



North Dakota Department of Transportation

Thomas K. Sorel
Director

Doug Burgum
Governor

June 27, 2018

ADDENDUM 1 – JOB 4

TO: All prospective bidders on project IM-5-094(122)027, Job No. 4 scheduled for the July 13, 2018 bid opening.

The following request for proposal revisions shall be made:

Add SP 699(14) UNITED STATES FOREST SERVICE CONSIDERATIONS

Add SP 707(14) USFS SEEDING

This addendum is to be incorporated into the bidder's proposal for this project.

A handwritten signature in blue ink, appearing to read "Phillip Murdoff".

PHILLIP MURDOFF, P.E. – CONSTRUCTION SERVICES ENGINEER

80: jwj

Enclosure

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION

UNITED STATES FOREST SERVICE CONSIDERATIONS

PROJECT 5-094(122)027 – PCN 21702

DESCRIPTION

The North Dakota Department of Transportation (NDDOT) in cooperation with the Federal Highway Administration (FHWA) have made the following environmental commitments to the United States Forest Service (USFS) for all work within USFS lands:

- Fire Protection and Suppression (See Page 1)
- Machinery Hygiene (See Page 3)
- All commitments as outlined in Section 6 of the plans.

FIRE PROTECTION AND SUPPRESSION

A. General: A Holder is defined as the Permittee (permit holder), or Lessee and/or Operator and their representatives, employees, workers, contractors, and subcontractors.

1. Compliance to the stipulations in this exhibit shall not preclude the Holder from complying with any other Federal, State, County, or municipal laws, ordinances, or regulations pertaining to fire prevention and suppression.
2. The Fire Season for the Medora and McKenzie Ranger Districts normally will be from April 1 to October 31 of each year. If conditions warrant, the District Ranger may begin or extend the fire season as deemed necessary. The District Ranger may also amend, add, or delete any requirement as deemed necessary, and prudent given state of fire risk.
3. It is the Holder's responsibility to obtain and know the daily Fire Danger Index and fire restrictions on or near the lands to be occupied under an approved authorization. For information on Fire Danger Index and fire restrictions contact local fire officials, the North Dakota Forest Service, Bismarck National Weather Service, or the North Dakota Division of Emergency Services.
4. To the extent practicable, the Holder, their employees, contractors, and subcontractors, shall take measures to prevent uncontrolled fires on the area of operations resulting from the operations. Self-inspections are encouraged.
5. The Holder shall promptly report all fires, regardless of size, to 1) the local fire department and 2) the Forest Service office. The Holder is responsible to submit a complete written follow-up Fire Report within 24 hours of reporting a fire.
6. The Holder, and if applicable, the applicable lessees and transferees are jointly and severally liable in accordance with Federal and State laws for indemnifying the United States for: (a) Injury, loss or damage, including fire suppression costs, which the United States incurs as a result of the operations; and (b) Payments made by the United States

in satisfaction of claims, demands or judgments for an injury, loss or damage, including fire suppression costs, which result from the operations.

- B. Fires:** With the exception of approved facilities, no open fires (fires for warming, burning wastes, brush disposal, debris, etc.) are allowed unless approved in writing from the District Ranger.
- D. Smoking:** All smoking will be done inside of vehicles or in areas cleared of flammable material when the "Fire Danger" is "Very High" or "Extreme".
- E. Fireworks:** Fireworks are prohibited on public lands.
- F. Exhaust & Arrester Systems:** Each internal combustion engine shall be equipped with a manufacturer's approved or equivalent spark arrester or spark arresting device or system. Heavy-duty trucks may have a vertical stack exhaust system with muffler, provided the exhaust stack extends above the cab of the vehicle. An exhaust driven turbocharger is considered to be a satisfactory spark arrester. Internal combustion engine exhaust systems, arresters and other devices shall be properly installed and maintained.
- G. Catalytic Converters:** The Holder shall take extra precautionary measures when driving off-road with vehicles equipped with catalytic converters. Such measures shall include but are not limited to: avoiding driving over or through vegetation tall enough to come into contact with the converter, avoid parking in vegetation tall enough to come into contact with the converter, and keep all debris from building up around or on the exhaust system.
- I. Required Fire Suppression Equipment:** Any vehicle and/or piece of equipment used off-road will be equipped with an operational, charged fire extinguisher with a minimum 2 ½ pounds capacity and 4 BC or higher rating; a shovel (round point #0 or equal); and a 5-gallon backpack container with a hand pump attached, to be filled at all times.
- J. Welding:** Welding and use of cutting torches or cutoff saws will be permitted only in areas that have been cleared or are free of all material capable of carrying fire. Flammable debris and vegetation must be removed from within a minimum ten (10) foot radius of all welding and cutting operations or fireproof welding blankets used.

