NATURAL RESOURCES CONSERVATION SERVICE ILLINOIS URBAN MANUAL PRACTICE STANDARD



(Source: NC Erosion and Sediment Control Field Manual)

DEFINITION

Stabilization of fine-graded disturbed areas by laying a continuous cover of grass sod.

PURPOSE

The purposes of this practice are to prevent erosion and damage from sediment by stabilizing the soil surface and to improve the visual quality and utility of the area quickly.

CONDITIONS WHERE PRACTICE APPLIES

Disturbed areas, which require immediate cover for erosion protection or sediment control.

Where sodding is preferred to other means of grass establishment.

Residential or commercial areas where quick use or aesthetics are factors.

At places where surface water concentrates such as waterways carrying intermittent flows. Areas around drop inlets or in swales.

Any area where conditions make seeding impractical or impossible.

CRITERIA

<u>Final grade</u> - Prior to soil preparation, areas to be sodded shall be brought to final grade in accordance with the approved plan. Any irregularities in soil surface shall be filled or shaped to prevent the formation of depressions or water pockets.

Soil Preparation - Soil tests should be made to determine the exact requirements for lime and fertilizer. Apply soil amendments uniformly and incorporate into the top 3 to 6 inches of the soil by disking or other acceptable means. Level with a harrow or similar tool. Roll lightly to firm surface after leveling. Prior to laying sod, the soil surface shall be clear of trash, debris, large roots, branches, stones, and clods in excess of 1 inch in length or diameter. Sod shall not be applied to gravel or other non-soil surface. <u>Sod</u> - High quality sod free of disease, insects or weeds and consisting of about a 3/4 inch mat of vigorous turf will be selected. It shall not be cut or laid in excessively wet or dry weather. Sod shall be harvested, delivered, and installed within a period of 48 hours. The type of sod used must be composed of plants adapted to the site and suited for the use.

Sod Installation - Sod should not be laid if temperatures are too hot or too cold. The soil should be slightly moist but firm enough not to leave depressions if walked on. The first row shall be laid in a straight line perpendicular to the slopes with subsequent rows placed parallel to and butted tightly against each other. Lateral joints shall be staggered to promote more uniform growth and strength. Care shall be taken to prevent voids or over exposure of the roots which would cause drying. As sodding of defined areas is completed, sod shall be rolled or tamped to provide firm contact between roots and soil. Fill any gaps between edges or ends of sod mats with good soil and roll.

<u>Watering</u> - After rolling is complete, sod shall be irrigated to a depth sufficient that the underside of the sod mat and 4 inches of soil below sod is thoroughly wet. Irrigate at a rate that does not result in runoff. Until a good root system develops, supplement rainfall as often as necessary to maintain moist soil to a depth of at least 4 inches.

<u>Mowing</u> - Do not mow for 2-3 weeks or until at least 3 inches of new growth occurs. During the first 4 months do not remove more than 1/3 of the grass leaf at any one cutting.

CONSIDERATIONS

It is initially more costly to install sod than to seed. However, this cost is easily justified in places where sod can perform better than seed or where instant cover for erosion control or aesthetics is wanted.

Sod can be laid during times of the year when seeded grass may fail, so long as there is adequate water available for irrigation in the early weeks if establishment. Sod should not be laid during periods when the ground is frozen or during hot, dry periods.

Select high quality sod that is densely matted, healthy, weed-free and uniformly cut. Sod selected should always be freshly cut and laid within 48 hours. If sodding is delayed keep it cool and moist. High activity or critical runoff areas should be considered for sodding. Areas such as building entrance zones or where concentrated water flows occur should be sodded. Sod provides instant soil stabilization and acts as a natural filter of runoff.

On slopes greater than four (4) percent or where concentrated flows are likely the sod should be staked to prevent movement.

Select a sod that will meet the needs of the site. It will look good and will protect the site for years if properly selected and maintained.

PLANS AND SPECIFICATIONS

The plans for sodding shall specify the following:

- 1. Site preparation.
- 2. Fertilization.
- 3. Installation techniques.

- 4. Sod type, quality and quantity.
- 5. Watering.
- 6. Use and maintenance.

OPERATION AND MAINTENANCE

One of the main features of sod is that it permits almost immediate use of the area. Try to limit foot traffic to low use for the first 2 to 3 weeks. After that normal to high traffic levels can occur if normal growing conditions prevail.

Water the sod regularly, every week to 2 weeks, until a good root system develops. Moisten the soil uniformly to a depth of about 4 inches.

If the site was properly limed and fertilized prior to sodding only maintenance levels of nitrogen (N) phosphorus (P₂05) and potassium (K₂0) need to be applied.

Apply maintenance fertilizer beginning one year after sodding to maintain sod health, appearance and vigor. Amount and formulation of the fertilizer depends on the grass mixture and level of turf management. Turf management professionals should be consulted for specific recommendations. If no information is available, a total annual rate of 130 pounds of N per acre (3) pounds per 1,000 sq. ft.) and 40 pounds each of P₂0₅ and K₂0 per acre (1 pound per 1,000 sq. ft.) should be applied. Apply as split applications, once in the spring after grass begins to grow (April-May) and once in the fall about 6 weeks before dormancy (August-September).

Mowing should occur as needed to maintain about 2 1/2 - 3 1/2 inches of grass. Generally, no more than 1/3 of

the total foliage should be removed during mowing.

Proper mowing height, fertilization and watering help maintain a disease and weed free sod. If weeds or diseases become a problem consult a turf specialist for treatment recommendations and adhere to label rates.

Special treatment, such as thatching aerating or rolling may be needed on an irregular basis. Consult a turf specialist for these issues.

Do not use sodium chloride salts on walks, or drives where runoff might damage the sod. Areas requiring resodding should be prepared in the same manner as the original installation.

NRCS IL December 1994

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