

Prepared for: Rock Ridge Public High School

1403 PROGRESS PKWY VIRGINIA MN 55792

Property: 10.44

Section 29, Township 58, Range 17

Project acres: .163

7096 Square feet

Parcels #s

090-0194-00206

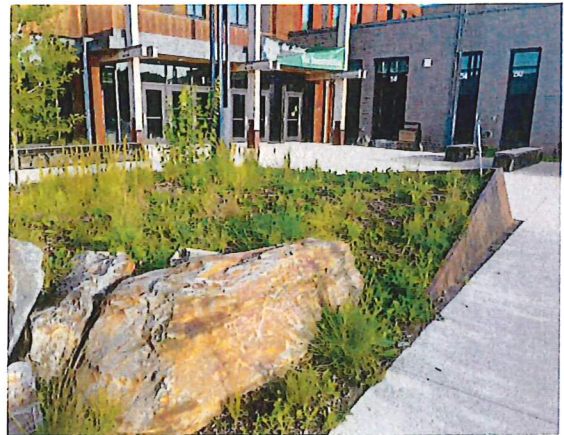
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Date: 4/07/2026



NRCS Practices:

Herbaceous Weed Treatment (315) – 0.163 acres

- Enhance accessibility, quantity, and/or quality of forage and/or browse.
- Restore or release native or desired plant communities for wildlife habitat.
- Control pervasive plant species to a desired level of treatment.

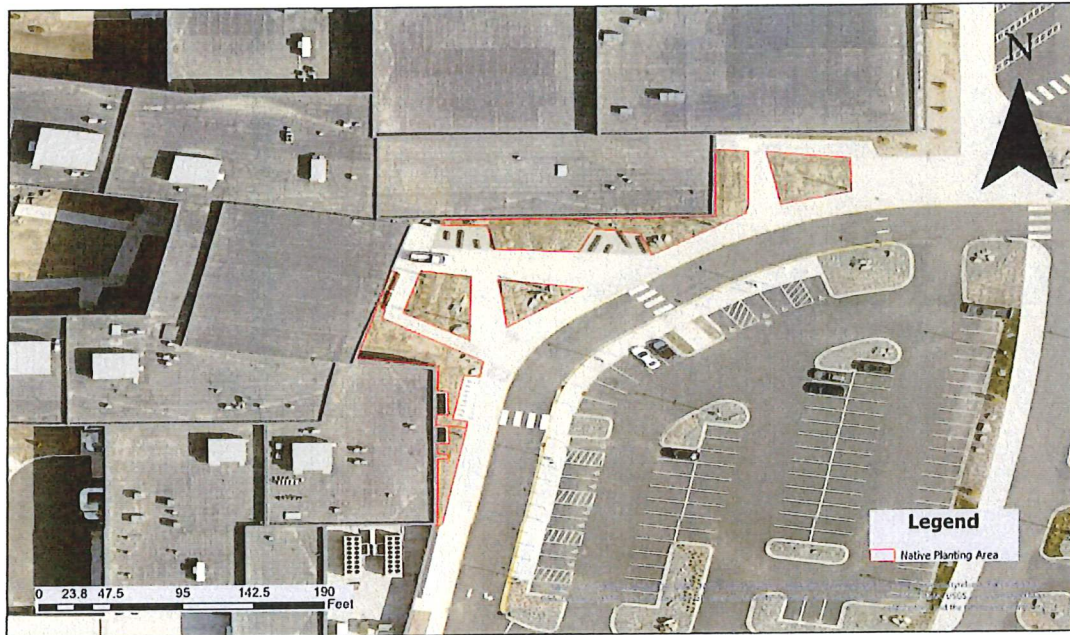
Conservation Cover (327) - 0.163 acres

- Enhance wildlife, pollinator, and beneficial organism habitat.
- Improve soil health.

