

SECTION 02950

SITE RESTORATION AND REHABILITATION

PART 1 - GENERAL

1.1. DESCRIPTION

- A. This section addresses site restoration and rehabilitation which the Contractor must replace and restore in equal or better condition than the original area.
- B. The Contractor shall provide all necessary labor, materials, equipment, tools, supplies, plants, and equipment required.

1.2. QUALITY ASSURANCE

- A. All plants and seeds furnished shall be free from noxious seeds such as Russian or Canadian Thistle, European Bindweed, Johnson Grass, and Leafy Spurge.

PART 2 - MATERIALS

2.1. SOIL AMENDMENTS

- A. 'Biocomp' compost,
- B. Biosol Fore 7-2-1
- C. Diammonium Phosphate (DAP)
- D. Or Owner Approved Equal

2.2. SEEDS

- A. Pawnee Buttes Seed Native Prairie Mix for Natural areas,
 - 1. After Amendment, seed minimum of 18 lbs up to 30 lbs PLS/Acre or 3 lbs PLS/1000 sf.
 - (29%) Blue Grama
 - (25%) Buffalograss
 - (5%) Green Needlegrass
 - (20%) Sideoats Grama
 - (20%) Western Wheatgrass
 - (1%) Sand Dropseed

- B. Or Owner Approved Equal.

PART 3 - EXECUTION

3.1. PREPARATION OF GROUND

- A. Topsoil shall be spread over all areas to receive ground cover to a minimum compacted depth of six inches (6”).
- B. Top soil to be stockpiled and replaced often from new backfill and/or grading generation.
- C. All foreign matter shall be removed.

3.2. PREPARATION OF SEED

- A. Preparing the seed bed should be timed with appropriate planting dates to conserve soil moisture and prevent wind and water erosion. Seeding of irrigated grasses can occur anytime during the growing season. Dryland seeding of non-irrigated warm and cool season grasses should occur between December 1 and May 1.
 - 1. Contractor shall submit an alternative maintenance plan if seeding outside recommended timeframes.
- B. Compost amendment shall be manure based compost.
- C. Biosol product to be broadcast on planted seed bed after seeding and before mulching, or mixed with the hydor-mulch.
 - 1. REQUIRED: 6 cy/1000 sf 'Biocomp' compost, screened to 3/8" minus, and free from stones, lumps, plants, roots, sticks, weed stolons, seeds, high salt content and other materials harmful to plant life; minimum 25% and maximum 35% organic matter measured on dry matter basis; pH range 6.0 to 7.0; EC electrical conductivity (soluble salts) of 3.0-5.0 mmhos/cc @1:5; carbon nitrogen C:N ratio 10-12 to 1 (Available at A-1 Organics, Eaton, Colorado, or Owner approved equal).
 - 2. PLUS EITHER: 20 lbs/Ac Granular Endo Mycorrhizal incorporated into seed bed or 2 lbs/acre mixed with seed in seed box AND 1200 lbs/Ac (if high organic results after soil test) to 1800 lbs/Ac (if low organic results after soil test) Biosol Forte 7-2-1 topically applied after drilling (Available at Rocky Mountain Bio Products, Denver, 303-696-8964).
 - 3. OR: 60 lbs/Ac of Mycorrhizal Inoculum AM 120 broadcast and Biosol at 1500 lbs/Ac topically applied after drilling (Available at Pawnee Buttes Seed Company, Greeley, 970-356-7002 or 800-782-5947).
 - 4. OR: Owner approved equal.

3.3. FIELD QUALITY CONTROL

CCWCD
PHASE 1 WALKER RECHARGE SOUTHSIDE MAIN PIPELINE

- A. Prior to planting, the Owner and the land owner will approve incorporation of amendment into seed bed.
- B. Seeding shall be done immediately after soil preparation to discourage weed competition. Seeding shall be evenly distributed over amended ground on a still day into a slightly moist seedbed. Hand broadcast methods shall be at double the seeding rate and shall be hand raked or otherwise covered with soil to a depth of 1/4-inch.
- C. All seeded areas shall be straw-mulched with manure in a separate application after drilling. Mix at manufacturer's recommended rates. Hydraulic mulching shall not be performed in the presence of free surface water. In areas not able to be straw-mulched, cover all seeded area with 100% biodegradable straw blankets with biodegradable blanket pins.
- D. The Contractor shall be responsible for protecting and caring for seeded areas until the seeded area is established (roots are growing and knitting together) with new growth or one (1) year.
 - 1. The Contractor shall be responsible for weed control and shall submit a weed control plan to the Owner.
- E. Reseeded areas showing bare spots shall be repaired by the Contractor at the Contractors expense.
- F. The Contractor shall be responsible for repairing washouts or gullies at the Contractors expense.

END OF SECTION