

- 1. PLANT EACH TREE SUCH THAT THE ROOT FLARE IS VISIBLE AT THE TOP OF THE ROOT BALL. DO NOT COVER THE TOP OF THE ROOT BALL WITH SOIL.
- 2. DEPTH OF THE PLANTING HOLE SHOULD BE DETERMINED AND DUG AFTER THE ROOT FLARE IS LOCATED. PLANTING HOLE MUST BE NO DEEPER THAN THE HEIGHT OF THE ROOT BALL.
- 3. IF PLANT IS SHIPPED WITH A WIRE BASKET AROUND THE ROOT BALL, CUT AND REMOVE THE WIRE BASKET ENTIRELY. REMOVE ALL TWINE, ROPE, AND BURLAP COMPLETELY FROM ALL ROOT BALLS.
- 4. PLACE ROOT BALL ON UNEXCAVATED OR TAMPED SOIL.
- 5. DO NOT PLACE MULCH IN CONTACT WITH STEMS.
- 6. WATER ALL PLANTS WITHIN 2 HOURS OF INSTALLATION.
- 7. PRUNE ONLY AS NECESSARY TO REMOVE UNHEALTHY BRANCHES. DO NOT REMOVE MORE THAN 1/3 OF THE ORIGINAL PLANT MASS.

# KEYED LEGEND

- $\langle$  1  $\rangle$  3" DEPTH SHREDDED HARDWOOD BARK MULCH. PROVIDE 4'-0" DIAMETER MULCH RINGS AT THE BASE OF ANY TREES PLANTED IN LAWN.
- $\langle$  2  $\rangle$  PROVIDE SPADED EDGE, 2" WIDE, 6" DEEP FOR ENTIRE PERIMETER OF BARK MULCH RINGS AT BASE OF TREES PLANTED IN LAWNS
- (3) PLANTING SOIL, PLANTING SOIL SHALL BE PLACED IN ONE CONTINUOUS VOLUME FOR THE ENTIRE AREA OF ANY GIVEN PLANT BED.
- 4 PREPARED SUBGRADE
- $\overline{\left\langle 5\right\rangle }$  TAMP SOIL AROUND BALL BASE FIRMLY WITH FOOT PRESSURE SO THAT BALL DOES NOT SHIFT

# A TYPICAL TREE PLANTING SCALE:NTS

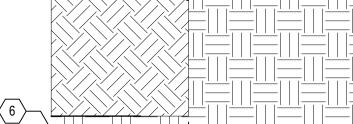
TREE PIT WIDTH - 2X BALL DIAMETER MINIMUM, OR FULL

EXTENTS OF PLANTING BED

- 1. MAKE 1" TO 2" DEEP VERTICAL CUTS EVERY 6" AROUND THE CIRCUMFERENCE OF THE ROOT BALL BEFORE PLANTING TO LOOSEN POT-BOUND ROOTS.
- 2. PLANT EACH SHRUB SUCH THAT THE ROOT FLARE IS VISIBLE AT THE TOP OF THE ROOT BALL DO NOT COVER THE TOP OF THE ROOT BALL WITH SOIL.
- 3. PLANTING HOLE MUST NOT BE DEEPER THAN THE HEIGHT OF THE ROOT BALL.
- 4. DO NOT PLACE MULCH IN CONTACT WITH STEMS.
- 5. PLACE ROOT BALL ON UNEXCAVATED OR TAMPED SOIL.
- 6. WATER ALL PLANTS WITHIN 2 HOURS OF INSTALLATION.
- 7. PRUNE ONLY AS NECESSARY TO REMOVE UNHEALTHY BRANCHES. DO NOT REMOVE MORE THAN  $\frac{1}{3}$  OF THE ORIGINAL PLANT MASS.
- 8. SEGREGATE ANY SOIL FROM BELOW WARNING LAYER EXCAVATED DURING PLANTING FOR OFF-SITE DISPOSAL. COORDINATE DISPOSAL WITH ENVIRONMENTAL CONSULTANT.
- 9. FOR SHRUBS PLANTED WITHIN PLANTING BEDS, CONTRACTOR SHALL PROVIDE PLANTING SOIL CONTINUOUSLY FOR THE ENTIRE PLANTING BED AND INDIVIDUAL SHRUBS SHALL BE PLANTED INTO THE PREPARED PLANTING SOIL. MULCH SURFACE FOR PLANTING BEDS SHALL ALSO BE CONTINUOUS ACROSS THE ENTIRE SURFACE AND HELD 1 MIN. TO 1 MAX. BELOW ADJACENT

### KEYED LEGEND

- $\langle$  1  $\rangle$  3" DEPTH TWICE-SHREDDED HARDWOOD BARK MULCH, UNLESS OTHERWISE INDICATED, KEEP 2" CLEAR OF STEMS
- PLANTING SOIL AS SPECIFIED, PLANTING SOIL SHALL BE PLACED IN ONE CONTINUOUS VOLUME FOR THE ENTIRE AREA OF ANY GIVEN PLANT BED
- 1" TO 2" DEEP VERTICAL CUTS EVERY 6"
- AROUND PERIMETER
- 4 PREPARED SUBGRADE
- TAMP SOIL AROUND BALL BASE FIRMLY WITH FOOT PRESSURE SO THAT BALL DOES NOT SHIFT



C TYPICAL PERENNIAL PLANTING
SCALE:NTS

ÉQUA<del>L → E</del>QUAL ← EQUAL ←

D = DIMENSION OF PLANT SPACING AS INDICATED ON PLANT LIST, PLAN VIEW

D TYPICAL PLANT SPACING SCALE:NTS



VARIES, PER PLAN

(1) ADJACENT PLANTING BED

KEYED LEGEND

 $\langle 2 \rangle$  BLACK ANODIZED ALUMINUM EDGING

1. DO NOT COVER THE TOP OF THE ROOT BALL WITH SOIL.

3. DO NOT PLACE MULCH IN CONTACT WITH STEMS.

KEYED LEGEND

 $\langle 4 \rangle$  PREPARED SUBGRADE

2. PLANTING HOLE MUST NOT BE DEEPER THAN THE HEIGHT OF THE ROOT BALL.

5. PRUNE ONLY AS NECESSARY TO REMOVE UNHEALTHY OR DEAD PLANT PARTS.

6. FOR PLANTS PLANTED WITHIN PLANTING BEDS, CONTRACTOR SHALL PROVIDE PLANTING SOIL CONTINUOUSLY FOR THE ENTIRE PLANTING BED AND INDIVIDUAL

SHRUBS SHALL BE PLANTED INTO THE PREPARED PLANTING SOIL. MULCH SURFACE FOR PLANTING BEDS SHALL ALSO BE CONTINUOUS ACROSS THE

SEE LANDSCAPE PLAN SHEETS L100-L103

PLACED IN ONE CONTINUOUS VOLUME FOR

THE ENTIRE AREA OF ANY GIVEN PLANT BED

(3) PLANTING SOIL, PLANTING SOIL SHALL BE

 $\langle$  2  $\rangle$  3" DEPTH TWICE-SHREDDED HARDWOOD BARK MULCH,

ENTIRE SURFACE AND HELD <sup>1</sup>/<sub>2</sub>" MIN. TO 1" MAX. BELOW ADJACENT PAVEMENTS.

(1) PERENNIAL, ORNAMENTAL GRASS, OR GROUNDCOVER PLUG,

UNLESS OTHERWISE INDICATED, KEEP 3" CLEAR OF STEMS

1. SET FINISH GRADE OF PLANTING AREA 2" BELOW FINISH SURFACE OF PAVING, CURB, OR HEADER

2. SEE PLANTING SCHEDULE FOR SPACING OF ALL

3. ALL SHRUBS / GROUNDCOVER TO BE PLANTED AT EQUAL SPACING (TRIANGULAR) UNLESS

4. TO DETERMINE APPROPRIATE PLANT QUANTITIES REFER TO THE PLANTING SCHEDULE OR PLAN.

SHRUBS AND GROUNDCOVERS

OTHERWISE INDICATED ON PLANS.

