



**PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM
REQUEST FOR QUOTATION**

PROJECT: (P16-023) Speidell Native Seeding Project-**REVISED**
LOCATION: PRRIP Property 2015001
NEAR: Kearney, Nebraska
REQUEST DATE: December 14, 2016
SITE SHOWING: December 21, 2016 – 2:00 pm central time
CLOSING DATE: January 11, 2017 – 5:00 pm central time
POINT OF CONTACT: Tim R. Tunnell
Headwaters Corporation
4111 4th Ave, Suite 6
Kearney, NE 68845
tunnellt@headwaterscorp.com

The undersigned acknowledges receipt of the following plans and specifications:

- # 1 () Cover Sheet
- # 2 () Site Layout Map
- # 3 () East Seeding Area Map
- # 4 () West Seeding Area Map
- # 5 () Mesic Site Species List
- # 6 () Sandy Upland Site Species List
- # 7 () Wetland Site Species List

Please circle method of planting: Drilling; Broadcast; Other; _____

Please circle seed mix type: Local-ecotype; Commercial;



SEED MIX GUIDELINES:

Mesic mix: 4.45 PLS lbs. Grass /Acre
0.86 PLS lbs. Forbs/Acre
5.31 PLS lbs. Total/ Acre

Sandy mix: 3.61 PLS lbs. Grass/Acre
0.92 PLS lbs. Forbs/Acre
4.53 PLS lbs. Total/Acre

Wetland mix: 2.91 PLS lbs. Grass/Acre
0.19 PLS lbs. Forbs/Acre
3.095 PLS lbs. Total/Acre

Please provide a short narrative on your intended approach to planting the areas:



The Contractor is required to submit quotes for all work Items below.

Item No.	Description	Unit	Estimated Quantity	Quote Unit Price	Quote Price
001	Mobilization	LS	1	\$ N/A	\$
001	Sandy Upland Seed Mix	AC	12	\$	\$
002	Wetland Seed Mix	AC	5	\$	\$
003	Central Mesic Seed Mix-East	AC	16	\$	\$
004	Seedbed Preparation- East	AC	33	\$	\$
005	Planting (Drilling or broadcast)- East	AC	33	\$	\$
006	Central Mesic Seed Mix-West	AC	24	\$	\$
007	Seedbed Preparation- West	AC	24	\$	\$
008	Planting (Drilling or broadcast)-West	AC	24	\$	\$

TOTAL QUOTE PRICE _____

_____ dollars (\$))

WORK COMPLETION DATE: _____

Submitted by: _____
(Company)

(Individual – Print)

