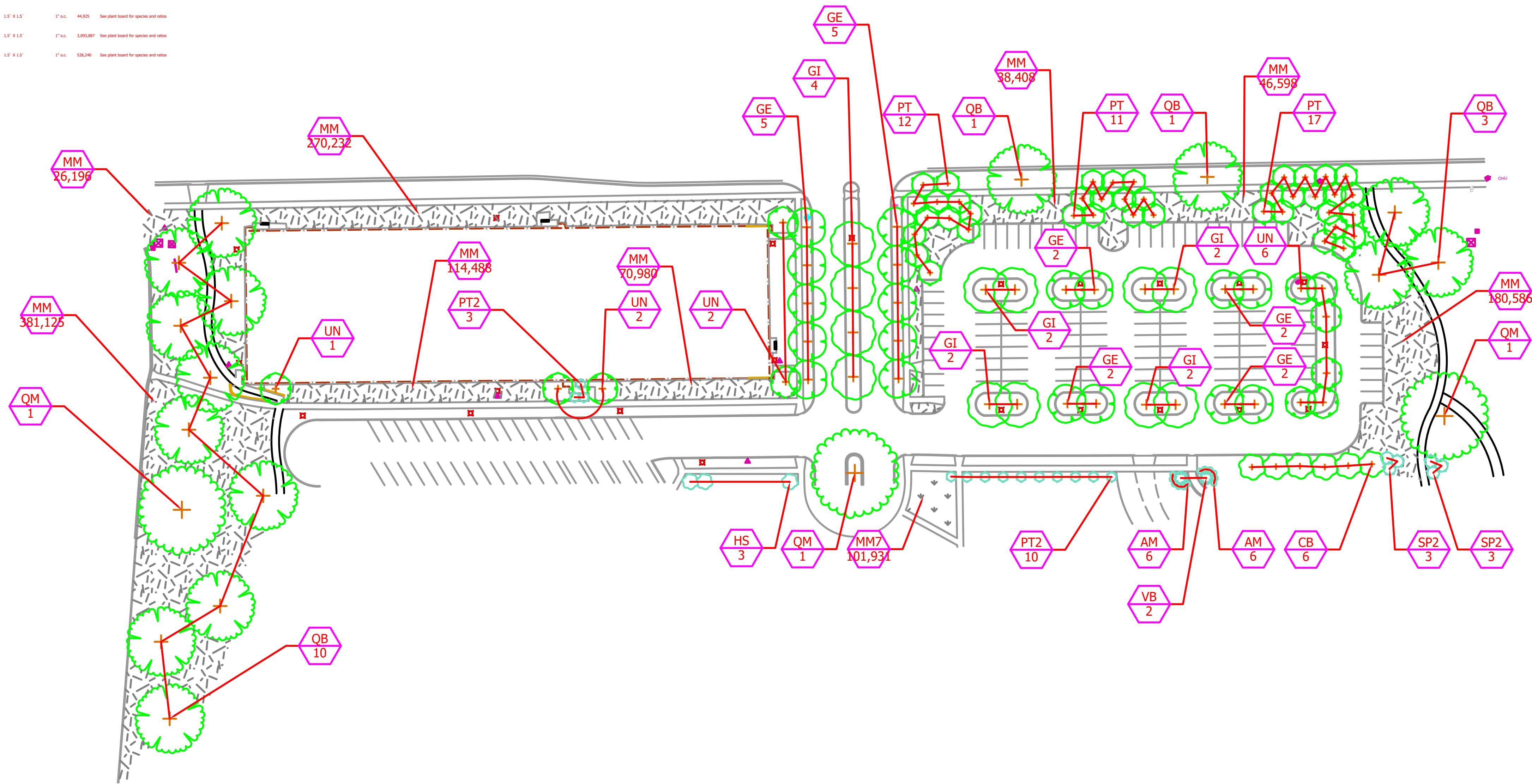




AHUSKA PARK AND WETLANDS MONONA, WISCONSIN		JULES WEST, LI ZHUANG, ZACH MEYER
DECEMBER 18, 2016		
PLANTING PLAN		
P - 10		



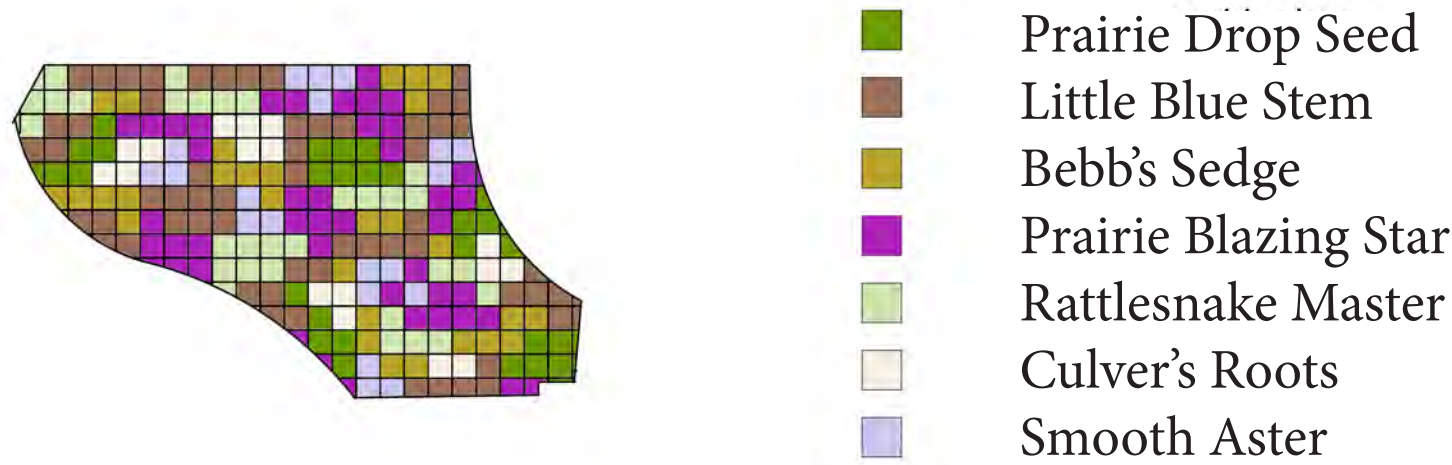
PLANT SCHEDULE					
PLANT	PLANT NAME	SIZE	QTY	PRICE	TOTAL
	Baldcypress / River Birch Multi-Trunk	8.8.5 2'CA	6" trunk Ht.	16	
	Cedrus libani / Tallgate / Pyramidal European Horizontal	8.8.5 2'CA	6" trunk Ht.	13	Select for straight upright trunks
	Cornus ovata / Shagbark Hickory	8.8.5 2'CA	6" trunk Ht.	4	Select for bark texture quality
	Quercus laevis / Swamp White Oak	8.8.5 2'CA	6" trunk Ht.	15	
	Gymnocladia dioica / Tennesse KTS / ESPRESSO Kentucky Coffee Tree	8.8.5 2'CA	6" trunk Ht.	18	Ensure trunks are curved (bushes) before planting
	Nyssa sylvatica / Sour Gum	8.8.5 2'CA	6" trunk Ht.	3	
	Ostrya virginiana / American Hophornbeam	8.8.5 2'CA	6" trunk Ht.	7	Select for upright trunk
	Prunus virginiana / White Pine	8.8.5 2'CA	6" trunk Ht.	8	
	Populus tremuloides / Quaking Aspen	8.8.5 2'CA	6" trunk Ht.	43	
	Quercus laevis / Swamp White Oak	8.8.5 2'CA	6" trunk Ht.	20	Select for best branching variety
	Quercus macrocarpa / Bur Oak	8.8.5 2'CA	6" trunk Ht.	6	Select for best branching variety
	Taxodium distichum / Hackberry / SHAWNEE BRAND Red Cedar	8.8.5 2'CA	6" trunk Ht.	18	Select for upright single leader and higher growing branches