(1) EDGE OF ADJACENT PAVEMENT

2 SHRUB, PERENNIAL OR ORNAMENTAL

**KEYED LEGEND** 

4. WATER ALL PLANTS THOROUGHLY WITHIN 2 HOURS OF INSTALLATION.

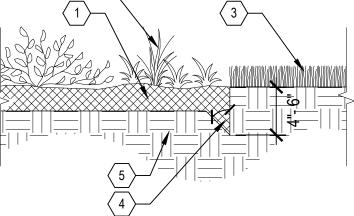
DO NOT REMOVE MORE THAN 1/3 OF THE ORIGINAL PLANT MASS.

- (3) BUILDING FACE
- 4 3" DEPTH STONE MULCH
- 5 WOVEN GEOTEXTILE FILTER FABRIC, WRAP UP SIDES OF BUILDING AND EDGING
- 6 PREPARED SUBGRADE

# GRASS PLANT CENTER LOCATION

#### KEYED LEGEND

- $\langle 1 \rangle$  3" DEPTH OF MULCH LAYER
- (2) SHRUB PLANTING BED
- (3) LAWN ADJACENT TO PLANTING BED
- 45 DEGREE ANGLE SHOVEL CUT EDGE TOWARD PLANTING BED
- (5) COMPACTED SUBGRADE



SHOVEL CUT EDGE

# **KEYED LEGEND**

- $\langle 1 \rangle$  3" DEPTH OF MULCH LAYER
- (2) SHRUB PLANTING BED
- (3) LAWN ADJACENT TO PLANTING BED
- 4 BLACK ANODIZED ALUMINUM EDGING
- (5) COMPACTED SUBGRADE

TURF METAL EDGE SCALE:NTS

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RAWSON

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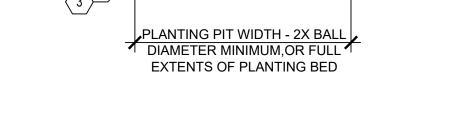
Phone: 414-285-3470

7044 South Ballpark Drive Suite 305

NO. REVISION

DATE

SCALE: PROJECT NO: 21775 DESIGN DATE: PLOT DATE: 2023.10.13 DRAWN BY: MJK CHECKED BY: APPROVED BY: CTC SHEET NO:



B TYPICAL SHRUB PLANTING SCALE:NTS

PLAN VIEW

SCALE:NTS

→ PLANT BIOINFILTRATION BASIN PLUGS

5 PVC DRAIN TILE, SEE CIVIL PLAN.

6 PREPARED SUBGRADE

RAINWATER RENEWAL SEED MIX (SIDE SLODES OF BIOCII TOATION BASING)

PERENNIAL PLUGS PLANT LIST

Common Name

Marsh Milkweed

New England Aster

Common Fox Sedge

Brown Fox Sedge

Spotted Joe Pye

Marsh Blazingstar

Yellow Coneflower

Dark-Green Bulrush

Black-Eyed Susan

Prairie Cordgrass

Ohio Spiderwort

Cardinal Flower Wild Bergamot

**Switchgrass** 

Wool Grass

Blue Vervain

Ironweed

Sneezeweed

Weed

Quantity Size

160.00

224.00

224.00

224.00

224.00

224.00

224.00

224.00

224.00

224.00

224.00

224.00

224.00

224.00

Round Tapered Plug | 18" O.C. in clusters of 5-12 plants per species

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Botanical Name

Carex stipdata

Liatris spicata

Lobelia cardinalis

Monarda fistulosa

Panicum virgatum

Ratibida pinnata

Rudbeckia hirta

| Scirpus atrovirens

Scirpus cyperinus

Spartina pactinata

Verbena hastata Vernonia fasciculata

Tradescantia ohiensis

Asclepias incarnata

Aster Novae-angliae

Carex vulpinoidea

Eupatorium maculatum

Helenium autumnale

Botanical Name	Common Name	PLS Ounces/Acre
Wildflower Forbs:		
Asclepias incarnata	Marsh (Red) Milkweed	3.00
Aster ericoides	Heath Aster	0.10
Aster novae-angliae	New England Aster	1.50
Baptisia leucantha (alba)	White Wild Indigo	4.00
Eupatorium maculatum	Spotted Joe Pye Weed	0.80
Eupatorium perfoliatum	Boneset	0.50
Liatris pycnostachya	Prairie Blazing Star	2.50
Liatris spicata	Marsh Blazing Star	5.00
Lobelia cardinalis	Cardinal Flower	0.25
Lobelia siphilitica	Great Blue Lobelia	0.50
Monarda fistulosa	Wild Bergamot	1.50
Physostegia virginiana	Obedient Plant	1.50
Pycnanthemum virginianum	Mountain Mint	0.30
Ratibida pinnata	Yellow Coneflower	2.25
Rudbeckia hirta	Black-Eyed Susan	2.00
Rudbeckia subtomentosa	Sweet Black-Eyed Susan	2.00
Solidago ohioensis	Ohio Goldenrod	0.50
Tradescantia ohiensis	Ohio Spiderwort	1.25
Verbena hastata	Blue Vervain	1.00
Vernonia fasciculata	Ironweed	1.00
	Totals =	31.45
Perennial Grasses, Sedges & Rushes:		
Bromus ciliatus	Fringed Brome	20.00
Calamagrostis canadensis	Blue Joint Grass	1.00
Carex bebbii Bebb's Oval Sedge		2.00
Carex crawfordii	Crawford's Sedge	1.00
Carex crinita	Fringed Sedge	0.75
Carex stipata	Common Fox Sedge	1.50
Carex vulpinoidea	Brown Fox Sedge	1.00
Elymus canadensis	Canada Wild Rye	24.00
Elymus virginicus	Virginia Wild Rye	32.00
Glyceria grandis	Reed Manna Grass	1.00
Panicum virgatum	Switchgrass	3.50
Scirpus atrovirens	Dark-Green Bulrush	0.50
Scirpus cyperinus	Wool Grass	0.30
Sorghastrum nutans	Indian Grass	5.00
Spartina pectinata	Prairie Cordgrass	3.00
		1

Totals = 96.55

TURF SEED MIX

				TOTAL OLLD WITH	
<u>'</u>	Size	Comments		Reinder's Deluxe 50 Seed Mix	Seed at rate of 150-200 lbs/acre
	Round Tapered Plug	18" O.C. in clusters of 5-12 plants per species			
	Round Tapered Plug	18" O.C. in clusters of 5-12 plants per species		20% Kentucky Bluegrass	
	Round Tapered Plug	18" O.C. in clusters of 5-12 plants per species		15% Newport Kentuckly Bluegrass	
	Round Tapered Plug	18" O.C. in clusters of 5-12 plants per species		15% Ken Blue Kentucky Bluegrass	
				25% Creeping Red Fescue	
	Round Tapered Plug	18" O.C. in clusters of 5-12 plants per species		15% Quebec Perennial Ryegrass	
	Round Tapered Plug	18" O.C. in clusters of 5-12 plants per species		10% Fiesta III Perennial Ryegrass	
	Round Tapered Plug	18" O.C. in clusters of 5-12 plants per species	L	10% Flesta III Fereninai Nyegrass	
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### NO MOW SEED MIX

Reinder's No Mow/Low Grow Mix	Seed at rate of 175-250 lbs/acre		
45% Spartan II Hard Fescue			
40% Quatro Sheep Fescue			
15% Turf Type Annual Ryegrass			

