

ADDENDUM NO. 1
(J4869) Gamehaven Wetland Bank Project

ISSUED: September 20, 2018

BIDS OPENED AT: 11:00 A.M. on September 24, 2018

YOUR BID MUST ACKNOWLEDGE RECEIPT OF THIS ADDENDUM.

The following additions, corrections, or modifications are hereby made a part of the Contract Documents for the above referenced project.

The Proposal & Plan shall be revised as follows:

PROPOSAL

1. Add to the Attachments to the Special Provisions

SECTION 32 70 20 Wetland Maintenance.

SECTION 32 70 30 Wetland Establishment

2. Revise GR-20 (1806) DETERMINATION OF CONTRACT TIME

Construction operations shall be started on or within eight (8) Calendar Days after the date of Notice of Contract Approval, or by October 1, 2018 whichever is later. Construction operations shall not commence prior to Contract Approval.

Work required by these Contract Documents shall be completed in phases no later than the following dates:

Wetland Soil Inversion Area Grading by	12/1/2018
Swales, and Sediment Basins Grading by	12/15/2018
Wetland Seeding and Upland Buffer Seeding by	12/21/2018
All construction operations shall be completed no later than	12/31/2018
Wetland Maintenance Completion and Certification of Wetlands by	10/20/2023

PLANS

3. Cadd Files are available for your use located here:

Folder: J4869 - Gamehaven CAD files

Password: jCPj2s8TuXna

<https://rochestermn.egnyte.com/fl/6p8vhuDZb4>

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Russ Kelm, PE,

This addendum is 11-pages.

SECTION 32 70 20

WETLAND MAINTENANCE

PART 1 GENERAL

1.01 SUMMARY

- A. Section includes prescribed Work for wetland maintenance operations. Maintenance work includes:
 - 1. Mobilization
 - 2. Herbicide treatment application.
 - 3. Mowing operations.
 - 4. Re-seeding operations.
- B. Basis of Payment:
 - 1. Payment for Wetland Maintenance shall be at the contract unit price as listed on the Bid Form for the following items:
 - a. Mobilization New Wetland
 - b. Mowing New Wetland
 - c. Weed Spraying and Removals New Wetland
 - d. Re-seeding New Wetland
 - 2. Additional mobilizations that may be required for specific work items or to conform to the provisions of the Contract Times shall be included in this item.
 - 3. If the total Bid amount for New Wetland Maintenance exceeds 5 percent of the total Base Bid amount, Owner will withhold the amount in excess of 5 percent until Substantial Completion of the Project.

1.02 REFERENCES

- A. NRCS Code 338 – Prescribed Burning

1.03 ADMINISTRATIVE REQUIREMENTS

- A. Scheduling
 - 1. Duration of Maintenance Period
 - a. The Contract's maintenance period shall be 5 years and shall begin immediately following completion of planting and seeding punch list determined at project substantial completion.
 - 2. Maintenance Schedule
 - a. All maintenance activities shall be coordinated with Engineer and the City of Rochester.
 - b. Notify the Engineer and the City of Rochester at least 48 hours before all maintenance activities

1.04 SUBMITTALS

- A. Required Submittals Prior to Mobilization:
 - 1. Product literature:
 - a. Herbicide(s)
 - b. Seed
 - c. Soil Amendments
 - d. Submit literature to Engineer at least 2 weeks in advance of use for approval.

1.05 QUALITY ASSURANCE

- A. Contractor applying herbicide must be licensed and trained for use and familiar with herbicide application.