	Ulmus americana / New Horizon / New Horizon American Elm	8.8.5 2'CA	6" trunk Ht.	26	
	Aster heterophyllus / Chisholm	10 gal 3' X 3'		75	
	Betula pumila / Dog Birch	8.8.5 6" X 6"		12	
	Cornus mas / Golden Glory / Golden Glory Cornelian Cherry	8.8.5 6" X 6"		12	
	Hamamelis virginica / Spring Blooming Witchhazel	8.8.5 6" X 6"		13	
	Box verticillata / Winterberry	10 gal 3' X 3'		9	
	Prunus pennsylvanica / Nanking Cherry	8.8.5 6" X 6"		21	
	Salix discolor / Pussy Willow	8.8.5 6" X 6"		10	
	Salix purpurea / Weir / Dwarf Arctic Willow	10 gal 3' X 3'		77	
	Viburnum prunifolium / Blackhaw Viburnum	8.8.5 6" X 6"		6	
PLANT	PLANT NAME	SIZE	QTY	PRICE	TOTAL
	Map A / Map A	Plugs 1.5' X 1.5'	2" x 2"	1,038,000	See plant board for species and values
	Map B / Map B	Plugs 1.5' X 1.5'	1" x 1"	68,132	See plant board for species and values
	Map C / Map C	Plugs 1.5' X 1.5'	1" x 1"	54,556	See plant board for species and values
	Map D / Map D	Plugs 1.5' X 1.5'	1" x 1"	52,045	See plant board for species and values
	Map E / Map E	Plugs 1.5' X 1.5'	1" x 1"	44,925	See plant board for species and values
	Map F / Map F	Plugs 1.5' X 1.5'	1" x 1"	3,093,887	See plant board for species and values
	Map G / Map G	Plugs 1.5' X 1.5'	1" x 1"	528,240	See plant board for species and values