**UPLAND MEADOW SEED MIX** 

Botanical Name	<u>Common Name</u>	PLS Ounces/Acre
NACH JELONG FOR LO		
Wildflower Forbs:		
Achillea millefolium	Native Yarrow	0.75
Agastache foeniculum	Lavender Hyssop	0.50
Amorpha canescens	Leadplant	2.00
Asclepias syriaca	Common Milkweed	2.00
Chamaecrista fasciculata	Partridge Pea	8.00
Coreopsis Palmata	Prairie Coreopsis	2.00
Dalea candida	White Prairie Clover	2.50
Dalea purpurea	Purple Prairie Clover	2.00
Echinacea purpurea	Purple Coneflower	8.00
Heliopsis helianthoides	Early Sunflower	4.00
Liatris pycnostachya	Prairie Blazing Star	1.50
Monarda fistulosa	Wild Bergamont	0.50
Monarda punctata	Dotted Mint	1.00
Ratibida pinnata	Yellow Coneflower	6.00
Rosa arkansana	Prairie Wild Rose	2.00
Rudbeckia hirta	Black-Eyed Susan	2.00
Solidago speciosa	Showy Goldenrod	0.50
Tradescantia ohiensis	Ohio Spiderwort	4.00
Verbena stricta	Hoary Vervain	1.50
Zizia aptera	Heart-Leaved Golden Alexanders	1.00
	Totals =	51.75
Perennial Grasses, Sedges & Rushes:		
Bouteloua curtipendula	Side Oats Grama	40.00
Bouteloua gracilis Blue Grama		4.00
Elymus canadensis	Canada Wild Rye	16.00
Juncus tenuis	Path Rush	0.25
Koeleria cristata	June Grass	4.00
Schizachyrium scoparium	Little Bluestem	16.00
Sorghastrum nutans	Indian Grass	4.00
Sporobolus heterolepis	Prairie Dropseed	8.00
	Totals =	92.25

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**DETAILS** 

LANDSCAP

DATE

NO. REVISION

PROJECT NO: 21775 DESIGN DATE: PLOT DATE: 2023.10.13 DRAWN BY: CHECKED BY: JL APPROVED BY: CTC

- SHALL BE TRAINED IN DEVELOPMENT AND APPEARANCE AS TO BE SUPERIOR IN FORM, COMPACTNESS AND SYMMETRY. TREES WITH MULTIPLE LEADERS. UNLESS SPECIFIED OTHERWISE, AND SHRUBS WITH DAMAGED OR CUT MAINSTEM(S), WILL BE REJECTED.
- 3.2. WITH A DAMAGED, CUT OR CROOKED LEADER, ABRASION OF BARK, SUNSCALD, FROST CRACK, DISFIGURING KNOTS, INSECTS (INCLUDING EGGS AND LARVAE) OR INSECT DAMAGE, CANKERS/CANKEROUS LESIONS OR FUNGAL MATS, MOLD, PREMATURELY-OPENED BUDS, OR CUTS OF LIMBS OVER 3/4" DIAMETER THAT ARE NOT COMPLETELY CALLUSED WILL BE REJECTED.
- 3.3. SHALL HAVE HEALTHY, WELL-DEVELOPED ROOT SYSTEMS, AND BE FREE FROM PHYSICAL DAMAGE OR OTHER HINDRANCES TO HEALTHY GROWTH.
- BALLED AND BURLAPPED PLANTS SHALL BE DUG WITH SOLID BALLS OF A DIAMETER NOT LESS THAN THAT RECOMMENDED BY THE AMERICAN STANDARDS FOR NURSERY STOCK, AND OF SUFFICIENT DEPTH TO INCLUDE BOTH FIBROUS AND FEEDING ROOTS. BALLS SHALL BE SECURELY WRAPPED WITH BURLAP, AND TIGHTLY BOUND WITH ROPE OR TWINE. NO PLANTS SHALL BE BOUND WITH ROPE OR WIRE IN SUCH A MANNER AS TO DAMAGE BARK OR BREAK BRANCHES. THE ROOT FLARE SHOULD BE WITHIN THE TOP 2" OF THE SOIL BALL. BALLED AND BURLAPPED PLANTS WILL NOT BE ACCEPTED IF THE BALL IS DRY, CRACKED, OR BROKEN BEFORE OR DURING PLANTING.
- 4. PLANTS SHALL CONFORM TO THE MEASUREMENTS SPECIFIED WITHIN THE PLANT SCHEDULE

#### PLANTING PROJECT CONDITIONS:

- 1. VERIFY SERVICE AND UTILITY LOCATIONS, AND DIMENSIONS OF CONSTRUCTION CONTIGUOUS WITH NEW PLANTINGS BY FIELD MEASUREMENTS BEFORE PROCEEDING WITH PLANTING WORK.
- 2. INTERRUPTION OF EXISTING SERVICES OR UTILITIES; DO NOT INTERRUPT SERVICES OR UTILITIES UNLESS PERMITTED UNDER THE FOLLOWING CONDITIONS AND THEN ONLY AFTER ARRANGING TO PROVIDE TEMPORARY SERVICES OR UTILITIES ACCORDING TO REQUIREMENTS INDICATED:
- 2.1. NOTIFY OWNER'S PROJECT REPRESENTATIVE NO FEWER THAN TWO DAYS IN ADVANCE OF PROPOSED INTERRUPTION OF EACH SERVICE OR UTILITY.
- 2.2. DO NOT PROCEED WITH INTERRUPTION OF SERVICES OR UTILITIES WITHOUT REPRESENTATIVE'S WRITTEN PERMISSION.
- 3. PLANTING RESTRICTIONS: PLANTING SHALL OCCUR DURING THE FOLLOWING ACCEPTABLE INSTALLATION PERIODS:
- 3.1. DECIDUOUS TREES AND SHRUBS APRIL 15 TO OCTOBER 15.
- 3.2. NATIVE SEEDING AND TURFGRASS: APRIL 15 OCTOBER 15
- 4. WEATHER LIMITATIONS: PROCEED WITH PLANTING ONLY WHEN EXISTING AND FORECASTED WEATHER CONDITIONS PERMIT PLANTING TO BE PERFORMED WHEN BENEFICIAL AND OPTIMUM RESULTS MAY BE OBTAINED. APPLY PRODUCTS DURING FAVORABLE WEATHER CONDITIONS ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS AND WARRANTY REQUIREMENTS.
- 5. CONTRACTOR SHALL PROTECT ALL EXISTING AND/OR NEWLY INSTALLED PLANTS, LAWNS, AND GRASS AREAS FROM DAMAGE AT ALL TIMES. DAMAGED PLANTS, LAWNS OR GRASS AREAS SHALL BE REPLACED OR TREATED AS REQUIRED TO CONFORM TO SPECIFICATIONS HEREIN FOR FRESH STOCK. WORK AREA SHALL BE KEPT CLEAN AND ORDERLY DURING THE INSTALLATION PERIOD. UNDER NO CONDITION SHALL DEBRIS FROM PLANTING ACTIVITIES RESULT IN A SAFETY HAZARD ON-SITE OR ADJACENT OFF-SITE PROPERTY. DAMAGE TO SITE IMPROVEMENTS OR ADJACENT LANDSCAPES INCURRED AS A RESULT OF PLANTING OR REPLACEMENT OPERATIONS SHALL BE REPAIRED BY THE CONTRACTOR THAT CAUSES THE DAMAGE AT NO COST TO THE OWNER.
- 6. EXAMINE AREAS TO RECEIVE PLANTS FOR COMPLIANCE WITH REQUIREMENTS AND CONDITIONS AFFECTING INSTALLATION AND PERFORMANCE. PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.
- 6.1. VERIFY THAT NO FOREIGN OR DELETERIOUS MATERIAL OR LIQUID SUCH AS PAINT, PAINT WASHOUT, CONCRETE SLURRY, CONCRETE LAYERS OR CHUNKS, CEMENT, PLASTER, OILS, GASOLINE, DIESEL FUEL, PAINT THINNER, TURPENTINE, TAR, ROOFING COMPOUND, OR ACID HAS BEEN DEPOSITED IN SOIL WITHIN PLANTING AREAS.
- 6.2. DO NOT MIX OR PLACE SOILS IN FROZEN, WET, OR MUDDY CONDITIONS.