PART 2 PRODUCTS

- A. Herbicide
 - 1. Upland Areas
 - a. Broad spectrum, non-selective herbicide used to eliminate undesirable woody and herbaceous vegetation in upland areas (minimum 20' away from water bodies). Herbicide shall contain 53.8% glyphosate and 46.2% inert ingredients.
 - 2. Wetland Areas
 - a. Broad spectrum, non-selective herbicide used to eliminate undesirable woody and herbaceous vegetation in wetland areas designed for use in areas adjacent to water bodies (within 20' of water bodies). Herbicide shall contain 53.8% glyphosate and 46.2% inert ingredients, and shall be safe for use in wetland areas.
 - b. Brand of Glyphosate herbicide labeled for use in and around wetlands and aquatic habitats (Rodeo™ or equivalent)
 - 3. Woody Plants Alternative
 - a. Garlon III or IV or equal with marker dye.
- B. Performance Criteria
 - 1. Contractor shall be responsible for the satisfactory growth of plants on all areas seeded and/or planted under the Contract until completion of the five year warranty period.
 - 2. Time Meander Search:
 - a. Acceptance of the work will be determined using a time meander search.
 - b. The Engineer shall conduct a time meander search for each class, e.g.: Wetland Seed Mix, Upland Seed Mix and plantings.

PART 3 EXECUTION

- A. Mowing
 - 1. Frequency:
 - a. Areas seeded with upland and transition seed shall be mowed to 4" to 6" anytime vegetation grows to 10" high during year one. Mowing shall be conducted at least 3 times during the Year 1 following installation of plant seedlings and seed mixes.
 - 1) If seeding is completed before July 16, 2016, Year 1 for maintenance schedule purposes shall be the year 2016. If seeding is performed between September 1 and October 1, 2016, Year 1 shall be the year 2017.
 - b. Mowing shall cease in the fourth year following planting unless otherwise directed by the Engineer. Annual mows of 3 times during each year shall be conducted in years 2 and 3.
 - 2. Method
 - a. Upland and transition plants shall be mowed with a rotary or flail type mower with a cutting height of 4-6 inches after 10 days of no precipitation. Clippings shall be left in place.
- B. Overseeding and Plant Replacements
 - 1. See Section 32 70 30 for overseeding and plant replacement rates in case of failure of planting or seeding of natural areas.
- C. Removing Unacceptable Species
 - 1. Unacceptable Species
 - a. Herbaceous
 - 1) The following **exotic** species shall be physically uprooted or herbicided at least 3 times per growing season in years 1 and 2: Purple Loosestrife - *Lythrum salicaria*, Yellow Sweet Clover - *Melilotus officinalis*, White Sweet Clover - *Melilotus alba*, Curly Dock - *Rumex crispus*, Garlic Mustard - *Alliaria petiolata* and physically removed from site and disposed of at an approved facility or incinerated off site. The above species shall be removed or herbicided and physically removed twice per growing season in years 3 through 5.