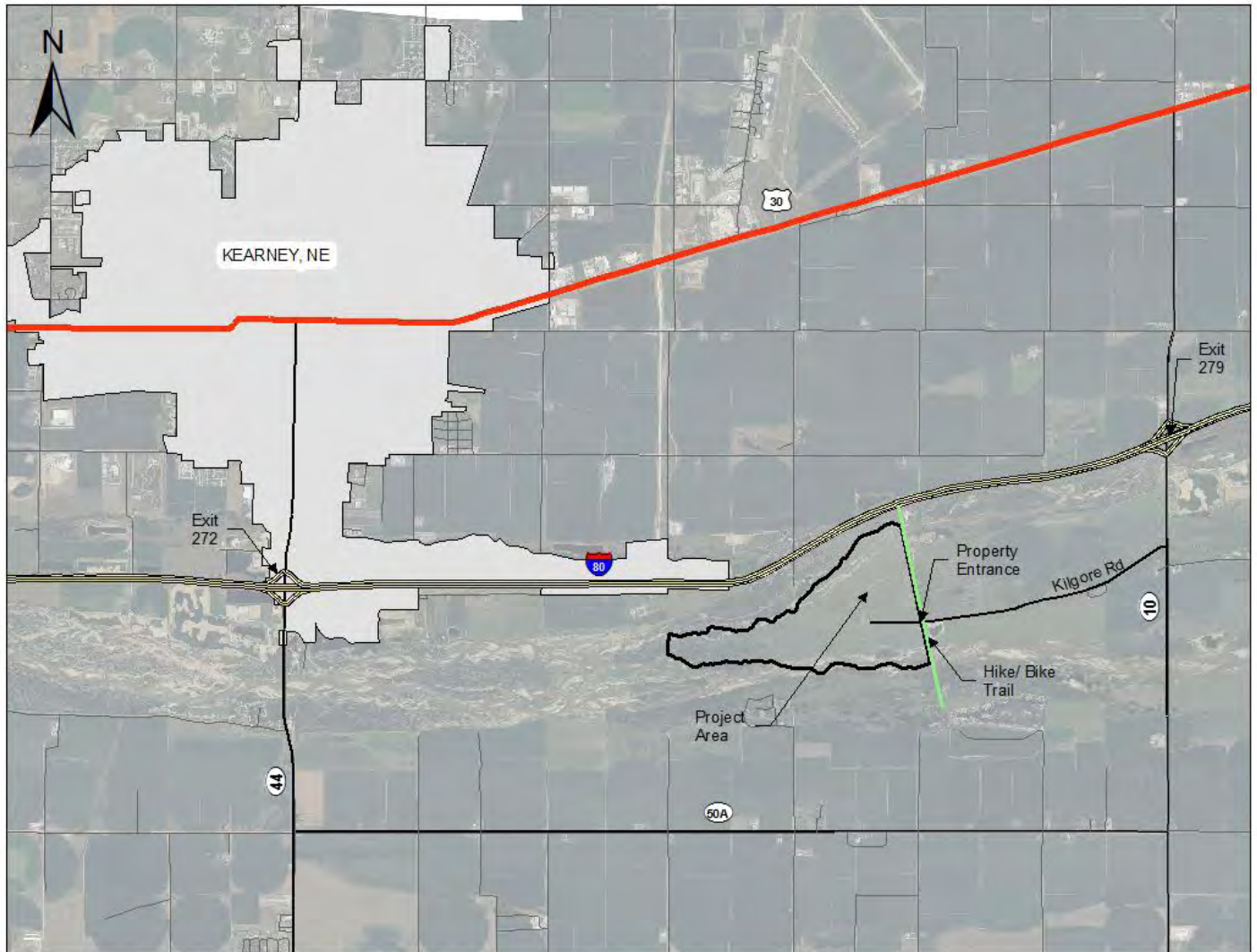
(Sign/Date)

Directions to Pre-Bid Meeting

Date and Time: Wednesday, December 21, 2016 at 2:00 PM CT

Location: Ft Kearny Complex – Speidell Tract

Map: Access property from Kilgore Rd west of Highway 10.



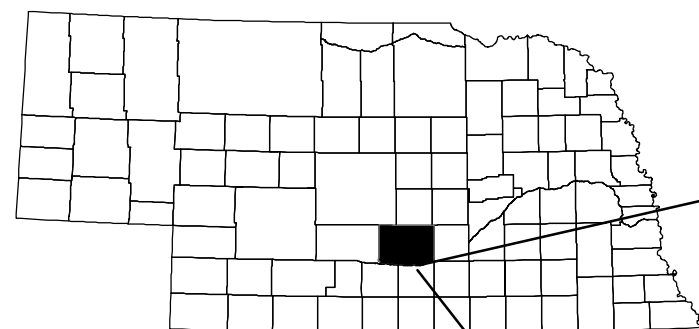
From I-80 Exit 279 (Minden Exit):

Travel south on Highway 10, turn west onto Kilgore Rd, travel 2.0 miles to property entrance at cattle guard west of Hike/Bike Trail. Project area is 0.25 miles NW of property entrance.

