


	<p>City of Berea, Kentucky Stormwater Best Management Practices (BMPs) Erosion Prevention Practices (EPPs)</p>	<p>EPP 4.2.7</p>
<p>PLANNING CONSIDERATIONS</p> <p>Design Life: Permanent</p> <p>Acres Needed: As required</p> <p>Estimated Unit Cost: Medium</p> <p>Monthly Maintenance: 30% of installation</p>		 
	<p style="text-align: center;">TARGET POLUTANTS</p> <p style="text-align: center;">Significant ♦ Partial ♦ Low or Unknown ♦</p> <p>Sediment ♦ Heavy Metals ♦ Nutrients ♦ Oxygen Demanding Substances ♦ Toxic Materials ♦ Oil & Grease ♦ Bacteria & Viruses ♦ Floatable Materials ♦ Construction Waste ♦</p>	
<p>Description</p> <p>Suitable Applications</p> <p>Approach</p> <p>Installation procedures</p>	<p>Sodding is a method used to quickly establish permanent grass stands. This practice can prove very effective in quickly stabilizing critical, erosion-prone areas.</p> <ul style="list-style-type: none"> ➤ Ditches or channels carrying intermittent flow. ➤ Areas around drop inlets in grass swales. ➤ Residential or commercial lawns that would be aesthetically enhanced sodding. Other critical areas not previously described. <ul style="list-style-type: none"> ➤ Establish permanent grass stands quickly. ➤ Prevent erosion by stabilizing formerly denuded areas. ➤ Reduce the amount of air borne sediment, dust and mud leaving the project site. Stabilize channels where concentrated overland flow occurs. <p><i>Site Preparation</i></p> <ul style="list-style-type: none"> ➤ Soil material should be capable of supporting permanent vegetation and have at least 25 % silt and clay to sufficiently hold moisture during establishment. ➤ In compacted areas, soil should be loosened to a depth of 6-8 inches. ➤ Stockpile unwanted topsoil to be used in other areas at the construction site. ➤ Grade and prepare the area for conventional construction equipment to be used for preparing the sod bed. 	

Installation Procedures (cont'd)*Sod Bed Preparation*

- Soil should be analyzed for fertilizer and lime requirements.
- Use a 10-10-10 fertilizer shall be applied at a rate of 1,000 lbs per acre, or as determined by soil testing.
- Work lime and fertilizer into the soil with disk harrow, springhooth harrow or like equipment to a depth of 4 inches.
- Clear vicinity of deleterious materials and stones greater than 4" in diameter prior to laying sod.
- Loosen the top one-inch of soil prior to saying the sod pieces.

Handling

- Sod should be kept moist and covered during transport and preparation.
- Sod should be free of noxious and secondary weeds and secured from good, thick growing stands.
- Sod should be mowed to a height between 2-4 inches.

Placement

- Do not place sod in freezing conditions (ambient temperatures less than 32° F.)
- Sod shall be placed and pressed together such that it will be continuous.
- The outer edges of the sod placed along curbing or side walks shall be sufficiently deep so that the surface water will flow over onto the top of the sod.
- In swales and ditches, lay sod strips perpendicularly to the centerline of the channel.
- In steep channels, wood stakes should be used to secure the sod strips.
- On slopes 3:1 or steeper, the sod shall be rolled or tamped, then secured with chicken wire or jute mesh over the sod for protection over critical areas. The stakes should secure the sod and the net and be spaced no further than 18" apart. The size of the stakes shall be approximately ½" x ¾" x 12". The netting or mesh shall be stapled on the side of each stake within two inches of the top of the stake. The stake would then be driven flush with the top of the sod.
- The sod shall be tamped or rolled after placement and then watered.