- 2) The following exotic species shall be herbicided at least 3 times per growing season in years 1 and 2: Smooth Brome - *Bromus inermis*, Crown Vetch - *Coronilla varia*, Bird's Foot Trefoil - *Lotus corniculatus*, Canada Thistle - *Cirsium arvense*, Foxtail - *Setaria spp.*, Leafy Spurge - *Euphorbia esula* and Japanese Knotweed - *Polygonum cuspidatum* - The above species shall be herbicided twice per growing season in years 3 through 5.
 - 3) The following native and native/non-native herbaceous species shall be herbicided at least 3 times per growing season in years 1 and 2: Giant Reed Grass – *Phragmites australis*, Reed Canary Grass – *Phalaris arundinacea*, Giant Ragweed - *Ambrosia trifida*, *Urtica dioica* – Stinging Nettle, Common Ragweed - *Ambrosia artemisiifolia*- The above species shall be herbicided twice per growing season in years 3 through 5.
- b. Woody
- 1) The following exotic species shall be cleared and stumps shall be herbicided in fall or winter (October - March): Buckthorns - *Rhamnus spp.*, Red Cedar – *Juniperus virginiana*, Honeysuckles - Exotic *Lonicera spp.*, Asian Mulberry - *Morus alba*, Siberian Elm- *Ulmus pumila*. Stump resprouts shall be herbicided according to manufacturer's application rates, times, and temperatures minimum of once in June and once in July. New seedlings shall be herbicided 2 times per year from October through March, according to manufacturer's application rates, times, and temperatures.
 - 2) The following native woody invasive species shall be herbicided at least 3 times per growing season in years 1 and 2: cottonwood – *Populus deltoides*, boxelder – *Acer negundo*, green ash - *Fraxinus pennsylvanica* and volunteer willow species- *Salix sp.*
2. Techniques
- a. Tools recommended for removal of exotic species after installation during maintenance period are: weed-eater with brush attachment, chainsaws, bow saws, other smaller saws, loppers and Weed Wrenches™. A Weed Wrench™ is a manually operated steel tool designed to uproot undesirable woody plants with stems of up to 2.5" diameter. Its combined gripping and pulling leverage allow plants to be uprooted with minimal effort. Soil disturbance after removing plants with a Weed Wrench™ is minimal and desirable plants are unharmed.
 - b. Plants too large to be lifted by the roots with a Weed-Wrench™ will need to be treated with concentrated 'Round-Up®' using one of the following methods:
 - 1) Tree Ringing:
 - a) remove a 2 inch wide band of bark about three feet up the trunk and apply herbicide to the exposed wood.
 - 2) Basal Pruning:
 - a) cut trunk at its base and apply concentrated herbicide to the stump.
- D. Herbicide Application
1. Several unacceptable species require glyphosate herbiciding to ensure that they do not spread rapidly and invade a planted natural system. These species can be controlled with a spraying of a glyphosate-based herbicide such as Rodeo® or Round-Up®. **Care must be taken when using either herbicide since they will also kill desirable plants.** Both of these herbicides work through translocation, which means that the herbicide is taken in through the transport vessels (xylem and phloem) and spread through all parts of the living tissue. These two herbicides are temperature sensitive as they are only active in green living tissue. Temperatures must be over 55°F for applications. Ideal conditions are 70°F to 85°F, sunny with no breeze. Death usually follows within two to three weeks of application.
 2. Application is recommended by backpack sprayer with a wand. Use Round-Up® with surfactant from 10 feet above the high water line and higher and Rodeo® with surfactant (liquid soap, e.g. Ivory) within 10 feet of the high water line and below the high water line. Both Rodeo® and Round-Up® can be applied without a state applicator's license and Rodeo® is EPA registered for use near waterways. Alternate herbicides may be used if written approval of Engineer is obtained by February of the current maintenance year.
 3. In areas where undesirable species are mixed with desirable species, herbicides should be applied using one of the following wicking techniques:
 - a. Hand wicking: wearing rubber and cotton gloves, with cotton gloves over the rubber gloves; pour herbicide on glove covered hands and rub herbicide up and down the plant.

- b. Wicking with backpack sprayer: place a nylon stocking secured with a rubber band over the nozzle of a back pack sprayer so that the herbicide can be wiped up and down the plant.

E. Inspection and Acceptance of Maintenance

1. Interim:
 - a. Years 1 through 5 inclusive.
 - b. Time Meander Search:
 - 1) Each search shall be conducted during the growing season and will randomly sample 20% of each area for each class noted above. If the sample area has minimum 80% ground cover of acceptable species, including germination of desirable seedbank flora (see list in paragraph 3.C.1 for undesirable species), and minimum 50% of species that were planted or seeded, the work will receive interim acceptance of maintenance.
2. Final:
 - a. End of 5 year period.
 - b. Time Meander Search:
 - 1) Search shall be conducted during the growing season and will randomly sample 20% of each area for each class that was seeded and/or planted. If the sample area has minimum 80% ground cover of acceptable species, including germination of desirable seedbank flora (see list in paragraph 3.C.1 for undesirable species), and minimum 50% of species that were planted or seeded, the work will receive final acceptance of maintenance.
3. Non-Compliance
 - a. Where inspected wetland work does not comply with the requirements, Contractor shall replace rejected work within 30 days and continue specified maintenance until inspected again by the Engineer and found to be acceptable.
 - b. Rejected plants and materials shall be removed promptly from the project site and disposed of at an approved facility.
 - c. Contractor shall remove undesirable species as specified and resow failed areas at 1/2 the original seeding rates.