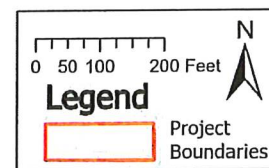
1403 Progress Parkway
Virginia MN, 55792
Section 29, Township 58, Range 17
Parcel #090-0194-00206

Rock Ridge High School Native Planting Improvement Project

327 - Conservation Cover
315 - Herbaceous Weed Treatment



All areas should be broadcast sprayed to treat herbaceous invasive species present throughout the project area. Care should be taken to preserve already established native wildflowers, grasses and shrubs. All trees should be preserved and anything within 2 feet of a tree should be hand pulled.



Property Description

The 10.44-acre property is located south of Virginia and north of downtown Eveleth. The project area is roughly 0.163 acres. The site includes several buildings and parking lots connected primarily by Progress Parkway, which serves as the main access road throughout the property. Prior to the construction of the new high school in 2020, the site was predominantly forested. The surrounding area remains largely forested, with a pond located to the north of the parcel. Previous landscaping efforts within the

project area incorporated a variety of native plant species, including Red-Osier Dogwood, Aspen, Sumac, Purple Coneflower, Rough Blazing Star, Big Bluestem, and Black-eyed Susan. However, non-native species are present in varying densities across the sites, including Common Tansy, Thistle, Birds foot Trefoil, and Hawkweed.

Soils Data

It appears that no present-day soils data are available through the Web Soil Survey for the project area. However, prior to construction of the new school, the site was mapped as consisting of variable loam soils. Currently, the project area is predominantly characterized as urban land due to development and construction activities impacting the soils.



Table 1. Summary and characteristics of the soil found throughout the rock ridge public school before construction began in 2020.

Map Unit Symbol	Map Unit Name	Slope (%)	Drainage Class	Typical Profile & Descriptions
F11B	Eagles Nest Stony Loam	2-8	Moderately Well Drained	<i>A - 0 to 3 inches: stony loam</i>
				<i>Bw1 - 3 to 6 inches: stony loam</i>
				<i>Bw2 - 6 to 20 inches: stony sandy loam</i>
				<i>Bw3 - 20 to 28 inches: very stony sandy loam</i>
				<i>2BC - 28 to 41 inches: very cobbly sandy loam</i>

Project Summary

Reduce the abundance of non-native species through a broadcast and targeted foliar herbicide application. Following treatment, establish a diverse assemblage of native plant species through seeding and planting that support pollinators and improve ecological function. The planting and seed mix shall include species from a broad range of plant families to maximize insect use, extend bloom periods throughout the growing season, provide consistent nectar and pollen resources, enhance stormwater filtration, and promote long-term ecological resilience.

Management Prescription

To enhance and improve habitat for local pollinator species, a diverse mix of native grasses and forbs shall be established in accordance with NRCS Conservation Practice Standard 327 (Conservation Cover). The seed mix shall provide a minimum seeding density of 35–40 seeds per square foot and contain no more than 25% grass species. An example of an acceptable mix is the BWSR Pollinator Plot NE (38-341) (see page 7). All seed mixes shall consist of native Minnesota species that provide accessible pollen and nectar throughout the growing season. To ensure continuous bloom, the mix must include at least three flowering species in each bloom period: early/spring, mid-summer, and late/fall. Native plugs and the seed mix collectively must include at least nine pollinator-friendly native forb species, with a minimum of three species flowering in each bloom period. All seed mixes require approval by SWCD staff prior to seeding.

Seeding shall be completed using the broadcast method at a rate of 1.5 times the drilled rate. Sawdust or sand may be used as a carrier to improve distribution. Site preparation should occur in spring when target species are actively growing, but no later than June 30. When feasible, late-spring seeding and planting is recommended. Fall seeding is preferred where possible. A minimum of 30 days must elapse between herbicide application and seeding or planting. Avoid mid-summer herbicide applications followed immediately by seeding or planting.