#### PLANTING DELIVERY, STORAGE, & HANDLING:

- BULK MATERIALS;
- 1.1. DO NOT DUMP OR STORE BULK MATERIALS NEAR STRUCTURES, UTILITIES, WALKWAYS AND PAVEMENTS, OR ON EXISTING TURF AREAS OR PLANTS.
- 2. DO NOT PRUNE TREES AND SHRUBS BEFORE DELIVERY. PROTECT BARK, BRANCHES, AND ROOT SYSTEMS FROM SUN SCALD, DRYING, WIND BURN, SWEATING, WHIPPING, AND OTHER HANDLING AND TYING DAMAGE. DO NOT BEND OR BIND-TIE TREES OR SHRUBS IN SUCH A MANNER AS TO DESTROY THEIR NATURAL SHAPE. PROVIDE PROTECTIVE COVERING OF PLANTS DURING SHIPPING AND DELIVERY. DO NOT DROP PLANTS DURING DELIVERY AND HANDLING.
- HANDLE PLANTING STOCK BY ROOT BALL.
- 4. DELIVER PLANTS AFTER PREPARATIONS FOR PLANTING HAVE BEEN COMPLETED AND INSTALL IMMEDIATELY. IF PLANTING IS DELAYED MORE THAN SIX HOURS AFTER DELIVERY, SET PLANTS AND TREES IN SHADED LOCATION, PROTECT FROM WEATHER AND MECHANICAL DAMAGE, AND KEEP ROOTS MOIST.
- 4.1. SET BALLED STOCK ON GROUND AND COVER BALL WITH SOIL, PEAT MOSS, SAWDUST, OR OTHER ACCEPTABLE MATERIAL.
- 4.2. WATER ROOT SYSTEMS OF PLANTS STORED ON-SITE DEEPLY AND THOROUGHLY WITH A FINE-MIST SPRAY. WATER AS OFTEN AS NECESSARY TO MAINTAIN ROOT SYSTEMS IN A MOIST, BUT NOT OVERLY WET CONDITION.

#### **EXCAVATION FOR TREES & SHRUBS**

- EXCAVATE CIRCULAR PLANTING PITS AS INDICATED IN DRAWINGS. TRIM PERIMETER OF BOTTOM LEAVING CENTER AREA OF BOTTOM RAISED SLIGHTLY TO SUPPORT ROOT BALL AND ASSIST IN DRAINAGE AWAY FROM CENTER. DO NOT FURTHER DISTURB BASE. ENSURE THAT ROOT BALL WILL SIT ON UNDISTURBED BASE SOIL TO PREVENT SETTLING. SCARIFY SIDES OF PLANTING PIT SMEARED OR SMOOTHED DURING EXCAVATION.
- 1.1. EXCAVATE APPROXIMATELY THREE TIMES AS WIDE AS BALL DIAMETER FOR BALLED AND BURLAPPED STOCK.
- 1.2. DO NOT EXCAVATE DEEPER THAN DEPTH OF THE ROOT BALL, MEASURED FROM THE ROOT FLARE TO THE BOTTOM OF THE ROOT BALL
- IF AREA UNDER THE PLANT WAS INITIALLY DUG TOO DEEP, ADD SOIL TO RAISE IT TO CORRECT LEVEL AND THOROUGHLY TAMP THE ADDED SOIL TO PREVENT SETTLING.
- MAINTAIN REQUIRED ANGELS OF REPOSE OF ADJACENT MATERIALS AS SHOWN IN DRAWINGS. DO NOT EXCAVATE SUBGRADES OF ADJACENT PAVING, STRUCTURES, HARDSCAPES, OR OTHER NEW OR EXISTING IMPROVEMENTS.
- MAINTAIN SUPERVISION OF EXCAVATIONS DURING WORKING HOURS.
- KEEP EXCAVATIONS COVERED OR OTHERWISE PROTECTED WHEN UNATTENDED BY
- 2. SUBSOIL AND TOPSOIL REMOVED FROM EXCAVATIONS MAY BE USED AS PLANTING SOIL IF THEY CONFORM TO THE REQUIREMENTS LISTED IN THESE SPECIFICATIONS.
- 3. NOTIFY OWNER'S PROJECT REPRESENTATIVE IF UNEXPECTED ROCK OR OBSTRUCTIONS DETRIMENTAL TO TREES OR SHRUBS ARE ENCOUNTERED IN EXCAVATIONS.
- 4. NOTIFY OWNER'S PROJECT REPRESENTATIVE IF SUBSOIL CONDITIONS EVIDENCE UNEXPECTED WATER SEEPAGE OR RETENTION IN TREE OR SHRUB PLANTING PITS.

#### TREE & SHRUB PLANTING

- 1. BEFORE PLANTING VERIFY THAT ROOT FLARE IS VISIBLE AT TOP OF ROOT BALL. IF ROOT FLARE IS NOT VISIBLE, REMOVE SOIL IN A LEVEL MANNER FROM THE ROOT BALL TO WHERE THE TOP-MOST ROOT EMERGES FROM THE TRUNK. AFTER SOIL REMOVAL TO EXPOSE ROOT FLARE, VERIFY THAT ROOT BALL STILL MEETS SIZE REQUIREMENTS. PLANT MATERIAL WITHOUT ROOT FLARE VISIBLE OR PLANTED TOO LOW WILL BE RE-PLANTED AT THE REQUEST OF THE LANDSCAPE ARCHITECT AT NO ADDITIONAL COST TO THE OWNER.
- 2. PLANTS FOUND TO HAVE STEM GIRDLING ROOTS AND/OR KINKED ROOTS AT THE TIME OF PLANTING WILL BE REJECTED AND REPLACEMENTS SHALL BE PROVIDED AT NO ADDITIONAL COST
- 3. REMOVE ALL TWINE, STRING, WIRE, AND ALL OTHER NON-BIODEGRADABLE MATERIAL ENTIRELY
- 4. REMOVE ONLY DEAD, DYING, OR BROKEN BRANCHES. DO NOT PRUNE FOR SHAPE. DO CUT TREE
- 5. SET BALLED AND BURLAPPED STOCK PLUMB AND IN CENTER OF PLANTING PIT OR TRENCH WITH
- ROOT FLARE 2 INCHES ABOVE ADJACENT FINISH GRADES. 5.1. USE SOIL MATERIALS FROM EXCAVATION FOR BACKFILL
- CAREFULLY CUT AND REMOVE BURLAP, ROPE, AND WIRE BASKETS FROM THE ENTIRE ROOT BALL. REMOVE PALLETS, IF ANY, BEFORE SETTING. DO NOT USE PLANTING STOCK IF ROOT BALL IS CRACKED OR BROKEN BEFORE OR DURING PLANTING OPERATION.
- 5.3. BACKFILL AROUND ROOT BALL IN LAYERS, TAMPING TO SETTLE SOIL AND ELIMINATE VOIDS AND AIR POCKETS. WHEN PLANTING PIT IS APPROXIMATELY ONE-HALF FILLED, WATER THOROUGHLY BEFORE PLACING REMAINDER OF BACKFILL. REPEAT WATERING UNTIL NO MORE WATER IS ABSORBED.
- 5.4. CONTINUE BACKFILLING PROCESS. WATER AGAIN AFTER PLACING AND TAMPING FINAL LAYER

#### TREE & SHRUB MATERIAL:

- 1. GENERAL: FURNISH NURSERY-GROWN PLANTS TRUE TO GENUS, SPECIES, VARIETY, CULTIVAR, STEM FORM, SHEARING, AND OTHER FEATURES INDICATED IN PLANT SCHEDULE SHOWN AND DRAWINGS.; AND WITH HEALTHY ROOT SYSTEMS DEVELOPED BY TRANSPLANTING OR ROOT PRUNING. PROVIDE WELL-SHAPED, FULLY BRANCHED, HEALTHY, VIGOROUS STOCK, DENSELY FOLIATED WHEN IN LEAF AND FREE OF DISEASE, PESTS, EGGS, LARVAE, AND DEFECTS SUCH AS KNOTS, SUN SCALD, INJURIES, ABRASIONS, AND DISFIGUREMENT.
- 1.1. TREES WITH DAMAGED, CROOKED, OR MULTIPLE LEADERS; TIGHT VERTICAL BRANCHES WHERE BARK IS SQUEEZED BETWEEN TWO BRANCHES OR BETWEEN BRANCH AND TRUNK ("INCLUDED BARK"); CROSSING TRUNKS; CUT-OFF LIMBS MORE THAN \(\frac{3}{4}\)" IN DIAMETER; OR WITH STEM GIRDLING ROOTS WILL BE REJECTED.
- 1.2. COLLECTED STOCK: DO NOT USE PLANTS HARVESTED FROM THE WILD, FROM NATIVE STANDS, FROM AN ESTABLISHED LANDSCAPE PLANTING, OR NOT GROWN IN A STATE CERTIFIED
- 1.3. PLANT MATERIAL SHALL BE PROVIDED IN THE CONTAINER TYPE INDICATED IN THE DRAWINGS (B&B, CONTAINER, BARE ROOT, ETC.), UNLESS THE CONTRACTOR RECEIVES WRITTEN APPROVAL FROM THE LANDSCAPE ARCHITECT THAT SUBSTITUTION OF CONTAINER TYPE IS
- 2. FURNISH TREES WITH ROOT BALLS MEASURED FROM TOP OF ROOT BALL. ROOT FLARE SHALL BE VISIBLE BEFORE PLANTING.
- 3. SELECT STOCK FOR UNIFORM HEIGHT AND SPREAD.