F. Waste Management

1. Dispose of waste materials and debris offsite in compliance with the local laws and regulations.

G. Protection

1. Protect those areas identified as "No Access" from damage from herbicide treatment and burning activities.

H. Attachments

1. Minimum Maintenance Management Schedule

Year 1 of management	A. Mow according to specifications
	B. Evaluate invasive species infestations
	C. Perform invasive species removal
	D. Check and repair erosion control blanket.
	E. Check and maintain trees.
	Engineer will conduct inspection of installation within first full growing season (12 months) to determine acceptability of guaranteed work as outlined in Section 32 70 30.
Balance of five year maintenance period	A. Annual mows if so directed by Engineer
	B. Evaluate invasive species infestations.
	C. Perform invasive species removal
	D. Check and repair erosion control blanket.
	E. Check and maintain trees and shrubs
	Engineer will conduct Interim and Final Acceptance of Maintenance.

END OF SECTION

SECTION 32 70 30

WETLAND ESTABLISHMENT

PART 1 GENERAL

1.01 SUMMARY

- A. Section includes Work for wetland establishment of herbaceous ground cover and plantings on designated areas. This Work includes but is not limited to:
 - 1. Herbicide Application
 - 2. Seeding
 - 3. Watering
 - 4. Mulching
 - 5. Rolled Matting and Blanketing.
- B. Basis of Payment:
 - 1. Payment for Wetland Establishment shall be at the contract unit price as listed on the Bid Form for the following items:
 - a. Upland Buffer Seeding BWSR Mix 35-641 (Mesic Prairie Southeast)
 - b. Wetland Seeding (Areas Downslope from Upland Buffer) BWSR Mix 34-262 (Wet Prairie)
 - c. Wetland Seeding (Areas Upslope from Emergent Wetland) BWSR Mix 34-271 (Wet Meadow South and West)
 - d. Wetland Seeding (Low areas of wetland basins) BWSR Mix 34-181 (Emergent Wetland)

1.02 RELATED REQUIREMENTS

- A. Section 32 70 20 – Wetland Maintenance

1.03 REFERENCES

- A. MnDOT
 - 1. 2574 – Soil Preparation
 - 2. 2575 – Establishing Turf and Controlling Erosion

1.04 ADMINISTRATIVE REQUIREMENTS

- A. Wetland Establishment will be accepted on a total Project basis.
- B. Five-year maintenance period shall begin upon Date of Acceptance.
- C. Erosion control items must also be in place and properly maintained prior to acceptance.
- D. Coordinate vegetation establishment to minimize lag time after seeding.
- E. Substitutions:
 - 1. Shall not be made without written approval of the Engineer.
 - 2. If specified material is not obtainable, Contractor shall submit to Engineer proof of non-availability at least 14 days prior to installation and a proposal for use of equivalent material.
 - 3. Such approval shall not preclude the right of inspection and rejection upon delivery at the site or during the progress of the work.

1.05 SUBMITTALS

- A. Contractor shall provide to the Engineer the following submittals within 14 days of award of contract.
 - 1. Planting schedule showing dates for each type of seeding.

2. Names and addresses of seed suppliers showing related quantities.
 - a. Seed blends, percentages, weights, and ratios shall be submitted and certified in writing.
3. Product literature for herbicides.
4. Seeding plan.
 - a. This plan shall include proposed methods of planting, species, quantities, types of propagules, proposed surface preparation and equipment.

1.06 QUALITY ASSURANCE

- A. Contractor Qualifications:
 1. 5 years of experience in wetland revegetation or 15 wetland installations.
 2. Project Supervisor:
 - a. 3 years revegetation experience (prairie, woodland, wetland) or 10 wetland installations.
- B. Certifications:
 1. Wetland Establishment materials shall be shipped with "Certificates of Inspection" as required by governmental authorities and in compliance with governing regulations applicable to landscape materials.