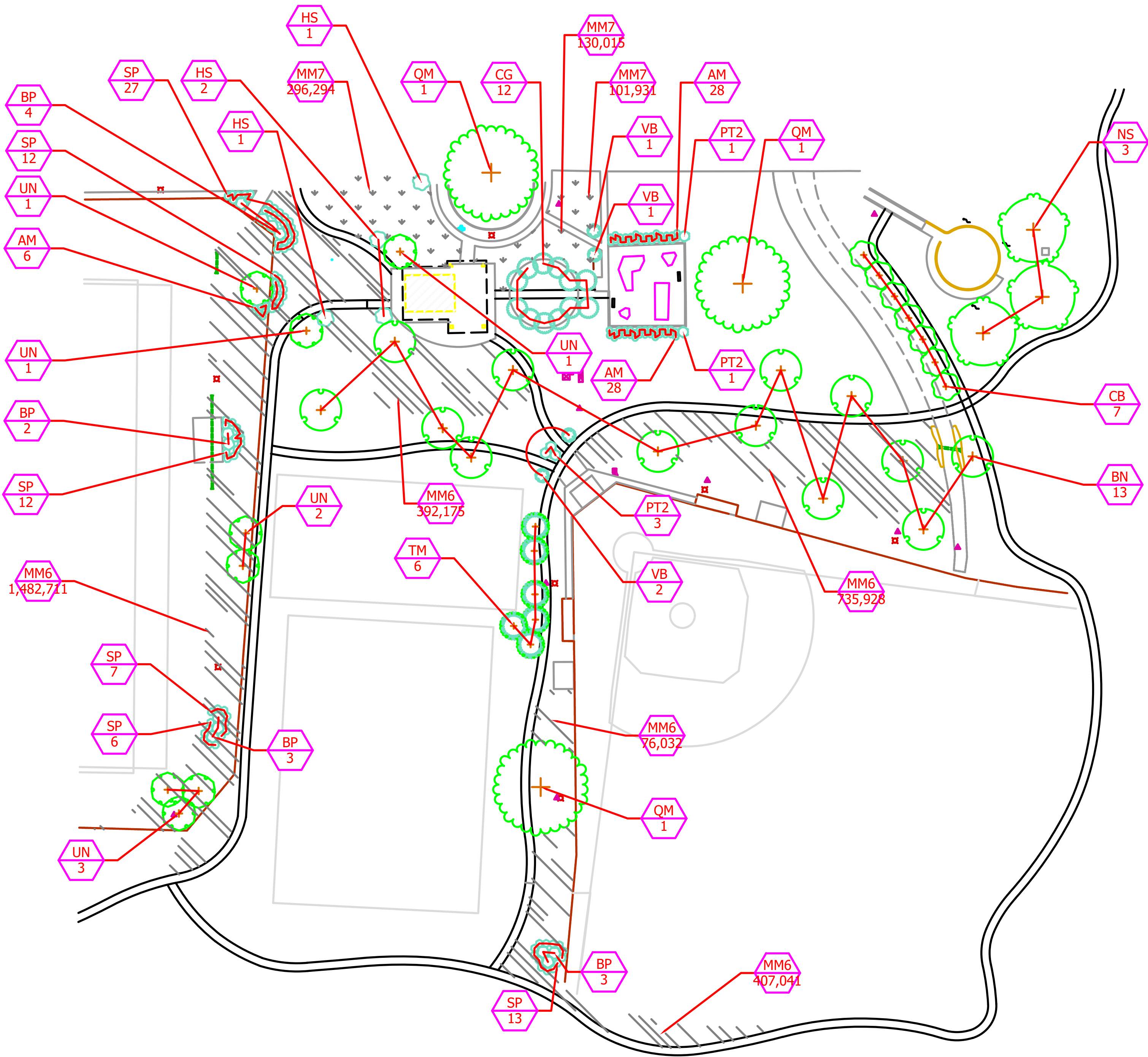
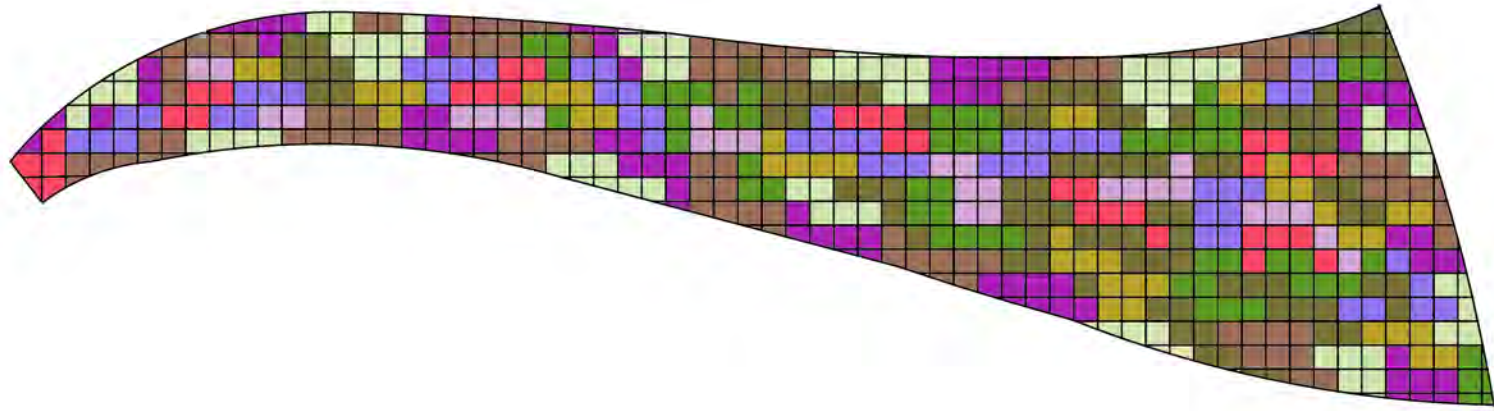