When the "Fire Danger" is in the "High" category or above, each welding crew will have available in the immediate working or project area 1) A mix of the required fire suppression equipment and 2) A ground tanker of not less than three hundred (300) gallon capacity with a pump capable of pumping twenty (20) gallons per minute at a minimum of forty (40) pounds per square inch (PSI) and not less than one hundred (100) feet of hose.

When "Fire Danger" is in the "Very High" or "Extreme" category and a Red Flag Warning is issued no welding is permitted.

- K. Fire Suppression Plan:** Upon request from the District Ranger, or when required by regulation, the Holder shall submit a Fire Suppression Plan to be included as part of the Permit Package or Plan of Operations.
- L. Failure to Comply:** Failure to comply may result in the immediate suspension of all or portions of the operations.

MACHINERY HYGIENE

- A. General:** Decontaminate off-road equipment prior to accessing USFS lands to prevent the spread of noxious weeds.

Definitions:

1. **Contractor Controlled Areas** are areas not included in the contract, but are obtained and solely controlled by the Contractor (e.g. concrete or asphalt batch plants, concrete washout areas, equipment staging yards, material storage areas, excavated material disposal areas, Contractor furnished borrow or waste areas, etc.).
2. **Decontaminate** means to remove all mud, dirt, and plant material.
3. **Decontamination Site** refers to an onsite decontamination area, which shall be situated on ground away from drainages and waterways.
4. **Noncompliance** is any action or inaction that violates the regulations imposed by the applicable permits or the requirements of this Special Provision or other contract documents.
5. **Noxious Weeds** are those plants deemed detrimental to public health, agriculture, recreation, wildlife and/or property by the North Dakota Department of Agriculture, and/or the USFS.
6. **Off-Road Equipment** includes any non-road engines (e.g. generators, welders, etc.), equipment and vehicles that leave the roadway, and any licensed trucks and vehicles used to excavate, remove, and haul vegetation, debris, and topsoil.
7. **Service Vehicles** include vehicles that stay on the roadway, travelling frequently in and out of the project area, that are used to transport personnel, tools, equipment, supplies, and construction materials to and from the project site, with the exception of excavated materials (borrow, topsoil, aggregate, etc.).
8. **USFS Lands** are lands designated by federal law as managed by USFS for the Public.

B. Construction Requirements:

1. **Coordination:** At least 10 work days prior to commencement of any construction activities, coordinate with the Engineer and the Medora Ranger District, (701) 227-7803 to establish the absence of noxious weeds along the project corridor where existing right-of-way or easements occur, as well as in areas outside of right-of-way, such as borrow and/or waste sites, haul routes, and any other contractor controlled areas. If noxious weeds are found to be present in these areas, said vegetation shall be treated or removed by the Contractor in a manner acceptable to the USFS. This clearance must be obtained at the start of each growing season during which construction occurs.
2. **Decontamination Requirements:** Decontaminate all off road equipment before entering USFS lands for the first time. Equipment used within the areas established to be free of noxious weeds as described herein does not need to be decontaminated each time it enters USFS lands. Repeat decontamination of any equipment utilized on another job prior to reentry of USFS lands. Conduct decontamination outside of USFS lands. Service vehicles do not need to be decontaminated.
3. **Decontamination Procedures:** Pressure wash all off-road equipment to remove all caked on dirt and mud prior to arrival at the project site. Pressure washing shall be

conducted at an offsite, dedicated washing station, with assurances of the proper containment and disposal of wash water and solid waste to avoid the spread of noxious weeds.