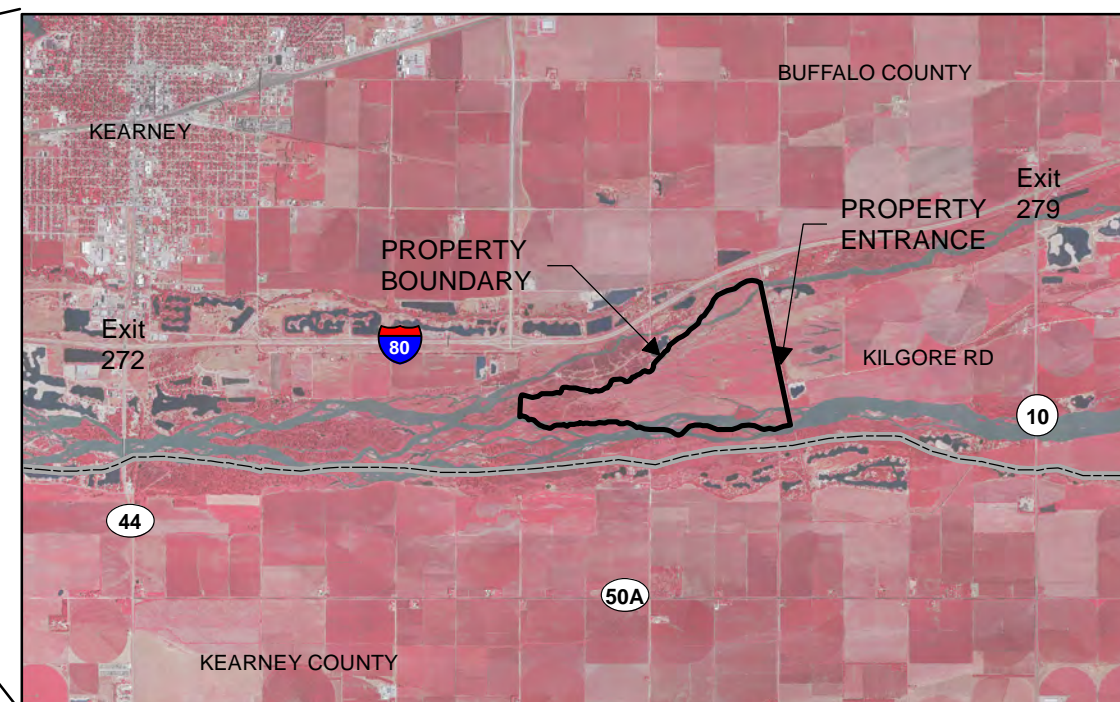
ITEM	DESCRIPTION	UNITS	PRELIM QUANTS	FINAL QUANTS
001	MOBILIZATION	LS	1	
002	EAST SEEDING AREAS	AC	33	
003	WEST SEEDING AREA	AC	24	

PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM

SPEIDELL NATIVE SEEDING IN BUFFALO COUNTY, NE



**PROJECT
LOCATION**



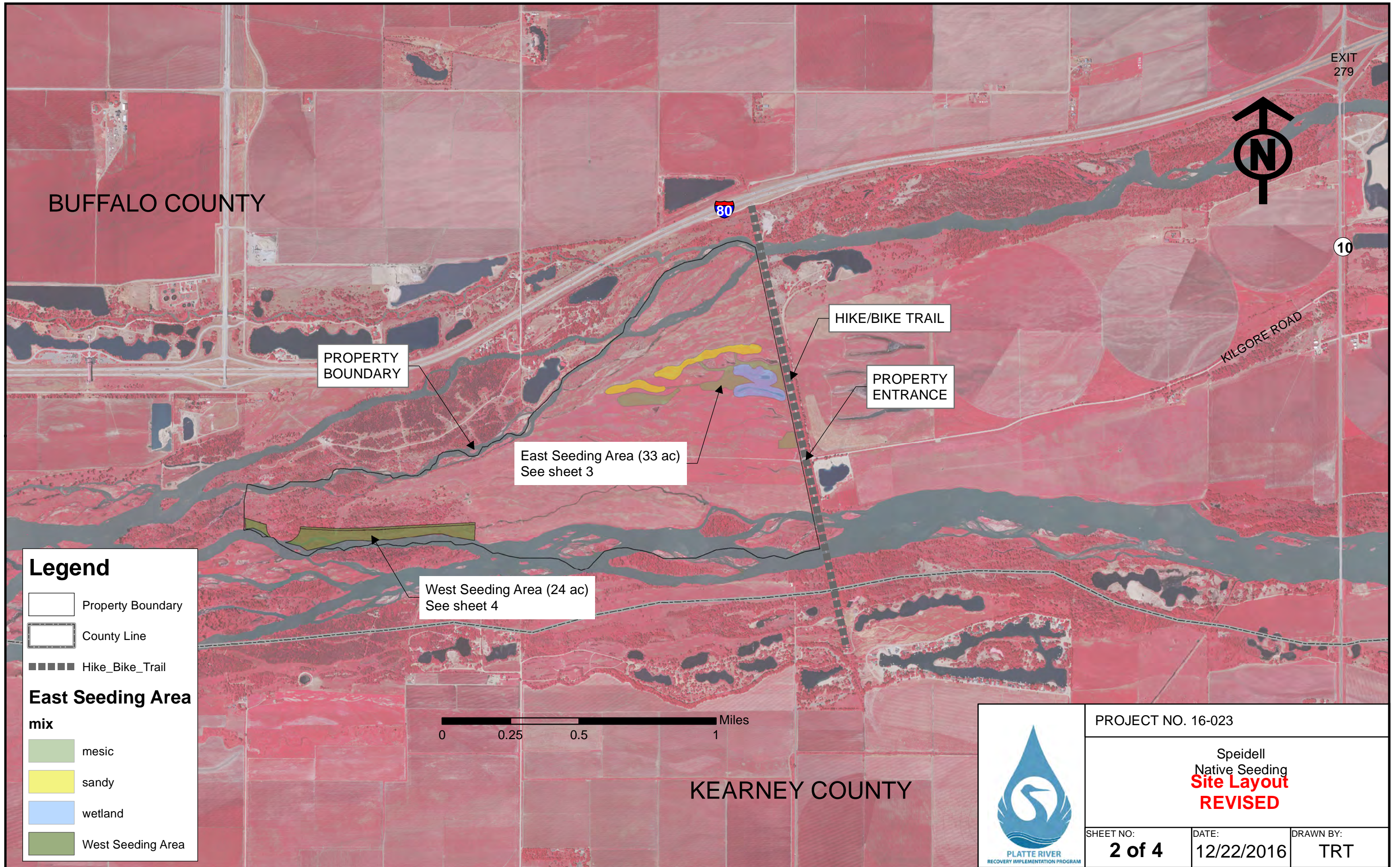
INDEX

- 1 COVER SHEET
- 2 SITE LAYOUT
- 3 EAST SEEDING AREAS
- 4 WEST SEEDING AREA

CAUTION

The Platte River Recovery Implementation Program will not be responsible for, or liable for, unauthorized changes to, or uses of these plans. All changes to the plans must be in writing and must be approved by the Program.

<p>PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM</p>	PROJECT NO. 16-023		
	Speidell Native Seeding COVER SHEET REVISED		
	SHEET NO: 1 of 4	DATE: 12/22/2016	DRAWN BY: TRT



BUFFALO COUNTY

EXIT 279



80

10

KILGORE ROAD

PROPERTY BOUNDARY




HIKE/BIKE TRAIL

PROPERTY ENTRANCE


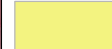
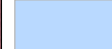

East Seeding Area (33 ac)
See sheet 3

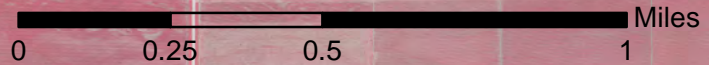
West Seeding Area (24 ac)
See sheet 4

Legend

-  Property Boundary
-  County Line
-  Hike_Bike_Trail

East Seeding Area

- mix**
-  mesic
 -  sandy
 -  wetland
 -  West Seeding Area



KEARNEY COUNTY



PROJECT NO. 16-023		
Speidell Native Seeding Site Layout REVISED		
SHEET NO: 2 of 4	DATE: 12/22/2016	DRAWN BY: TRT

BUFFALO COUNTY



Sandy Upland Seeding area
(Approx 8 acres)

Sandy Upland Seeding area
(Approx 4 acres)

Central Mesic Seeding area
(Approx 9 acres)

Wetland Seeding area
(Approx 5 acres)

Central Mesic Seeding area
(Approx 5 acres)

Central Mesic Seeding area
(Approx 2 acres)

Legend

Property Boundary

mix

wetland - 5 acres

mesic - 16 acres

sandy - 12 acres

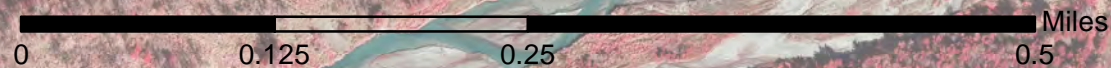


PROJECT NO. 16-023		
Speidell Native Seeding East Seeding Area REVISED		
SHEET NO: 3 of 4	DATE: 12/22/2016	DRAWN BY: TRT