PLANTING SOIL SHALL BE PLACED IN ONE CONTINUOUS VOLUME FOR THE WIDTH OF LANDSCAPE AREAS, AND A MINIMUM OF 3X THE DIAMETER OF THE ROOT BALL LENGTHWISE

2. DO NOT APPLY PLANTING SOIL TO SATURATED OR FROZEN SUBGRADES.

INSTALL PLANTING SOIL FOR PLANT BEDS IN 6" LIFTS, MINIMUM 8" DEPTH.

- 3. PLANTING SOIL SHALL BE A MIX OF 6-PARTS TOPSOIL. 1-PART COMPOST (APPROVED FOR USE ON THE PROJECT). THOROUGHLY BLEND PLANTING SOIL OFF-SITE BEFORE SPREADING.
- 3.1. THE PROJECT WILL ACCEPT ONLY CLEAN, SALVAGED OR IMPORTED TOPSOIL CAPABLE OF PASSING THE 1" SIEVE, FREE OF ROCKS, DEBRIS, AND OF NOXIOUS WEEDS.
- STRIPPED, SALVAGED, OR MINED TOPSOIL MUST BE TAKEN FROM THE TOP 6-INCHES OF THE A-HORIZON, HAVING A DARK BROWN TO BLACK COLOR WITH A GRANULAR STRUCTURE AND CLAY CONTENT OF LESS THAN 25%, VERIFIED WITH A RIBBON TEST THAT YIELDS NO MORE THAN 1-INCH.

### METAL EDGING

- 1. STANDARD PROFILE, COMMERCIAL-GRADE, EXTRUDED ALUMINUM EDGING, FABRICATED IN STANDARD LENGTHS WITH INTERLOCKING SECTIONS WITH LOOPS STAMPED FROM FACE OF SECTIONS TO RECEIVE STAKES.
- 1.1. BASIS OF DESIGN: CLEANLINE XL BY PERMALOC OR APPROVED EQUAL
- EDGING SIZE: 3/16-INCH-WIDE BY 5 INCHES DEEP 1.3. STAKES: ALUMINUM, ASTM 221, ALLOY 6061-T6, 18-INCHES LONG.
- 1.4. FINISH: MILL (NATURAL ALUMINUM)
  - MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, AVAILABLE MANUFACTURERS OFFERING PRODUCTS THAT MAY BE INCORPORATED INTO THE WORK INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWING: CURV-RITE, INC., PERMALOC CORPORATION, RUSSELL, J.D. COMPANY (THE), SURE-LOC EDGING CORPORATION
- INSTALL METAL EDGE IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.
- 3. ENSURE THAT METAL EDGING IS PROPERLY INSTALLED AND SECURED BEFORE INSTALLING STONE

#### STONE MULCH MATERIAL & INSTALLATION:

- 1. SHALL BE HARD, DURABLE, STONE, WASHED FREE OF LOAM, SAND, CLAY, AND OTHER FOREIGN SUBSTANCES, OF THE FOLLOWING TYPE, SIZE RANGE, AND COLOR:
- 1.1. MATERIAL: ANGULAR WASHED STONE.
- SIZE: 1-1/2" DIAMETER 1.3. DEPTH: 3" MINIMUM DEPTH PLACED IN ONE LIFT
- 1.4. COLOR RANGE: BLEND OF DARK GREY & BLUE TONES
- 1.5. BASIS OF DESIGN: 1-1/2" 'AMERICAN HERITAGE' AGGREGATE BY COUNTY MATERIALS.
- 2. LIGHTLY COMPACT AREAS TO RECEIVE STONE MULCH
- 3. INSTALL WEED BARRIER FABRIC IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS; COMPLETELY COVER AREA TO BE MULCHED, OVERLAPPING EDGES OF FABRIC LENGTHS A MINIMUM OF 6-INCHES AND SECURING SEAMS WITH GALVANIZED PINS. WEED BARRIER FABRIC SHALL BE WRAPPED VERTICALLY UP THE OUTSIDE EDGES OF SURROUNDING CONCRETE FLATWORK OR CURB AND SECURED IN PLACE. HOLD FABRIC 2" CLEAR OF TOP OF ADJACENT CURB AND CONCRETE FLATWORK SO IT IS NOT VISIBLE FROM SURFACE.
- 4. PLACE AND FINISH STONE MULCH AS INDICATED IN DRAWINGS, ENSURING A SMOOTH, LEVEL TOP SURFACE FOR ALL STONE MULCH AREAS HELD APPROXIMATELY 1/2" BELOW THE TOP SURFACE OF ADJACENT PAVED AREAS OR METAL EDGING.

### BARK MULCH MATERIAL & INSTALLATION

- TWICE-SHREDDED HARDWOOD BARK MULCH TO BE PROVIDED AS TOP-DRESSING FOR ALL AT-GRADE PLANTING BEDS IN LOCATIONS INDICATED ON PLANTING PLANS.
- 1.1. SIZE RANGE: MAXIMUM 2.5" TO 3"
- COLOR: NATURAL, UN-DYED
- PROVIDE 3" DEPTH MULCH FOR ALL PLANTING BEDS INDICATED AS BARK MULCH PLANTING BED.
- 2. KEEP BARK MULCH 2" CLEAR OF ALL STEMS OF PLANT MATERIAL

#### TURF SEEDING:

- 1.1. DELIVER PACKAGED SEED MATERIALS IN ORIGINAL, UNOPENED CONTAINERS LABELED AS TO NAME AND ADDRESS OF SUPPLIER; SPECIFIC BLEND OF SEED; AND INDICATION OF CONFORMANCE WITH STATE AND FEDERAL LAWS, AS APPLICABLE.
- PROJECT CONDITIONS
- 2.1. SEED DURING ONE OF THE FOLLOWING PERIODS.
- 2.1.1. SPRING SEEDING SEASON: APRIL 1 TO JUNE 15. 2.1.2. FALL SEEDING SEASON: AUGUST 15 TO OCTOBER 1.
- 3.0.1. PROVIDE THE FOLLOWING FOR TURFGRASS SEED BASIS OF DESIGN: REINDEERS DELUXE 50 SEED
- MIX OR APPROVED EQUAL TURFGRASS SEED MIX TO BE FERTILIZED WITH 'SCOTT'S STARTER FERTILIZER' BY THE 'SCOTTS
- MIRACLE-GRO COMPANY' OR APPROVED EQUAL
- 4. PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN MET 5. REMOVE ANY AND ALL UNDESIRABLE VEGETATION THAT HAS GERMINATED IN THE AREAS TO BE SEEDED OR
- SODDED. CONTRACTOR SHALL EVALUATE THE USE OF A BROAD SPECTRUM, NON-PERSISTENT GLYSOPHATE-BASED HERBICIDE BASED ON SITE CONDITIONS.
- 5.1. DO NOT APPLY SEED UNTIL FIVE TO SEVEN DAYS AFTER LAST HERBICIDE TREATMENT 6. FINISH GRADING: GRADE AREAS TO A SMOOTH, UNIFORM SURFACE PLANE WITH LOOSE, UNIFORMLY FINE

TEXTURE. GRADE TO WITHIN PLUS OR MINUS  $rac{1}{2}$  INCH OF FINISH ELEVATION. ROLL AND RAKE, REMOVE RIDGES,

IMMEDIATELY SEEDED AND STABILIZED WITH EROSION CONTROL MATERIAL 7. MOISTEN PREPARED AREA BEFORE SEEDING IF SOIL IS DRY. WATER THOROUGHLY AND ALLOW SURFACE DRY BEFORE SEEDING OR SODDING. DO NOT CREATE MUDDY SOIL.

