

SECTION 32 92 00

TURF AND GRASSES

PART 1 GENERAL

1.01 SUMMARY

- A. Section Includes restoration of construction areas including all seeding, sodding, fertilizer, and erosion control blankets.
- B. Related Sections
 - 1. Section 01 57 13 – Temporary Erosion and Sediment Control
 - 2. Section 31 23 00 – Excavation and Fill

1.02 REFERENCES

- A. North Dakota Department of Transportation “Standard Specifications for Road and Bridge Construction” 2022 Edition
 - 1. Section 251 – Seeding
 - 2. Section 252 – Sodding
 - 3. Section 253 – Mulching

1.03 SUBMITTALS

- A. Submittals shall conform to Section 01 33 00.
- B. Contractor shall provide submittals on the following items:
 - 1. Seed
 - 2. Erosion Control Blanket

PART 2 PRODUCTS

2.01 SEED

- A. Seed and seeding mixtures shall be free of all prohibited noxious weed seeds.
- B. Prohibited and restricted noxious weeds shall be those classified by the North Dakota State Seed Department.
- C. All seed containers shall be sealed and labeled to comply with existing North Dakota State Seed Rules and Regulations or in accordance with U.S. Department of Agriculture Rules and Regulations under the Federal Seed Act, if shipped in Interstate Commerce.

D. Seed which has become wet, moldy or otherwise damaged in transit or storage will not be acceptable.

E. Seed Mixture:

Seed Name	Seed (lb/ac)	% of Mix Component
Kentucky Blue Grass	264	60%
Creeping Red Fescue	142	30%
Annual Rye	44	10%

2.02 FERTILIZER

- A. Provide plant fertilizer that is commercial grade and uniform in composition and conforms to applicable state and federal regulations.
- B. Fertilizer shall contain a minimum percentage by weight of 5-10-5 (NKP).
- C. Apply fertilizer at a rate of 400 pounds per acre.

2.03 MULCH MATERIAL

- A. Shall be hydraulic mulch on all reconstruction projects.
 - 1. New developments and undeveloped areas straw mulch may be used.
- B. All mulch material types shall conform to NDDOT Section 253.

2.04 EROSION CONTROL BLANKET

- A. Fly Ash will be permitted for use up to a maximum of 20 percent by weight.

PART 3 EXECUTION

3.01 GENERAL

- A. The Contractor shall coordinate topsoiling and finishing work with turf establishment so that completed areas will be seeded, sodded, and mulched without delay before weed growth or soil erosion occurs.
- B. Notify the Engineer at least 3 days in advance of moving salvaged and stockpiled topsoil so the Engineer may visually inspect and sample for testing if deemed necessary.

- C. Finish grades are to be inspected and approved by the Engineer prior to start of restoration.

3.02 SOIL PREPARATION

- A. Immediately prior to seeding or placing sod, the topsoil shall be loosened to a depth of 4 inches.
- B. Area to be seeded shall be free of all stones and debris larger than 1 inch.
- C. All washed or eroded areas shall be backfilled before soil preparation begins.

3.03 SEEDING

- A. Seeding shall be done from April 15th to June 15th or September 15th to October 15th.
- B. The rate of application shall be 440 pounds per acre.
- C. Seed shall be sown by means of a drill.

3.04 HYDRAULIC MULCH (Reconstruct areas)

- A. All areas which are seeded shall be hydro mulched.
- B. Hydro mulch material shall be spread by blower, or other mechanical means provided a uniform covering is obtained.
- C. Areas of poor mulch distribution shall be corrected by the Contractor.
- D. Hydro mulch at a rate of one ton per acre with a minimum of 95 percent coverage of the seedbed.

3.05 MAINTENANCE

- A. The Contractor shall be responsible for maintaining all areas that have been seeded until the time of final acceptance.
- B. The Contractor shall water the mulch and seed daily for a period of 5 days from the date of installation, and then periodically for the next 3 weeks to keep the soil moist for a depth of 3 inches. Cost for watering shall be included in the price bid for seeding.
- C. Maintenance shall also include providing protection against damage due to erosion or traffic.

D. If at any time before final project acceptance, the seeded area is damaged by erosion, traffic, or other means; the Contractor shall repair the damage. This shall be completed at the Contractor's expense.