Inspect all off-road equipment prior to accessing USFS lands to ensure the absence of mud, dirt, and plant material. Tools needed for inspection typically include, mirrors, tools necessary to access internal components, probes, gloves, safety glasses, containers for contaminated material, and a checklist of inspection points (including, but not limited to, components of the cabin, engine, underside, tracks/wheels, blades/buckets, booms/arms, accessories/attachments, bumper/brush guard, and running boards).

Decontamination at decontamination site(s) shall consist of vacuuming/sweeping, physical removal, and air blasting. Use of water for decontamination is prohibited at the decontamination site(s). Cabins shall be swept and/or vacuumed. Caked on mud/dirt and large vegetative debris shall be physically removed using hand tools, including, but not limited to, brooms, brushes, scrapers, and shovels. Air blasting with compressed air shall be done to decontaminate dry, dusty equipment in such a way to limit dispersal of debris. Waste and debris removed shall be collected, sealed in refuse containers, and disposed of at the appropriate landfill.

4. **Documentation and Reporting:** Document all decontamination (both on and off project site) and inspection of all off-road equipment that accesses USFS lands. A log book shall be maintained by the Machinery Hygiene Supervisor to document for each piece of off-road equipment access USFS lands 1) was pressure washed prior to arrival at the project site, 2) was decontaminated onsite, and 3) was inspected for noxious weeds and passed said inspection (i.e., was free of mud, dirt and vegetative debris). The log book shall include applicable equipment identification, dates, responsible parties, locations, and methods. Within three working days of inspections, copies of this documentation shall be provided to the Engineer and USFS Medora Ranger District (701) 227-7803.

C. Personnel

Provide a Machinery Hygiene Supervisor that meets the following requirements.

1. **Qualifications:** The Prime Contractor shall name a supervisor that:
 - i. Is an employee of the Prime Contractor.
 - ii. Is familiar with project specifications, plans and this Special Provision.
 - iii. Has the ability to identify noxious weeds that may be present in Billings County, North Dakota.
 - iv. Has at least one year of experience supervising personnel.
2. **Duties:** Have the supervisor:
 - i. Adhere to this Special Provision.
 - ii. Be on the decontamination site to supervise the decontamination and inspection of equipment, and required documentation.
 - iii. Distribute documentation of decontamination and inspection as described herein.

- D. **Performance:** The Engineer shall determine whether the Prime Contractor is in compliance through inspection of the log book as described herein. Equipment that is in non-compliance will not be allowed to remain on the project site until decontamination has occurred.

BASIS OF PAYMENT

Pay Item	Pay Unit
Machine Hygiene	Lump Sum

Payment for Machine Hygiene will be based on the following table.

Original Contract Amount Earned	Payment of Machine Hygiene
5%	25%
25%	50%
75%	75%
95%	100%

Such payment is full compensation for furnishing all materials, equipment, labor, and incidentals to complete the work as specified.

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION

USFS Seeding

PROJECT 5-094(122)027 – PCN 21702

DESCRIPTION

This work consists of permanently seeding disturbed areas.

EQUIPMENT

Use a grass drill equipped with double disk furrow openers that are:

- Spaced no greater than 8 inches apart;
- Individually mounted;
- Adjustable;
- Spring loaded;
- Capable of planting seeds at depths of 1/4 Inch or less; and
- Packer wheels meeting one of the following requirements:
 - Mounted individually to each furrow opener and have an adjustable spring tension; or
 - Mounted independently with a press wheel positioned to follow directly behind each furrow opener.

Equip the seed box with:

- A positive feed mechanism that meters seed in a uniform manner with agitators that prevent seed bridging; and
- Baffles or partitions that keep all seeds uniformly mixed during drilling.

If chaffy native grasses (sideoats grama, little bluestem, big bluestem, or Indiangrass) are part of the seed mixture, equip the seed box with a positive picker-wheel mechanism with oversize teeth and auger style agitators that meters the chaffy native grasses either in a mixture or separately in a uniform manner.

MATERIALS

A. General.

Furnish seed that meets or exceeds Pure Live Seed (PLS) requirements for the specified seed.

Use seed that contains no prohibited noxious weed seeds and contains less than 25 seeds per pound of restricted noxious weed seeds. North Dakota Department of Agriculture classifies noxious weeds at www.nd.gov/ndda.