PLANT SCHEDULE						
TREES	BOTANICAL NAME / COMMON NAME	QTY	FILED	FILED	QTY	REMARKS
	Betula nigra / River Birch Multi-Trunk	8 & 8	2" Cal	6' trunk ht.	16	
	Carpinus betulus 'Fastigata' / Pyramidal European Hornbeam	8 & 8	2" Cal	6' trunk ht.	13	Select for straight upright trunks
	Carya ovata / Shagbark Hickory	8 & 8		6' trunk ht.	4	Select for bark texture quality
	Gleditsia triacanthos inermis / Thornless Common Honeylocust	8 & 8	2" Cal	6' trunk ht.	15	
	Gymnocladus dioica 'Espresso-JS' / ESPRESSO Kentucky Coffee Tree	8 & 8	2" Cal	6' trunk ht.	18	Ensure trees are correct (fruitless) cultivar prior to planting
	Nyssa sylvatica / Sour Gum	8 & 8	2" Cal	6' trunk ht.	3	
	Ostrya virginiana / American Hophornbeam	8 & 8	2" Cal	6' trunk ht.	7	Select for upright trunk
	Pinus strobus / White Pine	8 & 8	2" Cal	6' trunk ht.	8	
	Populus tremuloides / Quaking Aspen	8 & 8	2" Cal	6' trunk ht.	43	
	Quercus bicolor / Swamp White Oak	8 & 8	2" Cal	6' trunk ht.	20	Select for best branching variety
	Quercus macrocarpa / Bur Oak	8 & 8	2" Cal	6' trunk ht.	6	Select for best branching variety
	Taxodium distichum 'Mikkelsen' / SHAWNEE BRAVE Bald Cypress	8 & 8	2" Cal	6' trunk ht.	18	Select for upright single leader and higher growing branches
	Ulmus americana 'New Horizon' / New Horizon American Elm	8 & 8	2" Cal	6' trunk ht.	26	
SHRUBS	BOTANICAL NAME / COMMON NAME	QTY	FILED	FILED	QTY	REMARKS
	Aronia melanocarpa / Chokeberry	10 gal	3' X 3'		75	
	Betula pumila / Bog Birch	8 & 8	6' X 6'		12	
	Cornus mas 'Garden Glory' / Golden Glory Cornelian Cherry	8 & 8	6' X 6'		12	
	Hamelis vernalis / Spring Blooming Witchhazel	8 & 8	6' X 6'		13	
	Ilex verticillata / Winterberry	10 gal	3' X 3'		9	
	Prunus tomentosa / Nanking Cherry	8 & 8	6' X 6'		21	
	Salix discolor / Pussy Willow	8 & 8	6' X 6'		10	
	Salix purpurea 'Nana' / Dwarf Arctic Willow	10 gal	3' X 3'		77	
	Viburnum pumilifolium / Blackhaw Viburnum	8 & 8	6' X 6'		6	
GROUND COVERS	BOTANICAL NAME / COMMON NAME	QTY	FILED	FILED	QTY	REMARKS
	Mix A / Mix A	Plugs	1.5' X 1.5'	2" o.c.	1,630,690	See plant board for species and ratios
	Mix B / Mix B	Plugs	1.5' X 1.5'	1" o.c.	60,132	See plant board for species and ratios
	Mix C / Mix C	Plugs	1.5' X 1.5'	1" o.c.	54,556	See plant board for species and ratios
	Mix D / Mix D	Plugs	1.5' X 1.5'	1" o.c.	52,045	See plant board for species and ratios
	Mix E / Mix E	Plugs	1.5' X 1.5'	1" o.c.	44,925	See plant board for species and ratios
	Mix F / Mix F	Plugs	1.5' X 1.5'	1" o.c.	3,093,887	See plant board for species and ratios
	Mix G / Mix G	Plugs	1.5' X 1.5'	1" o.c.	528,240	See plant board for species and ratios