AND FILL DEPRESSIONS TO MEET FINISH GRADES. LIMIT FINISH GRADING TO AREAS THAT CAN BE

8. NO SEEDING SHALL OCCUR ON FROZEN GROUND OR AT TEMPERATURES LOWER THAN 32 DEGREES FARENHEIT OR IN THE FOLLOWING 5 DAYS AFTER PLANNED SEEDING OR SODDING.

9. SEEDING RATES TO BE PERFORMED IN ACCORDANCE WITH SEED SUPPLIER RECOMMENDATIONS.

### NATIVE SEEDING:

- PROVIDE THE FOLLOWING SEED TYPES FROM: AGRECOL LLC 10101 N. CASEY ROAD EVANSVILLE, WISCONSIN 53536:
- AGRECOL'S 'XXXXXX' MIX' FOR AREAS SHOWN AS 'XXXXXXX SEED MIX'
- AGRECOL'S 'XXXXXX' SEED MIX' FOR AREAS SHOWN AS 'XXXXXXXXX SEED MIX'
- REFER TO DETAIL XXXXXX ON SHEET L2XX, FOR SEED MIX COMPOSITION.
- REFER TO CIVIL PLANS FOR LOCATIONS AND EXTENTS OF EROSION CONTROL MAT. IN GENERAL, PROVIDE CURLEX NET FREE FOR SEEDED AREAS WITH SLOPES OF 4:1 OR LESS AND CURLEX II EROSION CONTROL MAT IN ALL OTHER SEEDED AREAS. PROVIDE MANUFACTURER'S STANDARD BIODEGRADABLE ANCHORING STAKES (OR ALTERNATIVE SOURCE FOR BIODEGRADABLE STAKES, IF APPROVED IN WRITING BY OWNER'S REPRESENTATIVE). INSTALL PER MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS.
- WITHIN 4 WEEKS FOLLOWING THE ISSUANCE OF THE NOTICE TO PROCEED, SUBMIT NAME AND LOCATION OF SEED SUPPLIER(S) AND A COMPLETE LIST OF EACH SEED MIX BY WEIGHT AND PROPORTION THAT IS BEING SUPPLIED BEFORE THE SEED MIX IS ORDERED. SUBSTITUTIONS WILL NOT BE PERMITTED. PROVIDE GEOGRAPHIC ORIGINS OF EACH SEED SPECIES.
- 4. ALL SEED MATERIAL SHALL ORIGINATE FROM LOCAL SOURCES TO THE EXTENT POSSIBLE, SPECIFICALLY FROM USDA PLANT HARDINESS ZONE 4 OR LOWER.
- ALL SEEDING ZONE BOUNDARIES SHALL BE SURVEYED AND STAKED ON THE PROJECT SITE BY THE CONTRACTOR. NO SEED MIX SHALL BE INSTALLED UNTIL THE GRADE PREPARATION AND LAYOUT HAVE BEEN APPROVED.
- THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO ADJUST SEED LIMITS WITHOUT ADJUSTING TOTAL SEEDED AREAS, TO MEET FIELD CONDITIONS, AT NO ADDITIONAL COST TO THE OWNER.
- 7. COORDINATION IS REQUIRED TO ENSURE RAINFALL/GROUNDWATER SEEPAGE DOES NOT RESULT IN SOIL MOISTURE CONDITIONS THAT WILL CAUSE EXCESSIVE RUTTING DURING SEEDING AND MULCHING OPERATIONS. FAILURE TO MEET THIS REQUIREMENT WILL NOT BE AN ACCEPTABLE REASON FOR NOT INSTALLING THE SEED AS SPECIFIED.
- 8. WHERE SEEDING OCCURS IN CLOSE PROXIMITY TO OTHER SITE IMPROVEMENTS OR AREAS TO REMAIN UNDISTURBED SUCH AS EXISTING WETLANDS AND UPLANDS AREAS, CARE SHALL BE TAKEN TO NOT DISTURB THE EXISTING CONDITIONS. ANY AREAS DAMAGED DURING PLANTING OPERATIONS SHALL BE PROMPTLY RESTORED TO THEIR ORIGINAL CONDITION AT NO COST TO THE
- FOLLOWING NATIVE SEED MIX INSTALLATION, THE LANDSCAPE ARCHITECT AND CONTRACTOR SHALL CONDUCT A SUBSTANTIAL COMPLETION INSPECTION ON ALL SEEDED AREAS. (SEE WARRANTY, MAINTENANCE AND ACCEPTANCE PERIOD)

### 10. GENERAL INSTALLATION:

- 10.1. SEEDING OF NATIVE SEED MIXES SHALL OCCUR IN THE EARLY SPRING:
- 10.1.1. APRIL 15 THROUGH MAY 31. 10.2. DO NOT SOW SEED DURING ADVERSE WEATHER OR WHEN WIND SPEEDS EXCEED TEN MILES
- DO NOT SOW SEED IN AREAS WHERE STANDING WATER IS PRESENT.
- 11. GRADE PREPARATION: SUBGRADE AND FINISH GRADE PREPARATION SHALL BE IN ACCORDANCE WITH SITE EARTHWORK REQUIREMENTS, AND TOPSOIL SHALL BE A MINIMUM 4 INCHES DEEP IN
- NON-BIORETENTION AREAS AFTER LIGHT COMPACTION TO PREVENT SETTLEMENT. BIORETENTION AREAS SHALL HAVE SOIL MIX PLACED PER DETAIL 11.2. PRIOR TO SEEDING, REPAIR ANY RUTS, RILLS, OR GULLIES GREATER THAN 2 INCHES IN DEPTH
- TO CREATE SMOOTH CONTINUOUS GRADES. 11.3. IF THE PREPARED GRADE IS ERODED OR COMPACTED BY RAINFALL OR OTHER REASONS, REWORK THE TOPSOIL TO THE FULL 4-INCH DEPTH.
- IMMEDIATELY BEFORE SEEDING, SCARIFY, LOOSEN, FLOAT, AND DRAG TOPSOIL AS NECESSARY TO BRING IT TO THE PROPER CONDITION. REMOVE FOREIGN MATTER LARGER THAN 1-INCH
- 11.5. NO FURTHER GRADE PREPARATION IS REQUIRED. 12. IF REQUIRED DUE TO CONSTRUCTION SEQUENCING, SEED THE SITE WITH A TEMPORARY COVER CROP TO HOLD IT FOR SPRING SEEDING AS FOLLOWS:
- 12.1. IF SEEDED MAY 15 THROUGH SEPTEMBER 1: MIX OF 32 POUNDS PER ACRE OF SEED OATS
- (AVENA SATIVA) AND 5 POUNDS PER ACRE OF ANNUAL RYE (LOLLIUM MULTIFLORUM). IF SEEDED SEPTEMBER 1 THROUGH OCTOBER 15: 20 POUNDS PER ACRE WINTER WHEAT (TRITICUM AESTIVUM) OR REGREEN STERILE WHEAT/WHEATGRASS HYBRID (TRITICUM AESTIVUM X ELYTRIGIA ELONGATAFROM).

