## 650 ROADSIDE

## ITEM 667 - SEEDING AND JUTE MATTING

### 667.01 Description

667.02 Materials
667.03 Construction
667.04 Maintenance
667.05 Method of Measurement
667.06 Basis of Payment
667.01 Description This work shall consist of furnishing, placing, and maintaining seeding and jute matting on areas as shown on the plans and as directed by the Engineer.
667.02 Materials. Matting shall be of a uniform open plain weave of undyed and unbleached single jute yarn. The yarn shall be of loosely twisted construction and shall not vary in thickness by more than one-half its normal diameter. Matting shall be furnished in rolled strips as follows:

Length - minimum, 50 yards ( 46 meters)
Width - 48 inches ( 1.2 m ) plus or minus 1 inch ( 25 mm )
Warp ends per width - 81 plus or minus 2
Weft ends per yard (meter) - 41 (49) plus or minus 3
Average weight - 1.22 pounds ( 0.6 kg ) per linear yard (meter) plus or minus 10 percent.

Staples used to fasten the matting shall be made from 12 inch ( 0.3 m ) lengths of No. 11 gage steel wire bent into a narrow " U " shape with the ends of the staples approximately 1 inch ( 25 mm ) apart. For clay, shale, and other heavy soils, a 3 steel staple, at least 9 gage with points approximately 1 inch ( 25 m ) apart will be used as may be required by the Engineer.

Seed and mulching materials shall be as specified in Item 659.
667.03 Construction. After the area has been fertilized, and limed if specified, it shall be seeded with the mixture and at the rate as specified in Section 659.09 or on the plans.

Within 48 hours after seeding, vegetative mulching material shall be carefully and evenly placed over the specified area at the rate of 25 lbs . per 1,000 square feet ( 120 $\mathrm{g} / \mathrm{m}^{2}$ ). No asphalt emulsion tack required. Immediately thereafter, the matting strips
shall be laid flat and loosely, parallel to the flow of water. Where more than one strip is required to cover the given area, the strips shall overlap at least 4 inches ( 102 mm ). Ends shall overlap at least 6 inches ( 152 mm ) with the upgrade section on top. The up-slope end of each strip of matting shall be buried in 6 inch $(152 \mathrm{~mm})$ slots with the soil firmly tamped against it. The Engineer may require that any other edge exposed to more than normal flow be buried in a similar manner.

Check slots shall be placed between the ends of strips by placing a tight fold of the matting at least 6 inches ( 152 mm ) vertically into the soil. These shall be tamped and stapled the same as up-slope ends. Check slots shall be spaced so that one check slot or one end occurs within each 50 feet ( 15.2 m ) of slope.

Edges of matting shall be similarly buried when the matting abuts catch basins and other structures.

Matting shall be spread evenly and smoothly. It shall be in contact with the grade at all points and care used that the material is not stretched or drawn taut during the stapling operation.

The matting shall be held in place by means of staples driven vertically into the soil. Three rows of staples shall be provided for each strip of matting, with one row along each edge and one row alternately spaced in the middle. The staples shall be spaced not more than 3 feet ( 0.9 m ) apart in each row. All ends of the matting and all check slots shall be stapled across the ir width, with staples spaced not more than 6 inches ( 152 mm ) apart.

After the installation operations described have been completed, the areas disturbed through the preparation of check slots or other grade disturbances as determined by the Engineer shall be over-seeded with the seed mixture specified in Item 659 or on the plans at the rate of 1 pound per 1,000 square feet $\left(5 \mathrm{~g} / \mathrm{m}^{2}\right)$.
667.04 Maintenance. The matting areas shall be maintained until all work on the contract has been completed and accepted. Maintenance shall consist of the repair of areas damaged by erosion, wind, fire, or other causes. The soil in such areas shall be restored to the condition and grade existing just prior to application of the matting, and restored areas shall be relimed, refertilized, and reseeded. Where necessary, the jute matting shall be completely replaced.
667.05 Method of Measurement. The yardage of seeding and jute matting shall be the number of square yards (ground surface area) of seeding and jute matting placed in accordance with these specifications, completed and accepted.
667.06 Basis of Payment. Payment for accepted quantities placed will be made at the contract price for:

Item Unit

## Description

667 Square Yard (Square Meter) Seeding and Jute Matting
The liming and fertilizing required on the area covered by seeding and jute matting will be paid for under Item 659.