1.07 SITE CONDITIONS

- A. Notification of adverse conditions:
 1. Contractor shall examine and evaluate grades, soils, and water levels, observe conditions under which work is to be performed, and notify Engineer of adverse conditions.
 2. Contractor shall not proceed with the work until adverse conditions have been corrected or mitigated.
 3. If conditions detrimental to installation or plant growth are encountered, such as rubble fill, adverse drainage conditions, or obstructions, Contractor shall notify Engineer before planting.
 4. Proceed with planting only when existing and forecasted weather conditions permit planting to be performed according to manufacturer's written instructions and warranty requirements.

1.08 SPECIAL WARRANTY

- A. Contractor shall provide a written special warranty for Wetland Establishment
 1. Contractor shall replace in accordance with the drawings and specifications, all seeded areas and plants that are dead for a period of 5 years after Date of Acceptance.
 2. The special warranty shall cover all costs for replacement.
 3. Warranty shall not include damage or loss to plants caused by fires, freezing rains, lightning or wind storms, winter kill caused by extreme cold (-35° F air temperatures for Rochester) not typical of Site, acts of vandalism, or negligence on the part of the Owner

PART 2 PRODUCTS

A. Suppliers

Dragonfly Gardens
 P.O. Box 192
 Amery, WI 54001
 (715) 268-6155
 (715) 268-4666
 Contact: Rob Bursik

Glacial Ridge Growers
 7140 Casey Parkway
 Prior Lake, MN 55372
 Phone: (952) 447-6858

Natural Shore Technologies
 Bill Bartodziey
 11000 Independence Ave.
 Champlin MN 55316
 612 703-7581
www.naturalshore.com

North American Prairies (seed and plants)
 Tony Rieger-Borer
 11754 Jarvis Ave.,
 Annandale, MN 55302.

Contact: Gene and Muriel Stark

(320) 274-5316.
Fax: (320) 274-5316.
northamericanprairies.com.

Hayland Woods
Shelley Larson
320 983-6354
fax 320 983-2151
6549 Keystone Road, Milaca MN 56353

Prairie Moon Nursery
31837 Bur Oak Lane
Winona, MN 55987
(507) 452-1362
Contact: Allan Wade

Hild and Associates
326 Glover Road South
River Falls, WI 54022
(715) 426-5131
(800) 790-9495
Fax: (715) 426-9887

Prairie Nursery
P.O. Box 306
Westfield, WI 53964
1-800-476-9453

Ion Exchange (Seed and plants)
Howard and Donna Bright,
1878 Old Mission Road,
Harpers Ferry, IA 52146.
(319) 535-7231 or 1-800-291-2143.
Fax: (319) 535-7362.
hbright@means.net. www.ionxchange.com

Prairie Restorations, Inc.
P.O. Box 327
Princeton, MN 55371
(612) 389-4342
Fax: (612) 389-4346

J & J Tranzplant Aquatic Nursery, Inc
600 Division Street
P.O. Box 227
Wild Rose, WI 54984-227
(414) 622-3552
Fax: (414) 622-3660

Shooting Star Native Seed
Contact: Mike Casey,
20740 County Road 33
Spring Grove, MN 55974.
(507) 498-3944.
Fax: (507) 498-3953.
ssns@means.net.