Site preparation begins with controlling existing invasive vegetation. Mow the invasives back 2 weeks prior to the herbicide treatment. Herbicide applications should be completed in late spring or early summer to maximize effectiveness and prior to seed set. A backpack sprayer is recommended. Minimize damage to established natives by avoiding spraying when wind speeds exceed 10 mph and by adding dye to the herbicide mixture for proper coverage. Any invasives within 2 feet of established trees on site should be hand pulled and left on site. Evenly spread any dead plant material across the project areas with a rake. Prior to seeding and planting, drag or lightly till the site to expose mineral soil. Broadcast seeds evenly across the project area, then pack or lightly harrow to ensure good seed-to-soil contact.

Because soils may be compacted, native plug installation may require an automatic auger. Plant native plugs according to the recommended species, spacing, and guidelines provided on page 10. After planting, apply a thin, even layer of straw mulch, taking care not to cover or suffocate plugs. Water the site.

Following establishment, inspect the site regularly for invasive species and manage as needed. Year 3 after seeding and planting should consist of a spot treatment using appropriate herbicides to set back any persistent invasives. Herbicide applications must target only undesired plants, avoiding drift or overspray. Herbicides containing clopyralid or 2,4-D or Glyphosate that have been evaluated by NRCS WIN-PST and assigned a low or very low toxicity rating may be used without a site-specific WIN-PST evaluation. All other products may require additional review prior to application.

Table 2. Herbicides containing Glyphosate, 2,4 D or Transline assigned a low or very low evaluation by WIN-PST

Active Ingredient	Product Name	Plant(s) Treated
Clopyralid, monoethanolamine salt	Transline herbicide	Hawkweed and Birdsfoot Trefoil
2,4-D, 2-ethylhexyl ester	2,4-D LV4	Hawkweed, Tansy, Thistle
Glyphosate, isopropylamine salt	Accord Herbicide	Tansy, Thistle

Operation and Maintenance (327)

- Most pollinator habitat plantings take several years to establish extensive root systems and reach their full potential. As such, preparing the site by using herbicides to control undesirable weeds, then mowing during the first year following planting is critical to ensure successful planting and establishment. More specific year-by-year O&M guidance is included in the “Operation and Maintenance Conservation Cover Code 327” document.
- If wildlife habitat enhancement is a purpose, maintenance practices and activities shall not disturb cover during the reproductive period for the desired species. Exceptions should be considered for periodic burning or mowing when necessary to maintain the health of the plant community.
- Control noxious weeds and other invasive species.
- Mowing may be needed during the establishment period to reduce competition from weeds.
- To benefit insect food sources for grassland nesting birds, spraying or other control of noxious weeds shall be done on a “spot” basis to protect forbs and legumes that benefit native pollinators and other wildlife.
- Re-vegetate bare spots.
- Signs should be installed around each project area, supported by stakes and rope, to protect the site from disturbance of seeds and native plant plugs. These signs should also inform the public that a native plant restoration project is in progress and to stay off.

Operation and Maintenance (315)