BUFFALO COUNTY




Central Mesic Seeding area
(Approx 24 acres)



Legend

-  Property Boundary
-  West Seeding Area

	PROJECT NO. 16-023		
	Speidell Native Seeding West Seeding Area		
SHEET NO: 4 of 4	DATE: 12/13/2016	DRAWN BY: TRT	

Mesic Site Species List

Mesic Site (31 species)

GRASSES

Big Bluestem	<i>Andropogon gerardi</i>
Side-oats Grama	<i>Bouteloua curtipendula</i>
Canada Wildrye	<i>Elymus canadensis</i>
Slender Wheatgrass	<i>Elymus trachycaulus (Agropyron caninum)</i>
Switchgrass	<i>Panicum virgatum</i>
Indiangrass	<i>Sorghastrum avenaceum</i>
Prairie Wedgegrass	<i>Sphenophilis obtusata</i>
Prairie Dropseed	<i>Sporobolus heterolepis</i>
Little Bluestem	<i>Schizachrium scoparium</i>

SEDGES

Fescue Sedge	<i>Carex brevior</i>
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RUSHES

Inland Rush	<i>Juncus interior</i>
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FORBS

Yarrow	<i>Achillea millefolium</i>
Canada Milkvetch	<i>Astragalus canadensis</i>
Plains Yellow-primrose	<i>Calylophus serrulatus</i>
White Prairie Clover	<i>Dalea candidum</i>
Purple Prairie Clover	<i>Dalea purpurea</i>
Illinois Bundleflower	<i>Desmanthus illinoisensis</i>
Tall Boneset	<i>Eupatorium altissimum</i>
Wild Licorice	<i>Glycyrrhiza lepidota</i>
Maximillian Sunflower	<i>Helianthus maximilliani</i>
Stiff sunflower	<i>Helianthus pauciflorus (H. rigidus)</i>
Roundheaded bushclover	<i>Lespedeza capitata</i>
Horse Mint	<i>Monarda fistulosa</i>
Common Evening Primrose	<i>Oenothera villosa</i>
Upright Prairie Coneflower	<i>Ratibida columnifera</i>
Prairie Wild Rose	<i>Rosa arkansana</i>
Black-eyed Susan	<i>Rudbeckia hirta</i>
Prairie ragwort	<i>Senecio plattensis</i>
Entire-leaf Rosinweed	<i>Silphium integrifolium</i>
Rigid Goldenrod	<i>Solidago rigidus</i>
Heath Aster	<i>Symphotrichum ericoides (Aster ericoides)</i>
Long-bracted Spiderwort	<i>Tradescantia bracteata</i>

Mesic Site Species List

Additional Grass Species:

Porcupine grass	<i>Hesperostipa spartea</i> (<i>Stipa</i> s.)
Junegrass	<i>Koeleria macrantha</i> (<i>K. pyramidata</i>)
Scribner's Spring Panicum	<i>Panicum oligosanthes</i>
Tall Dropseed	<i>Sporobolus compositus</i> (<i>S. asper</i>)

Additional Sedge Species:

Bicknell's Sedge	<i>Carex bicknellii</i>
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Additional Forb Species:

Wild Garlic	<i>Allium canadense</i>
Leadplant	<i>Amorpha canescens</i>
Meadow Anemone	<i>Anemone canadensis</i>
Candle Anemone	<i>Anemone cylindrica</i>
Field Pussytoes	<i>Antennaria neglecta</i>
Hemp Dogbane	<i>Apocynum cannabinum</i>
White Sage	<i>Artemisia ludoviciana</i>
Narrowleaf Milkweed	<i>Asclepias stenophylla</i>
Butterfly Weed	<i>Asclepias tuberosa</i> ssp. <i>Interior</i>
Whorled Milkweed	<i>Asclepias verticillata</i>
Short Green Milkweed	<i>Asclepias viridiflora</i>
Spider milkweed	<i>Asclepias viridis</i>
Ground-plum	<i>Astragalus crassicaarpus</i>
Plains Wild Indigo	<i>Baptisia bracteata</i>
False Boneset	<i>Brickellia eupatorioides</i>
Pale Poppy Mallow	<i>Callirhoe alcaeoides</i>
Redroot New Jersey Tea	<i>Ceanothus herbaceus</i>
Partridge Pea	<i>Chamaecrista fasciculata</i> (<i>Cassia chamaecrista</i>)
Bastard Toadflx	<i>Comandra umbellata</i>
Prairie Larkspur	<i>Delphinium carolinianum</i> (<i>D. virescens</i>)
Canada Tick-clover	<i>Desmodium canadense</i>
Purple Coneflower	<i>Echinacea angustifolia</i>
Flowering Spurge	<i>Euphorbia corollata</i>
Small-flowered guara	<i>Gaura mollis</i> (<i>G. parviflora</i>)
Downy Gentian	<i>Gentia puberulenta</i>
False Sunflower	<i>Heliopsis helianthoides</i>
Longbeard Hawkweed	<i>Hieracium longipilum</i>
Rough gayfeather	<i>Liatris aspera</i>
Dotted gayfeather	<i>Liatris punctata</i>
Grooved Yellow Flax	<i>Linum sulcatum</i>
Prairie Trefoil	<i>Lotus unifoliolatus</i> (<i>L. purshianus</i>)
Wild Four-o'clock	<i>Mirabilis nyctaginea</i>
False Gromwell	<i>Onosmodium molle</i>
Violet Wood Sorrel	<i>Oxalis violacea</i>
Silver-leaf Scurf Pea	<i>Pedimelum argophyllum</i> (<i>Psoralea</i> a.)
Prairie Turnip	<i>Pedimelum esculentum</i> (<i>Psoralea</i> e.)
Shell-leaf Penstemon	<i>Penstemon grandiflorus</i>
Prairie Phlox	<i>Phlox pilosa</i> ssp. <i>Fulgida</i>
Praire Cinquefoil	<i>Potentilla arguta</i>
Slender-flower Scurfpea	<i>Psoralidium tenuiflorum</i> (<i>Psoralea tenuiflora</i>)
Compass plant	<i>Silphium laciniatum</i>
Prairie Blue-eyed grass	<i>Sisyrinchium campestre</i>

Mesic Site Species List

Canada Goldenrod
Late Goldenrod
Missouri Goldenroad
Smooth Blue Aster
American Germander
Purple Meadow Rue
Western ironweed
Prairie Violet
Golden Alexander

Solidago canadensis
Solidago gigantea
Solidago missouriensis
Symphotrichum laeve (Aster laevis)
Teucrium canadense
Thalictrum dasycarpum
Veronia baldwinii
Viola pedatifida
Zizia aurea

Sandy Upland Species List

Sandy/Upland Site (34 species)

GRASSES

Big Bluestem	<i>Andropogon gerardi</i>
Side-oats Grama	<i>Bouteloua curtipendula</i>
Blue Grama	<i>Bouteloua gracilis</i>
Prairie Sandreed	<i>Calamovilfa longifolia</i>
Sand Lovegrass	<i>Eragrostis trichodes</i>
Six-weeks Fescue	<i>Festuca octoflora</i>
Switchgrass	<i>Panicum virgatum</i>
Indiangrass	<i>Sorghastrum avenaceum</i>
Tall Dropseed	<i>Sporobolus asper</i>
Sand Dropseed	<i>Sporobolus cryptandrus</i>
Needle & Thread	<i>Stipa comata</i>
Porcupine Grass	<i>Stipa spartea</i>
Little Bluestem	<i>Schizachrium scoparium</i>

SEDGES

Fescue Sedge	<i>Carex brevior</i>
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FORBS

Leadplant	<i>Amorpha canadensis</i>
Purple Poppymallow	<i>Callirhoe involucrata</i>
Serrate-leaf Primrose	<i>Calylophus serrulatus</i>
Rocky Mountain Bee Pl	<i>Cleome serrulata</i>
White Prairie Clover	<i>Dalea candidum</i>
Purple Prairie Clover	<i>Dalea purpurea</i>
Illinois Tickclover	<i>Desmodium illinoisensis</i>
Rigid Sunflower	<i>Helianthus laetiflorus</i>
Petioled Sunflower	<i>Helianthus petiolaris</i>
Roundheaded bushclo	<i>Lespedeza capitata</i>
Gayfeather	<i>Liatris squarrosa</i>
Prairie Trefoil	<i>Lotus unifoliolatus (Lotus purshianus)</i>
Fourpoint Evening-pr	<i>Oenothera rhombipetala</i>
Shell-leaf Penstemon	<i>Penstemon grandiflorus</i>
Upright Prairie Coneflo	<i>Ratibida columnifera</i>
Prairie Wild Rose	<i>Rosa arkansana</i>
Black-eyed Susan	<i>Rudbeckia hirta</i>
Catsclaw Sensitivebria	<i>Schrankia nuttallii</i>
Rigid Goldenrod	<i>Solidago rigidus</i>
Western Spiderwort	<i>Tradescantia occidentale</i>