Kinnickinnic Native Plants
235 State Road 65
River Falls WI 54022
715 425-7605

Spring Lake Restoration and Nurseries
21938 Mushtown Road
Prior Lake, MN 55372
952-477-1919

Landscape Alternatives, Inc
25316 St. Croix Trail
Shafer, MN 55074
(651) 257-4460

Natural Shore Technologies
6275 Pagenkopf Road
Maple Plain, Mn 55359
612 703-7581
www.naturalshore.com

Morning Sky Greenery
44804 E. Hwy. 38
Morris, Mn 56267
320-795-6234

Woodland Plant Salvage
651-426-8174

B. Seed Mixes:

1. Mixes shall be blended by the vendor and the mixture and ratio shall be guaranteed in writing to be as specified by percentage or weight in the Seed Lists.
2. Legumes shall be inoculated with the proper rhizobia and at the appropriate time prior to planting.
3. Seed shall be packed and covered in such a manner as to insure adequate protection against damage and maintain dormancy while in transit, storage or during planting operations.
4. Seeds shall have the proper stratification and/or scarification to break seed dormancy for other than fall planting

5. Seeds shall be true to their name as specified.
6. Their origin shall be known to be local within a 200 mile radius of the project location and species and subspecies native to the area in the project location's county unless otherwise specified.
7. Plant origins beyond a 200 mile radius shall be approved in writing by the Engineer.
8. Origin of seed shall be yellow tag certified.
9. Seed mix shall be supplied as pure live seed (PLS).
10. Seeds shall be free of prohibited noxious weed seeds and Reed Canary Grass (*Phragmites arundinacea*), Giant Reed Grass (*Phragmites australis*), Cattails (*Typha* spp.) and Purple Loosestrife (*Lythrum salicaria*). The following seeds are prohibited under Minnesota Statute: Bull Thistle – *Cirsium vulgare*; Canada Thistle - *Cirsium arvense*; Musk Thistle – *Carduus nutans*; Perennial Sow Thistle – *Sonchus arvensis*; Plumeless Thistle – *Carduus acanthoides*; Field Bindweed – *Convolvulus arvensis*; Hemp – *Cannabis sativa*; Leafy Spurge - *Euphorbia esula*; Perennial Peppergrass – *Lepidium draba*; and Russian Knapweed – *Centaurea repens*.
11. See paragraph 2.A for pre-qualified potential suppliers.

C. Herbicides

1. Upland Areas
 - a. Broad spectrum, non-selective herbicide used to eliminate undesirable woody and herbaceous vegetation in upland areas (minimum 20' away from water bodies). Herbicide shall contain 53.8% glyphosate and 46.2% inert ingredients.
2. Wetland Areas
 - a. Broad spectrum, non-selective herbicide used to eliminate undesirable woody and herbaceous vegetation in wetland areas designed for use in areas adjacent to water bodies (within 20' of water bodies). Herbicide shall contain 53.8% glyphosate and 46.2% inert ingredients, and shall be safe for use in wetland areas.
3. Woody Plants
 - a. Garlon III or IV or equal with marker dye.

D. Performance Requirements

1. Contractor shall be responsible for the satisfactory growth of vegetation on all areas seeded and planted under the Contract until completion of the 5 year maintenance period.

PART 3 EXECUTION

A. Herbicide Application

1. Areas denoted on the Restoration Plan in the Drawings as a seeded area shall be broadcast herbicided to kill the existing vegetation and any undesirable species listed below.
2. Herbicide treatment will be 10-14 days apart with post spraying evaluation one week following spraying to ascertain effectiveness of prior application.
3. Applications are to be performed until weed suppression has been deemed acceptable to project Engineer.
4. Spraying shall follow at least a 12 hour dry period with no precipitation or dew, with temperatures above 50 degrees F and wind less than 3 miles per hour.
5. All spraying shall be completed one week prior to seeding and/or planting of any sites.
 - a. The following species are considered exotic, invasive, herbaceous weeds:
 - 1) Purple Loosestrife - *Lythrum salicaria*, Smooth Brome - *Bromus inermis*, Crown Vetch - *Coronilla varia*, Bird's Foot Trefoil - *Lotus corniculatus*, Yellow Sweet Clover - *Melilotus officinalis*, White Sweet Clover - *Melilotus alba*, Canada Thistle - *Cirsium arvense*, Curly Dock - *Rumex crispus*, Foxtail - *Setaria* spp., Leafy Spurge - *Euphorbia esula*, Japanese Knotweed - *Polygonum cuspidatum* and Garlic Mustard - *Alliaria petiolata*. The following species are considered native aggressive invasive species and are to be controlled: Giant Ragweed – *Ambrosia trifida* and Common Ragweed – *Ambrosia artemisiifolia*. Giant Reed Grass – *Phragmites australis*, Reed Canary Grass – *Phalaris arundinacea*, Hybrid Cattail – *Typha x glauca* and Narrow Cattail – *Typha angustifolia* are considered an invasive species with both native and non-native origins and are to be controlled.
6. Rates