Dry Swale Distribution



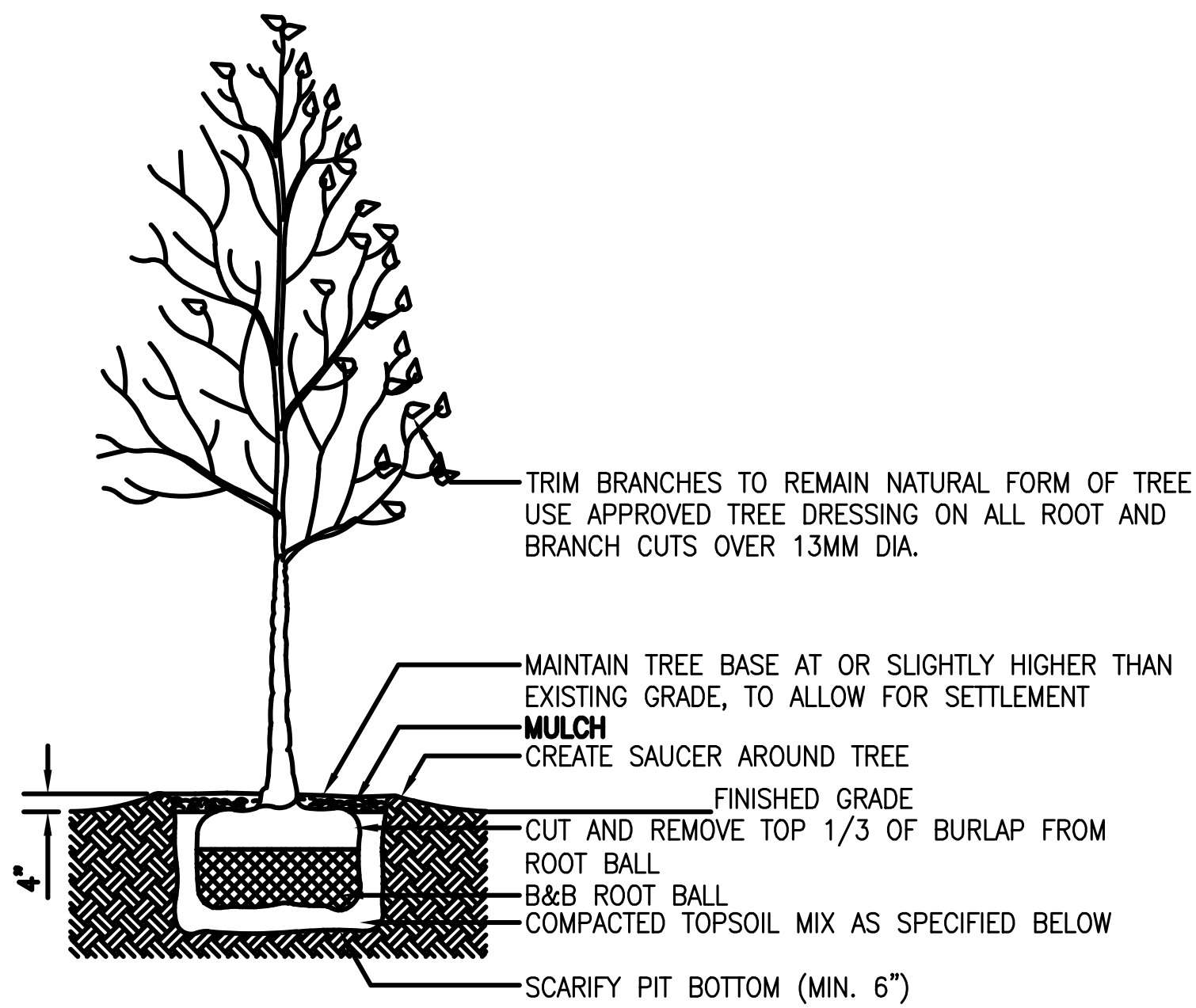
Wet Swale Distribution





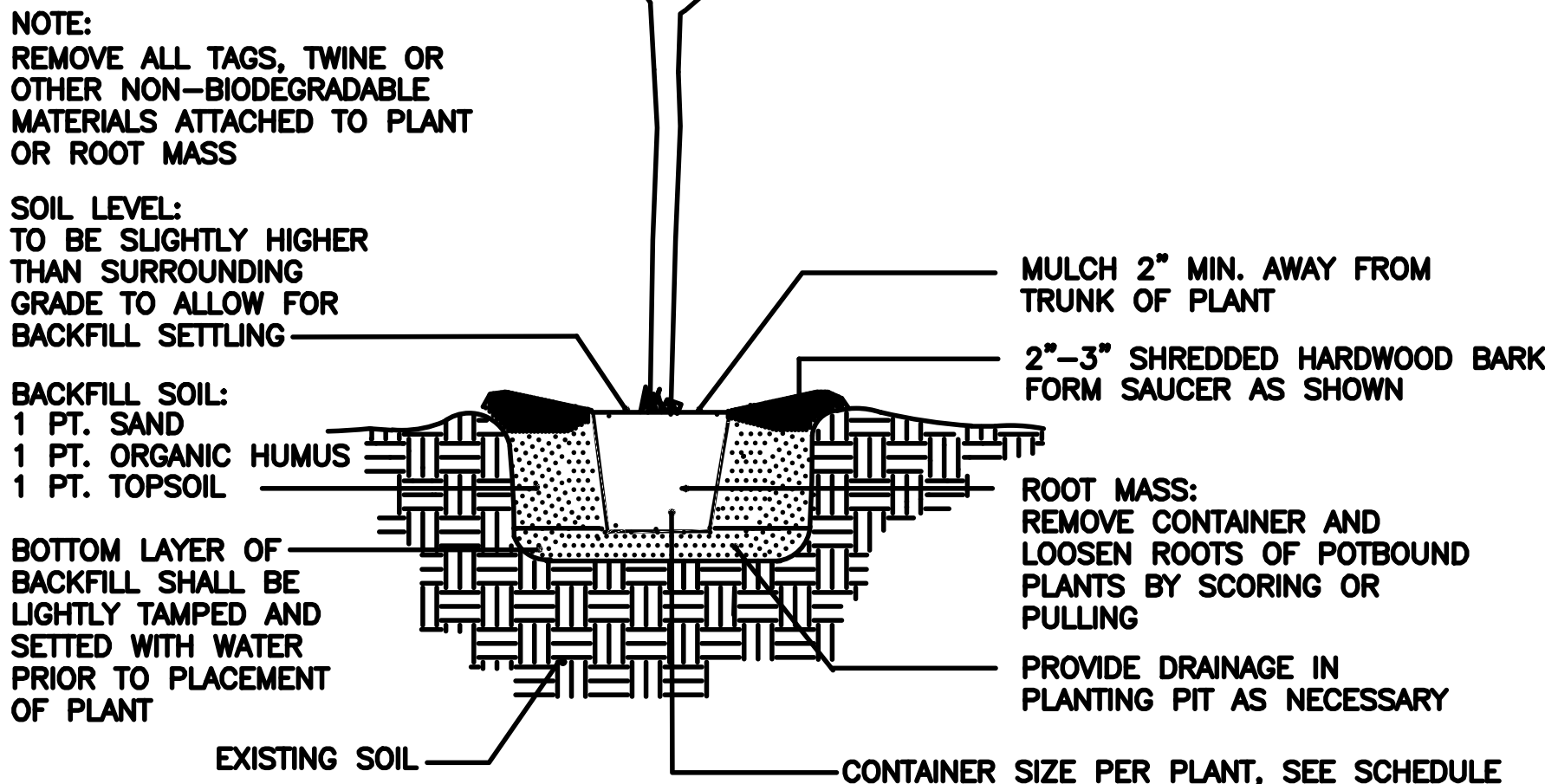
PLANT SCHEDULE						
TRADES	POTENTIAL NAME / COMMON NAME	QTY	CALL	FIELD	QTY	REMARKS
+	Betula nigra / River Birch Multi-Trunk	B & B	2" Cal	6' trunk Ht.	16	
+	Carpinus betulus "Fastigata" / Pyramidal European Hornbeam	B & B	2" Cal	6' trunk Ht.	13	Select for straight upright trunks
+	Corya ovata / Shagbark Hickory	B & B	6" trunk Ht.	4	Select for bark texture quality	
+	Gleditsia inaequalis inermis / Thornless Common Honeylocust	B & B	2" Cal	6' trunk Ht.	15	
+	Gymnocladus dioica "Espresso-JPS" / ESPRESSO Kentucky Coffee Tree	B & B	2" Cal	6' trunk Ht.	18	Ensure trees are correct (fruitless) cultivar prior to planting
+	Nyssa sylvatica / Sour Gum	B & B	2" Cal	6' trunk Ht.	3	
+	Ostrya virginiana / American Hophornbeam	B & B	2" Cal	6' trunk Ht.	7	Select for upright trunk
+	Pinus strobus / White Pine	B & B	2" Cal	6' trunk Ht.	8	
+	Populus tremuloides / Quaking Aspen	B & B	2" Cal	6' trunk Ht.	43	