Sandy Upland Species List

Additional Grass Species:

Sand bluestem	<i>Andropogon hallii</i>
Hairy grama	<i>Bouteloua hirsuta</i>
Purple lovegrass	<i>Eragrostis spectabilis</i>
Junegrass	<i>Koeleria macrantha (K. pyramidata)</i>
Sand muhly	<i>Muhlenbergia pungens</i>
Scribners Spring Panicum	<i>Panicum oligosanthos</i>
Slender Paspalum	<i>Paspalum setaceum</i>

Additional Sedge Species:

Sun sedge	<i>Carex heliophila</i>
Great plains Flatsedge	<i>Cyperus lupulinus</i>
Sand Flatsedge	<i>Cyperus schweinitzii</i>

Additional Forb Species:

Western sagewort	<i>Artemisia campestris</i>
White sage	<i>Artemisia ludoviciana</i>
Wooly milkweed	<i>Asclepias lanuginosa</i>
Narrowleaf milkweed	<i>Asclepias stenophylla</i>
Short Green Milkweed	<i>Asclepias viridiflora</i>
False Boneset	<i>Brickellia eupatorioides</i>
Reroot New Jersey Tea	<i>Ceanothus herbaceus</i>
Platte Thistle	<i>Cirsium canescens</i>
Bastard Toadflax	<i>Comandra umbellata</i>
Texas croton	<i>Croton texensis</i>
Silky Prairie-clover	<i>Dalea villosa</i>
Annual Wild Buckwheat	<i>Eriogonum annuum</i>
Large Cottonweed	<i>Froelichia floridana</i>
Hairy Golden-aster	<i>Heterotheca villosa (Chrysopsis villosa)</i>
Showy Vetchling	<i>Lathyrus polymorphus</i>
Hairy Puccoon	<i>Lithospermum carolinense</i>
Fringed Puccoon	<i>Lithospermum incisum</i>
Skeleton Plant	<i>Lygodesmia juncea</i>
Cutleaf Ironplant	<i>Machaeranthera pinnatifida (Haplopappus spinulosus)</i>
Pale Four-o'clock	<i>Mirabilis albida (including M. hirsuta)</i>
False Gromwell	<i>Onosmodium molle</i>
White Beardtongue	<i>Penstemon albidus</i>
Narrow Beardtongue	<i>Penstemon angustifolius</i>
Slender Beardtongue	<i>Penstemon gracilis</i>
Lemon Scurf Pea	<i>Psoralidium lanceolatum (Psoralea l.)</i>
Wild Begonia	<i>Rumex venosus</i>
Prairie Ragwort	<i>Senecio plattensis</i>
Missouri Goldenrod	<i>Solidago missouriensis</i>
Soft Goldenrod	<i>Solidago mollis</i>
Aromatic Aster	<i>Symphotrichum oblongifolium (Aster o.)</i>
Soapweed	<i>Yucca glauca</i>

Wetland Species List

Wet Site (23 species)

GRASSES

Northern Reedgrass
Slender Wheatgrass
Virginia Wildrye
Switchgrass
Cordgrass
Prairie Wedgegrass

Calamogrostis stricta
Elymus trachycaulus
Elymus virginianus
Panicum virgatum
Spartina pectinata
Sphenophilis obtusata

SEDGES

Fescue Sedge (Shortbeak sedge)
Emory's Sedge
Heavy Sedge (wetland variety)
Wooly Sedge
Broom Sedge
Fox Sedge

Carex brevior
Carex emoryii
Carex gravida
Carex pellita (C. lanuginosa)
Carex scoparia
Carex vulpinoidea