### 13. BROADCASTING

- 13.1. FOR SPRING SEEDING OF NATIVE SEED, SOW SEED DIRECTLY ONTO BARE GROUND OR GROUND WHERE THE PREVIOUS YEAR'S PLANT STUBBLE HAS BEEN CUT TO 2-INCH HEIGHT
- INCREASE THE VOLUME OF THE BROADCASTED SEED MIX BY MIXING IT WITH AN APPROVED CARRIER. ACCEPTABLE CARRIER MATERIAL INCLUDES MOISTENED COMPOST, PEAT MOSS, CORN COB BLAST MEDIA, OR COARSE-GRADE VERMICULITE. SAND AND SAWDUST ARE UNACCEPTABLE CARRIER MATERIALS. USE ONE BUSHEL BASKET OF CARRIER PER 1,000
- SQUARE FEET OF AREA TO BE SEEDED (A BUSHEL EQUALS 8 GALLONS OR 1.24 CUBIC FEET). USE HALF OF THE TOTAL SEED QUANTITY AND CROSS THE ENTIRE AREA TO BE SEEDED, EVENLY SPREADING THE SEED. WALK PERPENDICULAR TO THE ORIGINAL SEEDING AND
- EVENLY BROADCAST THE SECOND HALF OF THE SEED LIGHT SEEDS, AWNED SEEDS, OR BEARDED SEEDS TEND TO RISE TO THE TOP OF THE
- SPREADER, THEREFORE, MIX SEED ACCORDINGLY AS PLANTING COMMENCES. RAKE OR DRAG THE SEED INTO THE SOIL, BUT NOT MORE THAN 1/4-INCH DEEP. ROLL THE AREA WITH A ROLLER TO FIRM THE SEED INTO THE SOIL. ROLLING IS NOT NECESSARY ON

#### DORMANT SEEDINGS 14. DRILL SEEDER OR DROP SEEDER/SPREADER:

- 14.1. FOR SPRING DRILL SEEDING, SOW SEED DIRECTLY ONTO BARE GROUND OR GROUND WHERE THE PREVIOUS YEAR'S PLANT STUBBLE HAS BEEN CUT TO 2-INCH HEIGHT; FOR SPRING DROP SEEDING, CULTIVATE THE GROUND BEFORE INSTALLING SEED MIX.
- 14.2. CHECK THE EQUIPMENT FREQUENTLY TO ENSURE THE SEED IS DISPERSING EVENLY AND IS NOT CLOGGING.
- 14.3. IF THE EQUIPMENT IS NOT EQUIPPED WITH A ROLLER, PASS OVER THE SEEDED AREA WITH A ROLLER TO FIRM THE SEED INTO THE SOIL. ROLLING IS NOT NECESSARY WITH DORMANT

DISTURB SEED, SEEDLINGS, AND/OR TOPSOIL, OR THAT WOULD RUN OFF SOIL SURFACE.

- 14.3.1. DO NOT MIX THE NATIVE SEED WITH ANY CARRIER MATERIAL
- 14.3.2. EVENLY DISTRIBUTE THE SEED ACROSS THE ENTIRE SITE TO BE SEEDED. KEEP THE TOPSOIL MOIST (TO A DEPTH OF 3 INCHES) FOR 3-6 WEEKS FOLLOWING SEEDING: AFTERWARD, APPLY ONE INCH OF WATER DURING THE GROWING SEASON IF RAIN HAS NOT OCCURRED FOR MORE THAN ONE WEEK. DO NOT APPLY WATER WITH SUCH A FORCE AS TO

- 15. ALL AREAS OVER WHICH HAULING OPERATIONS HAVE BEEN CONDUCTED SHALL BE KEPT CLEAN ON A DAILY BASIS. PROMPTLY REMOVE ALL MATERIALS SPILLED ON PAVEMENT.
- 16. UPON COMPLETION OF SEED INSTALLATION, REMOVE FROM THE SITE AND LEGALLY DISPOSE OF ALL TRASH AND DEBRIS INCLUDING ANY MATERIAL REMOVED DURING GRADE PREPARATION.
- 17. RESTORE ANY EXISTING AREAS DAMAGED BY OPERATIONS UNDER THE CONTRACT. RESTORATION SHALL INCLUDE FINISH GRADING AND SEEDING AS REQUIRED TO MATCH EXISTING GRADE AND/OR
- 18. ANY DAMAGE BY THE CONTRACTOR TO ESTABLISHED OR NEWLY SEEDED AREAS NOT WITHIN THE PROJECT SCOPE OF WORK SHALL BE REPAIRED AND RESEEDED AT NO COST TO THE OWNER.

#### **CLEAN-UP AND PROTECTION**

- 1. DURING PLANTING, KEEP ADJACENT PAVING AND CONSTRUCTION CLEAN AND WORK AREA IN AN ORDERLY CONDITION.
- PROTECT PLANTS FROM DAMAGE DUE TO LANDSCAPE OPERATIONS AND OPERATIONS OF OTHER CONTRACTORS AND TRADES. MAINTAIN PROTECTION DURING INSTALLATION. TREAT, REPAIR, OR REPLACE DAMAGED PLANTINGS.
- AFTER INSTALLATION REMOVE ALL NURSERY TAGS, NURSERY STAKES, TIE TAPE, LABELS, WIRE, STRING, AND OTHER DEBRIS FROM PLANT MATERIAL, PLANTING AREAS, AND PROJECT SITE.

#### **VEGETATION MONITORING AND MANAGEMENT**

WETLANDS, AND MAINTENANCE OF RESTORED AREAS.

#### MANAGEMENT AND MONITORING:

THE MANAGEMENT AND MONITORING OF NATIVE PLANTINGS (INCLUDING SEED MIXES FORBS AND PLUGS) SHOULD BE DIRECTED TOWARD THE GOAL OF CREATING A STABLE, NATIVE PLANT COMMUNITY. INVASIVE AND WEEDY PLANT SPECIES WILL NEED TO BE CONTROLLED UNTIL THE DESIRED NATIVE PLANT COMMUNITIES ARE ESTABLISHED. THIS TYPICALLY WILL TAKE THREE (3) TO FIVE (5) YEARS AFTER SOWING OR PLUG INSTALLATION.

#### UNDESIRABLE PLANT CONTROL:

OVERALL MANAGEMENT OF VEGETATED AREAS MAY INCLUDE, BUT ARE NOT LIMITED TO: RESEEDING OR REPLANTING DAMAGED OR NON-ACTIVE GROWTH AREAS, IRRIGATION, STRATEGIC MOWING TO REDUCE WEED COVER AND PREVENT WEED SEED SET, REMOVAL OF TREE SEEDLINGS, TARGETED HERBICIDE APPLICATION(S), AND MECHANICAL WEED CONTROL (HAND PULLING AND SEED HEAD REMOVAL). SELECTED HERBICIDE APPLICATIONS SHOULD BE DONE SPARINGLY AND ONLY WHEN NECESSARY. SELECTION OF HERBICIDE FOR USE MUST CONSIDER THE PROXIMITY TO THE WATERWAY, IN COMPLIANCE WITH STATE AND APPLICABLE FEDERAL LAW.

#### SHORT-TERM VEGETATION MANAGEMENT:

SHORT-TERM VEGETATION MANAGEMENT (MAINTENANCE PERIOD AFTER SEEDING/PLUG INSTALLATION) OCCURS WHILE THE LANDSCAPE CONTRACTOR OR SPECIALTY SEEDING/ RESTORATION CONTRACTOR IS RESPONSIBLE TO THE PROJECT OWNER FOR THE GUARANTEE OF ALL PLANTINGS TO BE ALIVE AND IN VIGOROUS GROWING CONDITIONS. SEEDING SHOULD ACHIEVE AN AVERAGE OF 80% VEGETATION COVERAGE FROM SPECIFIED SEED MIXES. IF UNSATISFACTORY PLANTS ARE FOUND ON SITE, THEY SHOULD BE REPLACED BY THE LANDSCAPE CONTRACTOR OF SPECIALTY SEEDING/RESTORATION CONTRACTOR DURING THE FIRST MONTH OF THE NEXT FAVORABLE PLANTING SEASON. SUPPLEMENTAL SEEDING WILL BE NEEDED TO FILL IN BARE SPOTS WHERE NATIVE SEED GERMINATION IS POOR. IT IS ALSO THE LANDSCAPE CONTRACTOR / SPECIALTY SEEDING/RESTORATION CONTRACTOR'S RESPONSIBILITY TO ELIMINATE ALL NOXIOUS WEED GROWTH FROM THE SITE DURING THIS GUARANTEE PERIOD.

INSPECTIONS SHOULD BE MADE FREQUENTLY DURING THE GROWING SEASON TO PROPERLY DOCUMENT ANY INVASIVE SPECIES, WEEDS, DEHYDRATION, DAMAGE, EROSION, DISEASES, BARE AREAS, AND PESTS. THE NECESSARY REPAIRS, TREATMENTS, SEEDING AND PLANTING SHOULD BE DONE AS SOON AS WEATHER CONDITIONS ARE APPROPRIATE. THE INSPECTIONS AND SUBSEQUENT ACTIONS SHOULD BE PROPERLY DOCUMENTED AND GRAPHICALLY IDENTIFIED ON THE APPROVED LANDSCAPE PLAN FOR THE PROJECT.