The Engineer will not accept seed that is wet, moldy, or damaged.

B. Seed Testing.

Provide seed that has been tested for purity and germination within 12 months of the planting date by one of the following methods:

- North Dakota Seed Department, Seed Lab;
- Commercial seed testing lab; or

- A registered member of the Society of Commercial Seed Analysts.

Provide the certified test report before beginning seeding operations.

C. Labeling.

Provide a label for each bag of seed that meets the requirements of the North Dakota State Seed Department. The labeling requirements can be found at the following location:

<http://www.nd.gov/seed/index.aspx>

D. Class III Seed Mix.

1. General.

Class III Seed Mix							
			A	B	C	D	E
Species	Preferred Cultivar, Ecotype, or Germplasm	Common Name	%of Mix	Number Seed per lb.	Number Seed/ft ²	Number Seed/acre	Drilled PLS lb/acre
Cool Season Grasses:							
<i>Elymus canadensis</i>	Mandan	Canada wildrye	0.15	115,000	7.5	326,700	2.8
<i>Nassella viridula</i>	Lodonn	Green needlegrass	0.20	180,000	10.0	435,600	2.4
<i>Pascopyrum smithii</i>	Rodan	Western wheat grass	0.25	11 2,000	12.5	544,500	4.9
Warm Season Grasses:							
<i>Bouteloua gracilis</i>	Bad River	Blue grama	0.10	750,000	5.0	217,800	0.3
<i>Calamovilfa longifolia</i>	Goshen	Prairie sandreed	0.10	275,000	5.0	217,800	0.8
<i>Schizachyrium scoparium</i>	Badlands	Little bluestem	0.10	286,000	5.0	217,800	0.8
Alternate Warm Season (if one of the above warm species is unavailable)							
<i>Bouteloua curtipendula</i>	Pierre	Sideoats grama	0.10	180,000	5.0	217,800	1.2
Forbs:							
<i>Dalea purpurea</i> OR <i>Dalea candida</i>	Local	Purple prairie clover	0.04	290,000	1.8	78,408	0.25
	Antelope	White prairie clover	0.04	278,000	1.8	78,408	0.3
<i>Helianthus pauciflorus</i> OR <i>Solidago rigida</i>	Bismarck	Stiff sunflower	0.03	85,000	1.4	60,984	0.7
	Local	Stiff goldenrod	0.03	656,000	1.4	60,984	0.1
<i>Echinacea angustifolia</i> OR <i>Ratibida columnifera</i>	Bismarck	Purple coneflower	0.03	120,000	1.4	60,984	0.5
	Local	Prairie coneflower	0.03	737,000	1.4	60,984	0.1
Totals			100%		49.6	Forbs	13.4
						Alternate Forbs	(12.5)

Cultivars listed in the second column are preferred, but local seed collections grown for harvest are acceptable if performance and origin are certified or documented.

Source seed from local collections and grown in a general area extending 300 miles north and 200 miles south of the area to be reclaimed. Source seed from similar elevation and precipitation zones as western North Dakota, i.e., from Jamestown on the east to Billings, MT on the west.

2. Seeding Rate Formula.

Seeding Rates Formula

- A - % of Mix
- B - Number of seeds per lb.
- C - Number of seeds per ft² (C = A x 50)
- D - Number of seeds per acre (D = C x 43560)
- E - Drilled Pure Live Seed (PLS) lbs./acre (E = D / B)

Use of PLS for calculating seed mixtures.

- Planting is based on approximately 50 seed per square foot and/or 12-16 pounds PLS per acre (drilled).
- All of the seed mixtures reflect the rate of PLS for each species per acre. These rates were derived using three basic figures:
 - Percent of each species desired by composition,
 - Number of seeds per pound according to species, and
 - Total number of PLS per square foot.
- The following equation should be used to calculate how much seed is needed to provide the required pounds of PLS needed.

$\% \text{ Purity} \times \text{Germination Rate } \% = \% \text{ PLS}$

$\text{Pounds of PLS Desired divided by } \% \text{ PLS} = \text{Pounds of Seed Required}$

3. Example Calculation.

An example of this is: 10 lbs. of PLS is required. The given seed lot for this species has a purity of 95% and a germination rate of 85%.

