

Seeding Plan

CATEGORY OF POST MINING LAND USE		SUB-CATEGORY	LAND COVER		DEVELOPMENT DENSITY/INTENSITY	PUBLIC ACCESS/USE
Wildlife Habitat/Conservancy	Terrestrial		Grassland/Prairie		No Residential, Commercial, or Industrial Development	No Public Use -vs- Defined Public Use
	Mixed		Grassland/Prairie/Forest Savannah			
	Aquatic		Wet/Sedge Meadow			
			Shallow ponded/Deep Ponded			
Agricultural	Ag Production		Cultivated cropland; Row Crop		No Development	No Public Use -vs- Defined Public Use
			Cultivated Cropland; Forage Based		Non-Irrigated	
			Pasture		Irrigated	
			Other			
Forest	Forest Production		Even aged species		No Development	No Public Use -vs- Defined Public Use
			Mixed aged species		Low Density	
Residential	Ag/Forest Residential				Low Density	Defined Dev. Plan
	Res Subdivision				Med. Density	
Commercial					High Density	
	Light				Low Intensity	Defined Dev. Plan
Industrial	Heavy				Med. Intensity	
					High Intensity	
Institutional					Low Intensity	Defined Dev. Plan
	Public Inst.				Med. Intensity	
	Private Inst.				High Intensity	
Any other land use category that may currently or potentially apply to the subject mine site, as defined in an approved comprehensive plan or zoning ordinance.						

MIX 1 - PASTURE

Common Name	Scientific Name	Lb./Ac.*	Price/Lb.	Price
Timothy	<i>Phleum pratense</i>	4	\$ 1.50	\$ 6.00
Tall Fescue	<i>Festuca arundinaceae</i>	5	\$ 1.50	\$ 7.50
Canada Wild Rye	<i>Elymus canadensis</i>	3	\$ 12.00	\$ 36.00
Agricultural Rye	<i>Secale cereale</i>	4.5	\$ 1.00	\$ 9.00
Alfalfa**	<i>Medicago sativa</i>	10	\$ 4.00	\$ 40.00
Alsike Clover**	<i>Trifolium hybridum</i>	4.5	\$ 2.00	\$ 9.00
Total		31 lbs.	Total	\$ 107.50

MIX 2 – STABILIZATION/WILDLIFE/GRAZING (Mix 3 would be suitable too)

Common Name	Scientific Name	Lb./Ac.*	Price/Lb.	Price
Agricultural Rye	<i>Secale cereale</i>	4	\$ 1.00	\$ 4.00
Timothy	<i>Phleum pratense</i>	2	\$ 1.50	\$ 3.00
Tall Fescue	<i>Festuca arundinaceae</i>	3	\$ 1.50	\$ 4.50
Switchgrass	<i>Panicum virgatum</i>	1	\$ 13.50	\$ 13.50
Big Bluestem	<i>Andropogon gerardi</i>	1	\$ 10.50	\$ 10.50
Canada Wild Rye	<i>Elymus canadensis</i>	3	\$ 12.00	\$ 36.00
Alsike Clover**	<i>Trifolium hybridum</i>	4	\$ 2.00	\$ 8.00
Red Clover**	<i>Trifolium repens</i>	4	\$ 2.00	\$ 8.00
Alfalfa**	<i>Medicago sativa</i>	5	\$ 4.00	\$ 20.00
Total		27 lbs.	Total	\$ 107.50

MIX 3 – NATIVE MIX FOR WILDLIFE/PASSIVE RECREATION

Common Name	Scientific Name	Unit	Unit/Ac.*	Price/Unit	Price
Big Bluestem	<i>Andropogon gerardi</i>	lb.	1	\$ 10.50	\$ 10.50
Canada Wild Rye	<i>Elymus canadensis</i>	lb.	3	\$ 12.00	\$ 36.00
Switchgrass	<i>Panicum virgatum</i>	lb.	1	\$ 13.50	\$ 13.50
Indiangrass	<i>Sorghastrum nutans</i>	lb.	3	\$ 16.00	\$ 48.00
Purple Prairie Clover**	<i>Dalea purpurea</i>	oz.	2	\$ 4.50	\$ 9.00
Canada Tick Trefoil**	<i>Desmodium canadensis</i>	oz.	5	\$ 20.75	\$ 103.75
New England Aster	<i>Aster novae angliae</i>	oz.	0.2	\$ 48.75	\$ 9.75
Purple Cone Flower	<i>Echinacea purpurea</i>	oz.	4	\$ 4.50	\$ 18.00
Dotted Mint**	<i>Monarda punctata</i>	oz.	4	\$ 51.25	\$ 205.00
Bergamot**	<i>Monarda fistulosa</i>	oz.	5	\$ 25.75	\$ 128.75
Yellow Coneflower	<i>Ratibida pinnata</i>	oz.	3	\$ 4.50	\$ 13.50
Blackeyed Susan	<i>Rudbeckia hirta</i>	oz.	0.5	\$ 3.00	\$ 1.50
Blue Vervain	<i>Verbena hastata</i>	oz.	1	\$ 6.75	\$ 6.75
Total		~9.5 lbs.	Total	\$ 604.00	

MIX 4 – WET SOILS/POND EDGE/WEDLAND AREA

Common Name	Scientific Name	Unit	Unit/Ac.*	Price/Unit	Price
Canada Wild Rye	<i>Elymus canadensis</i>	lb.	3	\$ 12.00	\$ 36.00
Switchgrass	<i>Panicum virgatum</i>	lb.	1	\$ 13.50	\$ 13.50
Timothy	<i>Phleum pratense</i>	lb.	2	\$ 1.50	\$ 3.00
Blue Joint Grass	<i>Calamagrotis canadensis</i>	oz.	3.2	\$ 56.25	\$ 180.00
Annual Oats	<i>Avena sativa</i>	lb.	8	\$ 2.00	\$ 16.00
Alsike Clover**	<i>Trifolium hybridum</i>	lb.	1	\$ 2.00	\$ 2.00
Red Clover**	<i>Trifolium repens</i>	lb.	1	\$ 2.00	\$ 2.00
Culver's Root	<i>Veronicastrum virginicum</i>	oz.	2	\$ 77.00	\$ 154.00
Canada Tick Trefoil**	<i>Desmodium canadensis</i>	oz.	5	\$ 20.75	\$ 103.75
Blackeyed Susan	<i>Rudbeckia hirta</i>	oz.	0.2	\$ 3.00	\$ 0.60
Smooth Aster	<i>Aster laevis</i>	oz.	2	\$ 48.75	\$ 97.50
New England Aster	<i>Aster novae angliae</i>	oz.	0.6	\$ 30.75	\$ 18.45
Joe Pye Weed	<i>Eupatorium maculatum</i>	oz.	1	\$ 36.00	\$ 36.00
		Total	~17 lbs.	Total	\$ 662.80

* Seeding rates assume broadcast seeding and may be multiplied by 0.5 to approximate rates if drilled.

** Denotes legumes, which must be inoculated according to the seed provider's instructions prior to seeding.

Pricing for native species found at Agrecol in 2012.

<http://www.agrecol.com>