RUSHES

Prairie Bulrush
Spikerush
Dudley's Rush
Torrey's Rush
Dark Green Bulrush

Bolboschoenus maritimus
Eliocharis elliptica
Juncus dudleyii
Juncus torreyii
Scirpus atrovirens

FORBS

Plains Coreopsis
Sneezeweed
Sawtooth Sunflower
Lanceleaf Gayfeather
Blue Vervain
Western Ironweed

Coreopsis tinctoria
Helenium autumnale
Helianthus grosseserratus
Liatris lancifolia
Verbena hastata
Vernonia fasciculatum

Wetland Species List

Additional Grass Species:

Big blustem	<i>Andropogon gerardii</i>
Blue Joint	<i>Calamagrostis canadensis</i>
Canada Wildrye	<i>Elymus canadensis</i>
Western Wheatgrass	<i>Elymus smithii</i> (<i>Agropyron s.</i>)
Little Bluestem	<i>Schizachyrium scoparium</i>
Indiangrass	<i>Sorghastrum nutans</i>
Sand dropseed	<i>Sporobolus cryptandrus</i>

Additional Sedge Species:

Sawbeak sedge	<i>Carex stipata</i>
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Additional Rush Species:

Bald Spikerush	<i>Eleocharis erythropoda</i>
Common Spikrush	<i>Eleocharis palustris</i> (<i>E. macrostachya</i>)
Three-square Bulrush	<i>Schoenoplectus pungens</i> (<i>Scirpus p.</i>)

Additional Forb Species:

Wild garlic	<i>Allium canadense</i>
Meadow Anemone	<i>Anemone canadensis</i>
Swamp Milkweed	<i>Asclepias incarnata</i>
Showy Milkweed	<i>Asclepias speciosa</i>
Prairie Milkweed	<i>Asclepias sullivantii</i>
Common water hemlock	<i>Cicuta maculata</i>
Illinois Bundleflower	<i>Desmanthus illinoensis</i>
Canada tickclover	<i>Desmodium canadense</i>
Cinnamon Willow Herb	<i>Epilobium coloratum</i>
Spotted Joe Pye Weed	<i>Eupatorium maculatum</i>
Common Boneset	<i>Eupatorium perfoliatum</i>
Hairy Fimbry	<i>Fimbristylis puberula</i>
Yellow Avens	<i>Geum aleppicum</i>
Wild Licorice	<i>Glycyrrhiza lepidota</i>
Maximillian Sunflower	<i>Helianthus maximilianii</i>
Jerusalem Artichoke	<i>Helianthus tuberosus</i>
False Sunflower	<i>Heliopsis helianthoides</i>
Yellow Star Grass	<i>Hypoxis hirsuta</i>
Great Blue Lobelia	<i>Lobelia siphilitica</i>
Pale Spiked Lobelia	<i>Lobelia spicata</i>
Common Water Horehound	<i>Lycopus americanus</i>
Western Water Horehound	<i>Lycopus asper</i>
Fringed Yellow-loostrife	<i>Lysimachia ciliata</i>
Tufted Yellow-loosestrife	<i>Lysimachia thyrsoiflora</i>
Winged loosestrife	<i>Lythrum alatum</i>
Field mint	<i>Mentha arvensis</i>
Foxglove penstemon	<i>Penstemon digitalis</i>
Self-heal	<i>Prunella vulgaris</i>
Virginia Mountain-mint	<i>Pycnanthemum virginicum</i>
Black-eyed Susan	<i>Rudbeckia hirta</i>
Golden-glow	<i>Rudbeckia laciniata</i>
Marsh Skullcap	<i>Scutellaria galericulata</i>
Rosinweed	<i>Silphium integrifolium</i>
Cup Plant	<i>Silphium perfoliatum</i>
Compass-plant	<i>Silphium laciniatum</i>
Canada Goldenrod	<i>Solidago canadensis</i>
Late Goldenrod	<i>Solidago gigantea</i>

Wetland Species List

Common Hedge Nettle
Panicled Aster
New England Aster
Willowleaf Aster
American Germander
Purple Meadow Rue
Blue Vervain

Stachys pilosa (*S. palustris*)
Symphyotrichum lanceolatum (*Aster simplex*)
Symphyotrichum novae-angliae (*Aster n.*)
Symphyotrichum praealtum (*Aster praealtus*)
Teucrium canadense
Thalictrum dasycarpum
Verbena hastata