- Herbaceous weed treatment methods shall be applied using approved materials and procedures. Operations will comply with all local, State, Tribal, and Federal laws and ordinances. The landowner is responsible for obtaining any permits prior to practice implementation. Observe State and Federal restricted-use pesticides and certified pesticide applicator’s license requirements.
- Develop a safety plan for individuals exposed to chemicals, including telephone numbers and addresses of emergency treatment centers and the telephone number for the nearest poison control center.
- The National Pesticide Information Center (NPIC) telephone number in Corvallis, OR, may also be given for nonemergency information: 1-800-858-7384, Monday to Friday, 6:30 a.m. to 4:30 p.m., Pacific Time.
- The national Chemical Transportation Emergency Center (CHEMTRAC) telephone number is: 1-800-424- 9300.
- Follow label requirements for mixing/loading setbacks from wells, intermittent streams and rivers, natural or impounded ponds and lakes, and reservoirs.
- Signs must be posted and visible to the public after any herbicide use indicating to avoid coming in contact with the sprayed areas.
- Dispose of herbicide and herbicide containers in accordance with label directions and adhere to Federal, State, Tribal, and local regulations.
- Read and follow label directions and maintain appropriate safety data sheets. Safety data sheets and herbicide labels can be accessed at the Greenbook Web site (<http://www.greenbook.net>).
- Calibrate application equipment according to recommendations before each seasonal use and with each major chemical and site change.
- Replace worn nozzle tips, cracked hoses, and faulty gauges on spray equipment.
- Maintain records of plant management for at least 2 years. Herbicide application records shall be in accordance with USDA Agricultural Marketing Service’s Pesticide Recordkeeping Program and State-specific requirements.
- Success of the practice shall be determined by evaluating regrowth or reoccurrence of target and desired species after sufficient time has passed to monitor the vegetation and gather reliable data.
- Length of evaluation periods depend on the herbaceous weed species being monitored, proximity of propagules (seeds, plant materials, and roots) to the site, transport mode of seeds (wind or animals), and methods and materials used.
- Following initial application, regrowth, resprouting, or reoccurrence of herbaceous weeds can be expected.
- Complete spot treatments of individual plants or areas needing retreatment when weed vegetation is most vulnerable to desired treatment procedures.

- Review and update the herbaceous weed treatment plan periodically to—
 - o Incorporate new integrated pest management technology,
 - o Follow cooperative extension service guidance to avoid the development of weed resistance to herbicide chemicals.

38-341 Pollinator Plot Northeast Mix						
Code	Common Name	Scientific Name	PLS lb/ac	% by PLS lb/ac	Seeds/7/2	% by Seeds/7/2
andgr	Big Bluestem	<i>Andropogon gerardi</i>	0.22	1.14%	0.81	1.72%
boucur	Sidecoats Grama	<i>Bouteloua curtipendula</i>	1.13	5.87%	2.49	5.30%
brocil	Fringed Brome	<i>Bromus ciliatus</i>	0.25	1.30%	1.01	2.15%
danspl	Poverty Oats	<i>Danthonia spicata</i>	0.04	0.21%	0.37	0.78%
elyhys	Boitebrush Grass	<i>Elymus hystrix</i>	0.04	0.21%	0.11	0.24%
panvir	Switchgrass	<i>Panicum virgatum</i>	0.10	0.52%	0.51	1.09%
schsco	Little Bluestem	<i>Schizachyrium scoparium</i>	0.58	3.01%	3.20	6.80%
somut	Indiangrass	<i>Sorghastrum nutans</i>	0.20	1.04%	0.88	1.89%
spapec	Prairie Cord Grass	<i>Spartina pectinata</i>	0.04	0.21%	0.10	0.21%
	Grasses Subtotal		2.40	13.31%	9.48	20.16%
carvul	Brown Fox Sedge	<i>Carex vulpinoidea</i>	0.05	0.26%	1.84	3.91%
	Sedges & Rushes Subtotal		0.05	0.26%	1.84	3.91%
achmil	Common Yarrow	<i>Achillea millefolium</i>	0.01	0.05%	0.65	1.39%
agafoe	Anise Hyssop	<i>Anastache foeniculum</i>	0.04	0.21%	1.32	2.81%
allste	Prairie Onion	<i>Allium stellatum</i>	0.05	0.26%	0.20	0.43%
anecan	Canada Anemone	<i>Anemone canadensis</i>	0.05	0.26%	0.15	0.31%
ascinc	Swamp Milkweed	<i>Asclepias incarnata</i>	0.11	0.57%	0.19	0.41%
asclyr	Common Milkweed	<i>Asclepias syriaca</i>	0.03	0.16%	0.04	0.09%
asclub	Butterfly Milkweed	<i>Asclepias tuberosa</i>	0.03	0.16%	0.05	0.10%
asltan	Canada Milkweed	<i>Astragalus canadensis</i>	0.03	0.16%	0.19	0.40%
dalcan	White Prairie Clover	<i>Dalea candida</i>	0.11	0.57%	0.77	1.63%
dalpur	Purple Prairie Clover	<i>Dalea purpurea</i>	0.36	1.87%	1.88	4.22%
doSCAN	Showy Tick Trefoil	<i>Desmodium canadense</i>	0.10	0.52%	0.20	0.43%
doeumb	Flat-topped Aster	<i>Doellingeria umbellata</i>	0.02	0.10%	0.49	1.05%
dryarg	Prairie Cinquefoil	<i>Drymoallis arguta</i>	0.01	0.05%	0.84	1.80%
euGRA	Grass-leaved Goldenrod	<i>Euthamia graminifolia</i>	0.01	0.05%	1.29	2.74%
eulmac	Joe Pye Weed	<i>Eutrochium maculatum</i>	0.03	0.16%	1.05	2.23%
genand	Boite Gentian	<i>Gentiana andrewsii</i>	0.01	0.05%	1.03	2.19%