How many pounds of seed will be necessary to have 10 PLS?

$0.95 \text{ (Purity)} \times 0.85 \text{ (germination rate)} = 0.81 \text{ (\% PLS)}$ 10 (required poundage) divided by 0.81 (% PLS) = 12.3

12.3 pounds of seed will be necessary to provide 10 lbs PLS of seed.

E. Seed Mix Adjustment.

The seed mix may need to be adjusted due to seed availability. If one or more seed types are unavailable, contact Russ Senske (701)328-2188 or Greg Schonert (701)328-2592.

F. Certification of Seeding.

In addition to the requirements of SP 282(14) "Certificate of Compliances", submit the following to Engineer:

- Certificate of Seed Mixture from the Seed Company;
- Seed tags; and
- Report of Seeding (Appendix A).

The Engineer will provide the information to the Medora Ranger District at the following address:

99 23rd Ave. W. Suite B
Dickinson, ND 58601
Phone: 701-227-7800

CONSTRUCTION REQUIREMENTS

A. General.

Clear seeding areas of all deleterious materials. Shape the cleared areas before seeding.

Do not place seed in frozen ground or in standing water.

Operate equipment parallel to the contours of the ground.

B. Seedbed Preparation.

Cultivate or disk topsoil to a depth of approximately 3 inches. Break up lumps and clods exposed by the initial pass of tillage equipment into pieces less than 1 inch in diameter. Remove materials greater than 1 inch in diameter that cannot be broken up. Construct a smooth and firm seedbed that allows seeds to be placed at a depth of 1/4 inch or less.

Do not cultivate or disk topsoil if temporary cover crop has achieved greater than 25 percent vegetative coverage determined by the Engineer.

Round the tops of backslopes before seeding.

Cover the exposed backslope with existing topsoil during the finish grading work without loading and transporting the topsoil.

Leave seedbeds that are to be hydraulic mulched with seed in loose condition.

Mow temporary cover crop to a height between 8 and 10 inches before placing final seed mixture.

C. Seeding Requirements.

Apply the seed mix between April 20th and June 1st.

Plant seeds to a depth of 1/4 inch or less.

Use a grass drill to plant seed. In areas that are inaccessible to a grass drill, broadcast the seed at 1.5 times the rate shown in the seed mix table. Broadcast only when the wind is less than 15 MPH.

Use a drag harrow to cover the seed. Use a light-weight packer over the seeded area.

METHOD OF MEASUREMENT

The Engineer will measure, completed and in place, as specified in Section 109.01, "Measurement of Quantities".

BASIS OF PAYMENT

Pay Item	Pay Unit
Seeding Class III	Acre or Mile

No additional payment will be made for seed that is broadcast.

Such payment is full compensation for furnishing all materials, equipment, labor, and incidentals to complete the work as specified.

Appendix A

Report of Seeding (Revised 05/07/2007)

REPORT OF SEEDING

01. SITE SEEDED

Holder Name:			
Site Name & SU Permit #:			
¼ ¼ :	Sec:	Twn:	Rng:

02. SEEDING COMPANY

Company Name:
Date Seed Mixture Sent To Forest Service:
Date Site Seeded:

03. SEEDING METHODS

✓	Seed Bed Preparation	✓	Equipment Used	✓	Seeding Techniques
	Ripped Seed Bed		Grass Seeder		Parallel To Contours
	Disked Seed Bed		Small Grain Seeder		Criss-Cross Pattern
	Firm		Large Grain Seeder		Mulching
	Free of Clods		Hand Seeded		

04. Drill Row Spacing (Inches):
05. Seeding Depth (Inches):
06. Approximate Acres Seeded:

07. I hereby certify that I, or persons under my direct supervision, have seeded this site, and the mixture has been certified weed free. A copy of the seed mixture certification, including the seed mixture is attached.

Seeding Company Representative	Date
Forest Service Reviewer	Date Received

NOTE: ✓ The appropriate boxes and fill in the blanks as applicable for all 7 items above. Sign and send the original to the Forest Service Ranger District. Faxed copies must be followed by the original.