- a. 5 quart concentrated herbicide (Use wetland safe herbicide only within 20 feet of water bodies).
 - b. Surfactant in all 3 applications, per manufacturer's specifications.
 - 7. Acceptance
 - a. Absolutely no planting or seeding work shall be performed before unacceptable species has been eliminated.
 - b. "Effectively Killed" is defined as 95% kill of all plant species in areas of herbicide spraying.
 - c. "Effectively Killed" is defined as 95% dead of all identified "undesirable" species via spot spraying.
- B. Seeding Application
- 1. Seeding shall be performed between between September 1 and October 20 or later as conditions allow for a dormant seed application.
 - 2. Engineer shall be notified 24 hours prior to beginning the seeding operations.
 - 3. Provide preliminary staking of seeded areas using stakes or paint. Obtain Engineers approval of seeding area staking.
 - 4. Seeding shall be applied concurrent with hydromulch operation.
 - 5. Seed mixture shall be applied at two times the BWSR application rate.
 - 6. Use of fertilizer is prohibited.
 - 7. Hydromulch shall conform to MnDOT Type 6 applied at 2500 lbs./acre.
- C. Cleaning and Protection
- 1. Machinery shall not run across seeded area for one year after native plant seeding operations have been completed except on access pads following the first year after planting.
 - 2. If machinery operation in seeded areas during this period is proposed, written request by the Contractor and approval by the Engineer must be obtained prior to commencement of activity requiring approval.
 - 3. Observance of machinery on seeded areas after seeding operations have been completed without written approval will result in a \$500 fine per occurrence, set-off from the Contractor's next pay request.
 - 4. Exceptions include machinery used for mowing and other routine maintenance specified within the project manual or if 12-inches of ground frost is present.
 - 5. Contractor shall maintain protection during installation and maintenance periods, and shall treat, repair or replace damaged wetland establishment work to comply with the Contract documents.
- D. Inspections
- 1. Engineer reserves the right to inspect seed materials at any time, either at place of growth or at site before planting, for compliance with requirements for name, variety, size, quantity, quality and mix proportion.
- E. Closeout Acceptance
- 1. Installation
 - a. Contractor shall notify Engineer when seeding and planting within entire limits of work is completed.
 - b. The Engineer will make a final inspection to determine acceptability.
 - c. This determination initiates the 5-year special warranty period on seed and plant.
 - 2. Date of Acceptance
 - a. When the Project Work is substantially completed and all punch list items have been resolved and completed, the Engineer will issue a Notice of Substantial Completion.
 - b. The Notice initiates the 5-year maintenance period. See Section 32 70 20.
 - 3. Time Meander Search
 - a. Acceptance of the work will be determined using a time meander search.
 - b. The Engineer shall conduct a time meander search for each class, e.g.: Wetland Seed Mix, Upland Seed Mix, and plantings.
 - c. The search shall be conducted during the first full growing season after seeding (not to exceed 12 months).
 - d. The search will randomly sample 20% of each area for each class.

- e. If the sample area has minimum 80% ground cover of acceptable species (see Section 32 70 20 for unacceptable species), including germination of desirable seedbank flora, and minimum 50% of species that were planted or seeded, the wetland work will receive acceptance of guaranteed work.
- f. Contractor shall replace rejected work until inspected again by the Engineer and found to be in compliance with the Contract documents.
- g. Rejected work shall be removed promptly from the project site.

END OF SECTION