+	Quercus bicolor / Swamp White Oak	B & B	2" Cal	6' trunk Ht.	20	Select for best branching variety
+	Quercus macrocarpa / Bur Oak	B & B	2" Cal	6' trunk Ht.	6	Select for best branching variety
+	Taxodium distichum "Mikelson" / SHAWNEE BRAVE Bald Cypress	B & B	2" Cal	6' trunk Ht.	18	Select for upright single leader and higher growing branches
+	Ulmus americana "New Horizon" / New Horizon American Elm	B & B	2" Cal	6' trunk Ht.	26	
SUBS	POTENTIAL NAME / COMMON NAME	QTY	CALL	FIELD	QTY	REMARKS
+	Aronia melanocarpa / Chokeberry	10 gal	3' X 3'		75	
+	Betula pumila / Bog Birch	B & B	6' X 6'		12	
+	Cornus mas "Golden Glory" / Golden Glory Cornelian Cherry	B & B	6' X 6'		12	
+	Hamelis vernalis / Spring Blooming Witchazel	B & B	6' X 6'		13	
+	Ilex verticillata / Winterberry	10 gal	3' X 3'		9	
+	Prunus tomentosa / Nanking Cherry	B & B	6' X 6'		21	
+	Salix discolor / Pussy Willow	B & B	6' X 6'		10	
+	Salix purpurea "Nana" / Dwarf Arctic Willow	10 gal	3' X 3'		77	
+	Viburnum prunifolium / Blackhaw Viburnum	B & B	6' X 6'		6	