Butterfly Weed



Large Leaved Aster



Blue Giant Hyssop



Ox-Eye



germac	Wild Geranium	<i>Geranium maculatum</i>	0.03	0.16%	0.06	0.12%
helaut	Sneezeweed	<i>Helenium autumnale</i>	0.02	0.10%	0.96	2.03%
helgro	Sawtooth Sunflower	<i>Helianthus grosseserratus</i>	0.02	0.10%	0.11	0.23%
lobslp	Great Blue Lobelia	<i>Lobelia siphilitica</i>	0.01	0.05%	1.84	3.91%
lytala	Winged Loosestrife	<i>Lythrum alatum</i>	0.01	0.05%	1.10	2.34%
pycvir	Virginia Mountain Mint	<i>Pycnanthemum virginianum</i>	0.02	0.10%	1.62	3.44%
rosbla	Smooth Wild Rose	<i>Rosa blanda</i>	0.02	0.10%	0.02	0.04%
rudhtr	Black-eyed Susan	<i>Rudbeckia hirta</i>	0.06	0.31%	2.03	4.31%
slscam	Prairie Blue-eyed Grass	<i>Sisyrinchium campestre</i>	0.01	0.05%	0.17	0.35%
solnem	Gray Goldenrod	<i>Solidago nemoralis</i>	0.02	0.10%	2.20	4.69%
solpla	Upland White Goldenrod	<i>Solidago parviflora</i>	0.02	0.10%	0.47	1.00%
solrig	Stiff Goldenrod	<i>Solidago rigida</i>	0.06	0.31%	0.90	1.92%
solspe	Showy Goldenrod	<i>Solidago speciosa</i>	0.02	0.10%	0.59	1.25%
symcil	Lindley's Aster	<i>Symphotrichum ciliolatum</i>	0.02	0.10%	0.59	1.25%
symlae	Smooth Blue Aster	<i>Symphotrichum laeve</i>	0.05	0.26%	1.01	2.15%
thadas	Purple Meadow Rue	<i>Thalictrum dasycarpum</i>	0.04	0.21%	0.11	0.23%
verhas	Blue Vervain	<i>Verbena hastata</i>	0.04	0.21%	1.37	2.91%
vervir	Culver's Root	<i>Veronicastrum virginicum</i>	0.01	0.05%	2.94	6.25%
zizaar	Golden Alexanders	<i>Zizia aurea</i>	0.12	0.62%	0.48	1.03%
	Forbs Subtotal		1.60	8.31%	29.00	61.71%
cover	Oats/Winter Wheat	<i>Avena sativa/Triticum aestivum</i>	15.00	77.92%	6.68	14.22%
	Cover Crop Subtotal		15.00	77.92%	6.68	14.22%
	Total		19.25	100.00%	46.99	100.00%