### LONG TERM VEGETATION MANAGEMENT:

LONG-TERM MANAGEMENT (AFTER MAINTENANCE AGREEMENT ENDS) WILL BE THE RESPONSIBILITY OF THE PROJECT OWNER/MANAGEMENT ASSOCIATION. LONG-TERM VEGETATION MANAGEMENT TASKS WILL INCLUDE MOWING, RESEEDING OR REPLANTING DAMAGED AREAS, REMOVAL OF TREE SEEDLINGS, TARGETED HERBICIDE APPLICATION AND MECHANICAL WEED CONTROL (HAND-PULLING AND SEED HEAD REMOVAL) AND REPAIR OF EROSION AREAS. SELECTIVE HERBICIDE APPLICATIONS SHOULD BE DONE SPARINGLY. INSPECTIONS SHOULD BE MADE FREQUENTLY DURING THE GROWING SEASON TO IDENTIFY ANY INVASIVE SPECIES, WEEDS, DEHYDRATION DAMAGE, EROSION. DISEASES, BARE AREAS, AND PESTS. THE NECESSARY REPAIRS, TREATMENTS, SEEDING AND PLANTING SHOULD BE DONE AS SOON AS WEATHER AND GROWING CONDITIONS ARE APPROPRIATE.

**MOWING FREQUENCIES:** MOWING FREQUENCIES WILL DEPEND ON FIELD CONDITIONS. THE NATIVE SEEDLING/GRASS AREAS SHOULD NEVER BE MOWED SHORTER THAN SIX (6) INCHES. GROWTH OF THE VEGETATION ALONG THE WATER'S EDGE (WHERE APPLICABLE) WILL PROVIDE BANK STABILIZATION. THE VEGETATION SHOULD PREVENT NUISANCE LEVELS OF GEESE IN WATERWAYS, WHICH WOULD ADD TO THE NUTRIENT LEVEL IN THE WATER AND FURTHER DEGRADE THE WATER QUALITY. IN ADDITION, THE GROUND SLOPE ABOVE NORMAL WATER ELEVATION SHOULD PROVIDE GOOD DRAINAGE OF THE SURFACE SOILS REDUCE PONDING, AND THUS MOSQUITO HABITAT. THE NATIVE VEGETATION WILL PROVIDE HABITAT CONDUCIVE TO THE BREEDING AND ESTABLISHMENT OF EFFECTIVE

MOWING SHOULD BE DONE THREE (3) TIMES DURING THE ESTABLISHMENT PERIOD:

	ACTIVITY	TIMING	SUGGESTED MOWING HEIGHTS	REASON	
	FIRST MOWING	LATE MAY- EARLY JUNE	NO LESS THAN (6) INCHES	TARGET EARLY WEEDS	
SI	ECOND MOWING	EARLY AUGUST	NO LESS THAN (12) INCHES	CONTROL WARM SEASON WEED GROWTH	
-	THIRD MOWING	LATE OCTOBER		VEGETATION SHOULD BE	

MOWING TIMES ARE APPROXIMATE; ACTUAL MOWING TIMES SHOULD BE BASED ON THE GROWTH OF NATURAL GRASSES AND UNDESIRABLE WEEDS.

AFTER THE DESIRED VEGETATION HAS BECOME ESTABLISHED THE FIRST AND SECOND MOWINGS (MAY, AUGUST) MAY NOT BE NECESSARY. THE THIRD MOWING (OCTOBER),

#### HOWEVER, SHOULD BE DONE ANNUALLY BURNING (IF APPROPRIATE FOR SITE):

MOSQUITO PREDATORS SUCH AS DRAGONFLIES.

PRIOR TO BURNING, CONTACT WITH THE LOCAL MUNICIPALITY / FIRE DEPARTMENT IS REQUIRED. SOME MUNICIPALITIES MAY HAVE RESTRICTIONS ON OPEN BURNING, OR ONLY ALLOW SUCH PRACTICES AT CERTAIN TIMES. ADDITIONALLY, A PERMIT TO BURN MAY BE REQUIRED IN SOME MUNICIPALITIES. THE SUPERVISING CREW SHOULD BE COMPRISED OF EXPERIENCED PROFESSIONALS WHO ARE TRAINED AND CERTIFIED IN THESE TYPES OF PRESCRIBED BURNS.

IF ALLOWED BY LOCAL CODE AND ORDINANCES, ONLY BURN WHEN THE DEAD VEGETATION MATTER CAN SUSTAIN FIRE. WET OR DAMP PLANT MATTER IS NOT EFFECTIVE IN A CONTROL BURN SETTING. IT MAY TAKE UP TO THREE (3) YEARS FOR A NEWLY PLANTED PRAIRIE TO HAVE ENOUGH "FUEL" TO STAGE AN EFFETIVE CONTROLLED

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PROJECT NO: 21775 **DESIGN DATE:** PLOT DATE: 10/13/2023 DRAWN BY: CHECKED BY: APPROVED BY: | CTC

I:\Land By Label\21775 Poths General - 76th-Rawson\060 CAD\030 Production Sheets\400 Landscape\L300 Landscape Specifications.dwg









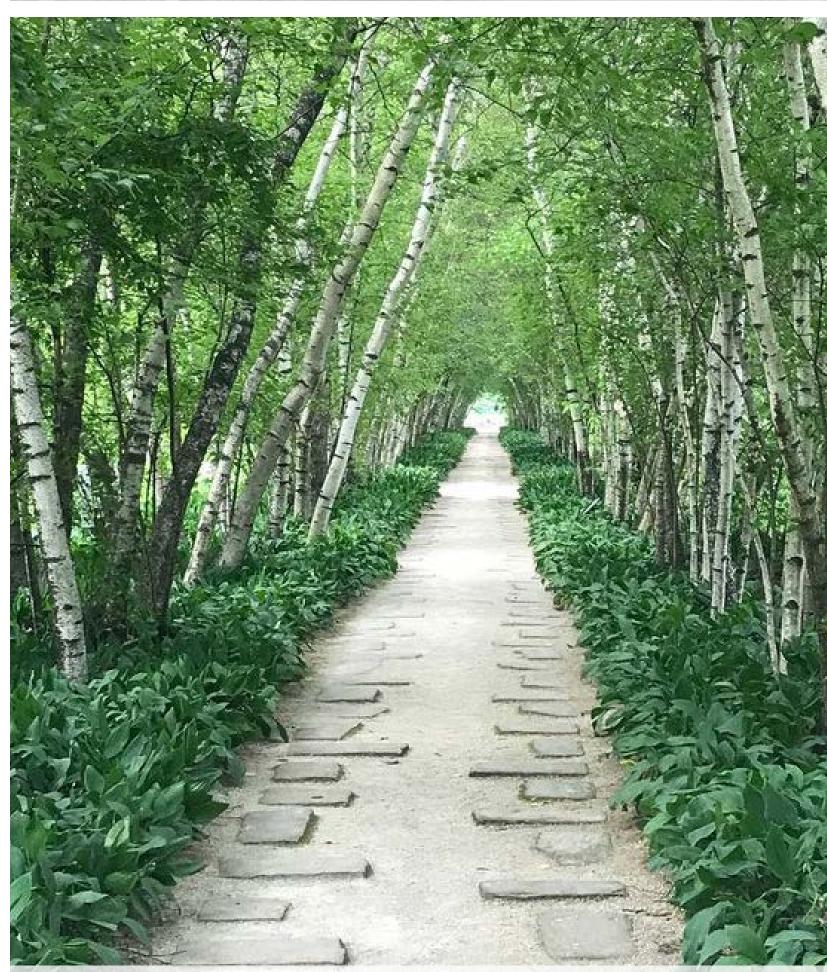




TEXTURAL PLANTINGS







GROUNDCOVER WITH TREE ALLEE

# LANDSCAPE DESIGN INTENT

ALLEE OF UPRIGHT TREES







TEXTURAL PLANTINGS

AMPHITHEATER LANDSCAPE BACKDROP

ORNAMENTAL GRASS MASS PLANTINGS







FOOD TRUCK PLAZA ELEVATED PLANTERS

OUTDOOR AMPHITHEATER OPPORTUNITIES