GROUND COVERS	POTENTIAL NAME / COMMON NAME	QTY	FILE NO.	QTY	REMARKS
+	Mix A / Mix A	Plugs	1.5' X 1.5'	2" o.c.	1,630,690 See plant board for species and ratios
+	Mix B / Mix B	Plugs	1.5' X 1.5'	1" o.c.	60,132 See plant board for species and ratios
+	Mix C / Mix C	Plugs	1.5' X 1.5'	1" o.c.	54,556 See plant board for species and ratios
+	Mix D / Mix D	Plugs	1.5' X 1.5'	1" o.c.	52,045 See plant board for species and ratios
+	Mix E / Mix E	Plugs	1.5' X 1.5'	1" o.c.	44,925 See plant board for species and ratios
+	Mix F / Mix F	Plugs	1.5' X 1.5'	1" o.c.	3,093,887 See plant board for species and ratios
+	Mix G / Mix G	Plugs	1.5' X 1.5'	1" o.c.	528,240 See plant board for species and ratios



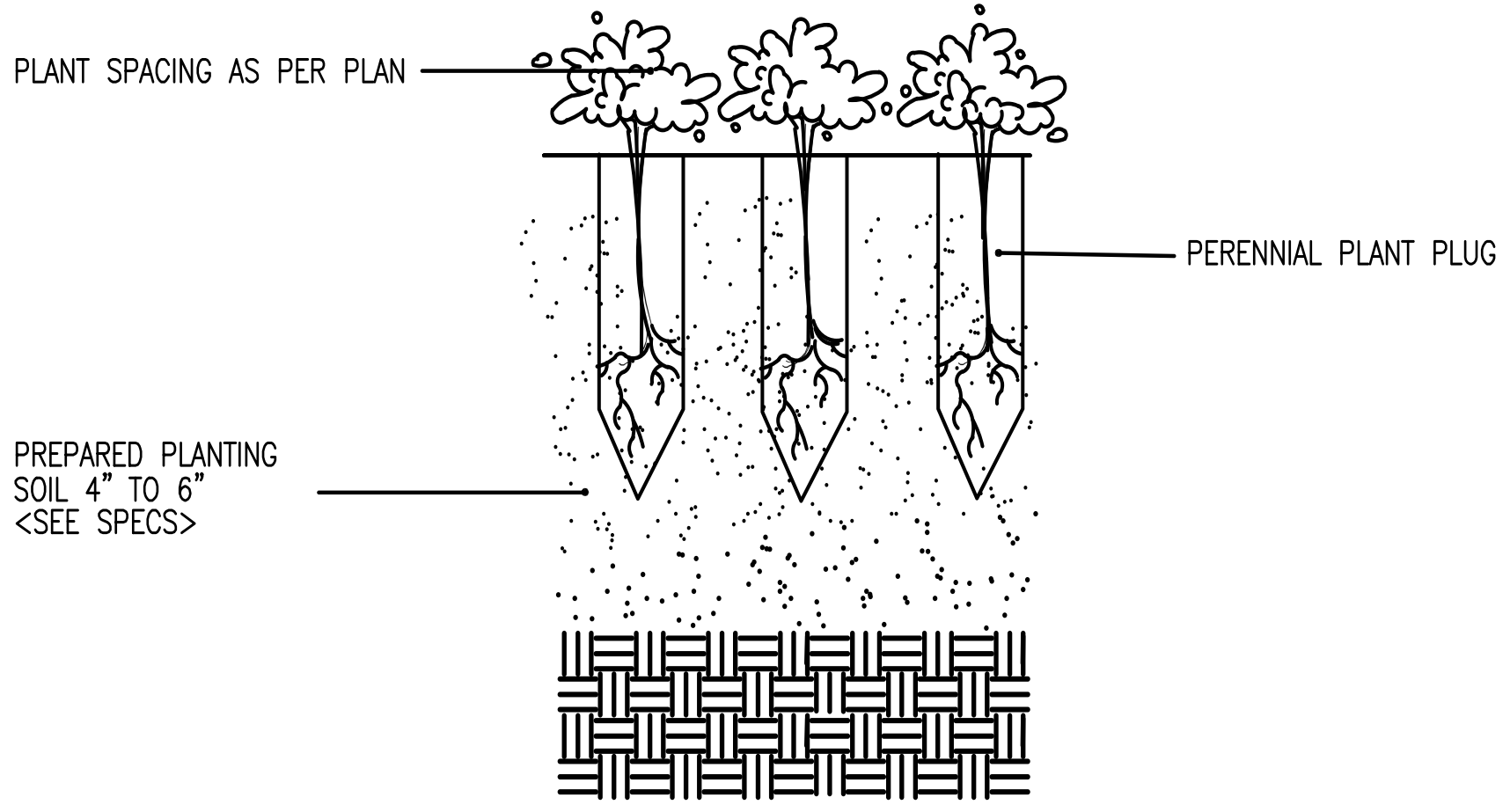
- SPECIFICATIONS:**
1. TOPSOIL MIX, SEE SPEC.
  2. DO NOT DAMAGE MAIN ROOTS OR DESTROY ROOT BALL WHEN INSTALLING TREE STAKE.
  3. WATER THOROUGHLY AFTER INSTALLATION.
  4. REMOVE TREE RINGS AND STAKES TWO YEARS AFTER INSTALLATION.
  5. PROVIDE DRAINAGE FOR PLANTING PIT IN IMPERMEABLE SOIL.
  6. ALL TREES MUST BE TAGGED AND APPROVED BY CONSULTANT WITHIN 14 DAYS AFTER TENDER CLOSING.
- NOTES:**
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
  2. DO NOT SCALE DRAWINGS.
  3. CONTRACTORS NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT [www.CADDetails.com/info](http://www.CADDetails.com/info) REFERENCE NUMBER 000-043.