Rough Blazing Star



Wild Bergamot



Black eyed susan



Stiff Goldenrod



Columbine



Zig Zag Goldenrod



Hoary Vervain



Showy Goldenrod



Pearly Everlasting



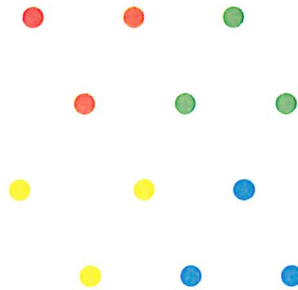
Purple Prairie Clover



Select 9 native wildflower species from the approved species list below and install them as plugs according to the recommended plant spacing. Plugs shall be distributed evenly across the project area to promote structural and species diversity. Large monoculture groupings of a single species should be avoided. Instead, 3 plugs of the same species may be planted next to each other in a triangular formation. Continue this throughout the entire project area. Alternate species across the planting area to create a heterogeneous planting that supports ecological resilience, pollinator diversity, and long-term establishment success.

A minimum of 90 plugs shall be installed for each of the 9 selected species. This planting density will ensure adequate representation of each species within the restoration area while providing the landowner flexibility to emphasize preferred species in future management or supplemental plantings. Plugs should be spaced out every 20 to 24 inches.

Example of plug spacing/formation. Each color is a different species.



Native Plant Encyclopedia | Minnesota DNR

Name	Scientific Name	Life Form	Habitat	Exposure	Height (ft)
butterflyweed	<i>Asclepias tuberosa</i> var. interior	Ferns and Wildflowers	upland dry	full sun,partial sun	1.5 - 2.0
blue giant hyssop	<i>Agastache foeniculum</i>	Ferns and Wildflowers	upland moist,upland dry	full sun,partial sun	3.0 - 4.0
large-leaved aster	<i>Eurybla macrophylla</i>	Ferns and Wildflowers	upland moist,upland dry	full sun,partial sun,full shade	1.0 - 2.0
ox-eye	<i>Helopsis helianthoides</i> var. scabra	Ferns and Wildflowers	upland moist,upland dry	full sun,partial sun	1.5 - 4.0
rough blazing star	<i>Liatris aspera</i>	Ferns and Wildflowers	upland moist,upland dry	full sun,partial sun	1.5 - 4.0
wild bergamot	<i>Monarda fistulosa</i>	Ferns and Wildflowers	upland moist,upland dry	full sun,partial sun	2.0 - 3.5
black-eyed susan	<i>Rudbeckia hirta</i> var. pulcherrima	Ferns and Wildflowers	upland moist,upland dry	full sun,partial sun	1.0 - 3.0
stiff goldenrod	<i>Solidago rigida</i>	Ferns and Wildflowers	upland moist,upland dry	full sun,partial sun	1.0 - 5.0
columbine	<i>Aquilegia canadensis</i>	Ferns and Wildflowers	upland moist,upland dry	full sun,partial sun,full shade	2.0 - 3.0
zigzag goldenrod	<i>Solidago flexicaulis</i>	Ferns and Wildflowers	upland moist,upland dry	partial sun,full shade	1.0 - 3.0
hoary vervain	<i>Verbena stricta</i>	Ferns and Wildflowers	upland moist,upland dry	full sun	1.0 - 2.0
showy goldenrod	<i>Solidago speciosa</i>	Ferns and Wildflowers	upland moist,upland dry	full sun	2.0 - 4.0
pearly everlasting	<i>Anaphalis margaritacea</i>	Ferns and Wildflowers	upland dry	full sun	0.5 - 1.5
purple prairie clover	<i>Dalea purpurea</i> var. purpurea	Ferns and Wildflowers	upland moist,upland dry	full sun	1.0 - 2.0