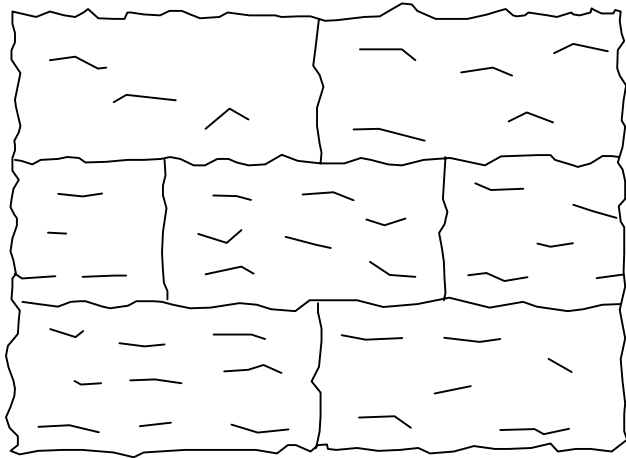
Maintenance

- Sod should be kept moist for at least the first three weeks, until properly rooted.
- Sod areas where original placement does not establish or take root.
- Do not mow for the first three weeks.
- Once mowing begins, cutting height should be 3" or greater.
- Fertilize and mow grasses once established.

Inspection Checklist

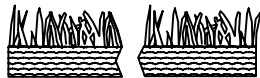
- Sodded areas are properly watered and maintained.
- Heavy construction equipment has been prohibited from crossing sodded areas.
- Sodded areas are mowed once established.

FLOW ↓



SHAPE AND SMOOTH SOIL SURFACE TO FINAL GRADE. WORK PRESCRIBED LIME AND FERTILIZER INTO THE SOIL.

LAY SOD IN A STAGGERED PATTERN. BUTT THE STRIPS TIGHTLY AGAINST EACH OTHER. DO NOT LEAVE SPACES AND DO NOT OVERLAP. A SHARPENED MASON'S TROWL IS A HANDY TOOL FOR TUCKING DOWN THE ENDS AND TRIMMING PIECES.



CORRECT



INCORRECT

BUTTING - ANGLED ENDS CAUSED BY THE AUTOMATIC SOD CUTTER MUST BE MATCHED CORRECTLY.



City of Berea
Stormwater Manual

Sodding Detail

SOURCE: LOUISVILLE MSD

EPP 4.2.7

Sodding Standard

Installation:

Shape and smooth the soil surface to final grade in accordance with the approved grading plan.

Add lime to reach a soil pH value required by the specific grass. Fertilize according to a soil test or in the absence of a test use available nitrogen, phosphorous and potash as prescribed for permanent seeding. Work lime and fertilizer into the soil 3- to 6-inches deep and smooth the surface.

Clear the soil surface of trash, debris, roots, branches, stones and soil clods in excess of 2-inches of length or diameter. Rake soil surface to break crust just before laying sod, or irrigate soil lightly if the soil is dry. Do not install sod on hot, dry soil, compacted clay, frozen soil, gravel, or soil than has been treated with pesticides.

Sod should be harvested, delivered, and installed within a period of 36 hours. Store rolls of sod in the shade during installation. Sod should be free of weeds and be of uniform thickness (approximately 1-inch) and should have a dense root mat for mechanical strength.

Lay strips of sod beginning at the lowest area to be sodded with the longest dimension of the strip perpendicular to the slope, and stagger in a brick-like pattern. Wedge strips securely in place. Square the ends of each strip to provide for a close, tight fit. Match angled ends correctly to prevent voids.

Roll or compact immediately after installation to ensure firm contact with the underlying topsoil.

Irrigate the sod until the soil is wet to a depth of 4-inches, and keep moist until grass takes root.

If placed on steep slopes, sod should be laid with staggered joints and/or be pegged and stapled. In areas such as steep slopes or next to running waterways, chicken wire, jute, or other netting can be placed over the sod for extra protection against lifting.


Inspection and Maintenance:

Watering may be necessary after planting and during periods of intense heat and/or lack of rain (drought). Keep soil moist to a depth of 2-inches until sod is fully rooted.

Mow to a height of 2- to 3-inches after sod is well-rooted (2-3 weeks). Do not remove more than 1/3 of the shoot in anyone mowing.

Permanent, fine turf areas require yearly applications of fertilizer and lime.

Inspect the sod frequently after it is first installed, especially after large storm events, until it has established a permanent cover.

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