Ball and Burlap Plant Detail



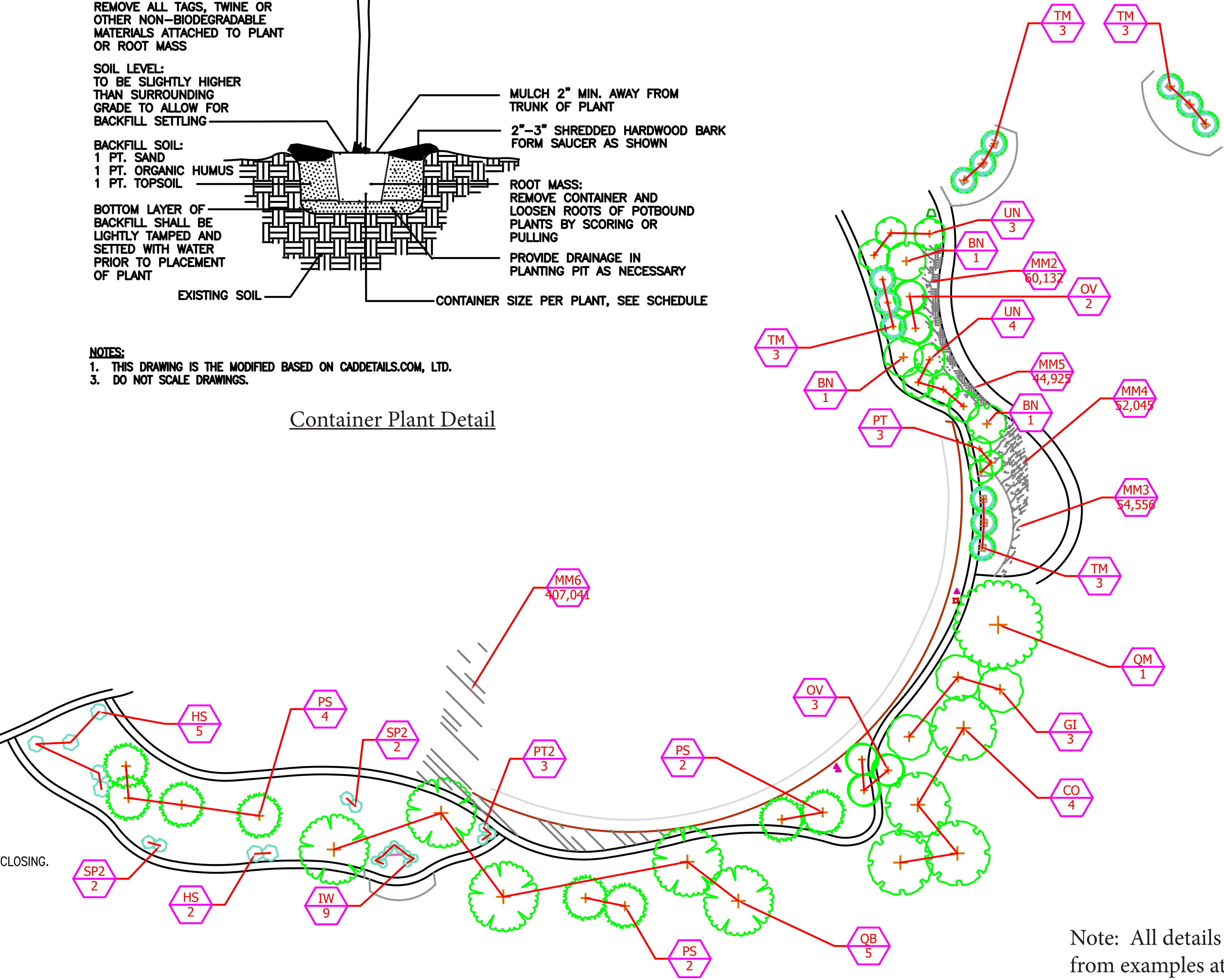
- NOTES:**
1. THIS DRAWING IS THE MODIFIED BASED ON CADDDETAILS.COM, LTD.
  3. DO NOT SCALE DRAWINGS.

Container Plant Detail



- NOTES:**
1. THIS DRAWING IS MODIFIED BASED ON CADDDETAILS.COM, LTD.
  2. DO NOT SCALE DRAWINGS.

Plug Plant Detail



Note: All details have been modified from examples at Caddetails.com



## ABOUT THE UNIVERCITY YEAR

UniverCity Year is a year-long partnership between UW-Madison and one community in Wisconsin. The community partner identifies sustainability and livability projects that would benefit from UW-Madison expertise. Faculty from across the university incorporate these projects into their courses with graduate students and upper-level undergraduate students. UniverCity Year staff provide administrative support to faculty, students and the partner community to ensure the collaboration's success. The result is on-the-ground impact and momentum for a community working toward a more sustainable and livable future.

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