Cost Estimate

Item	Quantity	unit	Cost	Total
Mobilization	1	LS	\$1200	\$1200
Site prep (herbicide, hand pull, rake)	1	LS	\$1500	\$1500
Mulching/straw hay	7000	feet	\$1000	\$1000
Native Plugs	1,013	ES	\$4.00	\$4050
BWSR Seed Mix (38-341)	3.5	LB	\$200	\$700
Maintenance (year 3)	1	LS	\$1500	\$1500

Sub-Total: \$9,950

+ 15% Contingency: \$1,492

\$11,442

Operation and Maintenance Plan: Native Gardens

Landowner: _____

Location: _____

All projects require maintenance after implementation. Because every project is unique, you may require slightly different maintenance needs than what are listed here. This Operation and Maintenance Plan outlines some of the common maintenance activities that may be needed on your project. Project success cannot be expected without ongoing maintenance activities.

First Year

- ❖ **Watering-** New plantings need one inch of water per week. If there is little rain, watering your project will be needed.
- ❖ **Mowing/Weed Whipping-** On sites where seeding was the primary planting method, the site will need mowing or weed whipping to control weeds and allow sunlight to warm the soil and germinate the native seeds. Cut when weed growth reaches 10-12 inches and before weeds begin to set seed (*this is very important*). This is typically done in late spring or early summer. Cutting height should be set at 6 inches and no lower than the top of the planted native plugs. Expect to mow or weed whip areas between June and September at least two times.
- ❖ **Weeding-** If no seeding has been done and live plugs were used, check for weeds at least once every two weeks. Pull or spot treat weeds with herbicide as necessary. Pay extra attention for weed growth near project edges and paths.
- ❖ **Plant Identification-** Mark live plugs with color coded popsicle sticks or some other type of marking device. Become familiar with the native plants on your project. Also become familiar with the weeds. Ask your technical representative about good identification books to help you.

Second Year

- ❖ **Dead Vegetation-** Cut back or rake dead vegetation if desired. This is only necessary if the appearance of the project is a concern. Leave dead vegetation standing in the fall. The standing dried vegetation provides winter interest, food, and cover for wildlife.
- ❖ **Mowing/Weed Whip-** If mowing/weed whipping is your primary weed control method, cut at a height of 6-12 inches. *Remember to mow or weed whip before weeds begin to set seed.*
- ❖ **Weeding-** If initially using live plugs, thoroughly weed site as it begins to green up. Check for weeds at least once every three weeks. Pull or spot treat weeds with herbicide as necessary.
- ❖ **Watering-** During drought periods, provide plants one inch of water per week.
- ❖ **Supplemental Planting-** Plant replacement live plugs in spots with low survival.

Third Year and Beyond

- ❖ **Dead Vegetation-** Cut back or rake dead vegetation if desired in spring. Leave dead vegetation standing in the fall.
- ❖ **Weeding-** Check for weeds once a month. Pull or spot treat weeds with herbicide as necessary.
- ❖ **Supplemental Planting-** Plant replacement plants as necessary, continuous native vegetation cover is the goal.
- ❖ **Expansion-** Consider expanding the project area into new areas of your project
- ❖ **Burning-** Burning is a tool for weed control, increased flowering, seed production, germination of new native plants, and reducing undesired woody vegetation. Burns are typically conducted on a 4-5 year rotation. ***A burning permit is recommended before conducting a burn.*** Contact your technical representative for a list of local professional burn specialists. If this is not possible, continue to mow and spot treat areas with invasives present.
- ❖ **Monitoring-** The project site should be monitored yearly. Monitoring would include notes on successful species, weed problems, disturbances (animal or human), and management needs. It is recommended you monitor one hour each month throughout the growing season and include written notes with photos of the projects progress.

Contact the North St. Louis Soil and Water Conservation District or your technical representative with questions and if problems occur that inhibit the above Operation and Maintenance Plan.

We have reviewed the Operation and Maintenance Plan, and I, the owner, understand and agree to follow the guidelines listed above.

Landowner Signature _____ Date _____

Technical Representative Signature _____ Date _____