

## 2.6 SODDING



Figure 2.15. Sod truck (Source: Urban Resources and Borderland Alliance Network)

### Overview

**Description:** To cover bare soil with cut sod, usually bluegrass, to provide rapid stabilization of the soil.

**Problem identification:** Waterways, rock chutes, flumes, and some slopes require rapid vegetation establishment to control soil loss due to wind or water erosion.

**Design purpose:** To control erosion or dust and enhance the area, or to protect rock chutes, flumes, and waterways from erosion with sod.

**Associated practices:** Sod is placed in areas where vegetative cover is needed rapidly.

**Installation:** Sod is usually bluegrass or a mixture of bluegrass and creeping red fescue. Sod may be 12 or more in. wide, 3 or more ft long, and approximately 3/4 of an in. thick.

Sod should be installed within 36 hours of being cut.

The sodbed surface should be smooth and firm and free of all debris or other objects that would interfere with sodding or with the final finish. If the area has been subject to construction traffic compaction, the underlying soil bed should be loosened to a depth of two to three inches to aid in root growth.

Sod placed on slopes 3:1 or steeper should be staked.

Apply fertilizer at the rate of 10 lbs of 13-13-13 fertilizer per 1,000 sq ft before the sod is placed. After the sod is placed, it should be rolled to ensure firm contact with the soil. Immediately after rolling, the sod shall be thoroughly watered so the ground is wet at least 4 in. beneath the sod.

For the first two weeks, the sod should be watered three times a week or every two or three days. Watering must be done so wet soil is present four in. below the sod. For the next two weeks, the sod should be watered twice a week (for example, every three days), and again the ground should be soaked to four in. below the sod.

**Maintenance/inspection:** Inspect on a weekly basis to ensure that there are no dry areas or that the sod has not been damaged by heavy precipitation. If hot, dry weather prevails after 28 days of watering, additional water may be necessary. Any damaged areas of the sod should be replaced. Do not mow until the roots are well established and the sod is firm. No more than one-third of the grass leaf should be removed by the first mowing.

The second application of fertilizer should be applied one month after the sod was installed. Use 8 lbs of 13-13-13 fertilizer per 1,000 sq ft.

**Design life:** Permanent.

**Estimated cost:** Sod and 28-day water period: \$49.00 per 100 sq ft.

### Instructions for Figures 2.16 and 2.17

Grading and shaping may include the removal and disposal of excess earth in order to obtain satisfactory drainage and appearance for the finished work.

Sod channels should be constructed at the low point through ditches or borrow areas. All excavated material should be wasted to fill low areas and otherwise facilitate the free flow of surface water into the channel. Alignment should be smooth. Abrupt changes should be avoided.

At locations where silt conditions require shaping of a ditch to provide a proper area for installing sod for special ditch control, necessary excavation shall be done by the contractor with the excavated material disposed of in adjacent areas at the direction of the engineer.

At locations where erosion has created gullies in ditches or backslopes, the gullies shall be filled and compacted in lifts not more than eight in.

Special care shall be taken to ensure that the ground surface adjacent to any sod channels is shaped to facilitate natural drainage into the sodded area.

Where directed, the contractor will be required to stake the sod in place to minimize erosion damage, with a minimum of 33 stakes per square. Wooden stakes shall be used in sod flumes. Longer stakes may be required for certain soil conditions to properly hold the sod in place.

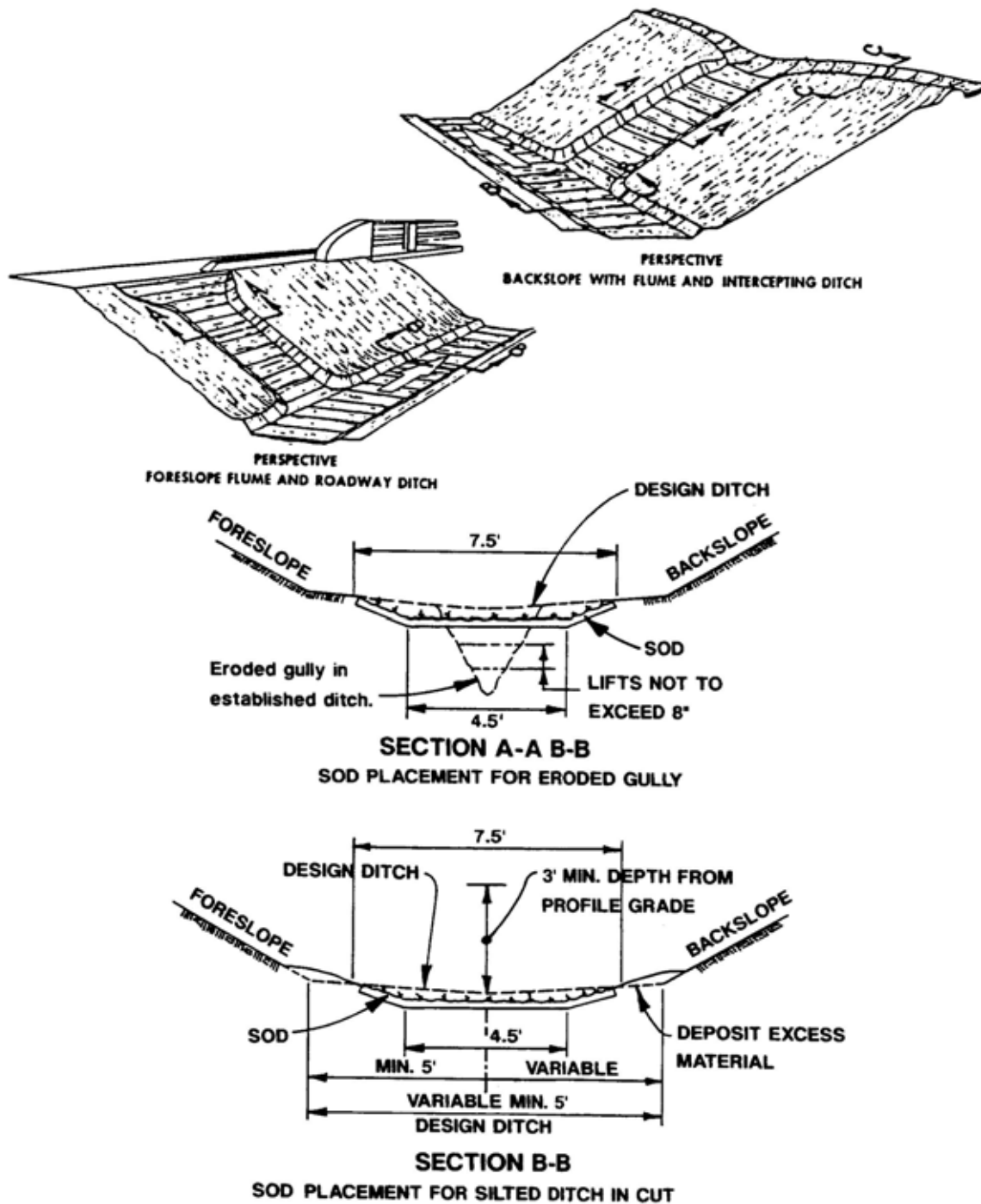


Figure 2.16. Sod placement in eroded gully and silted ditch (Source: Department of Civil, Construction, and Environmental Engineering, Iowa State University)

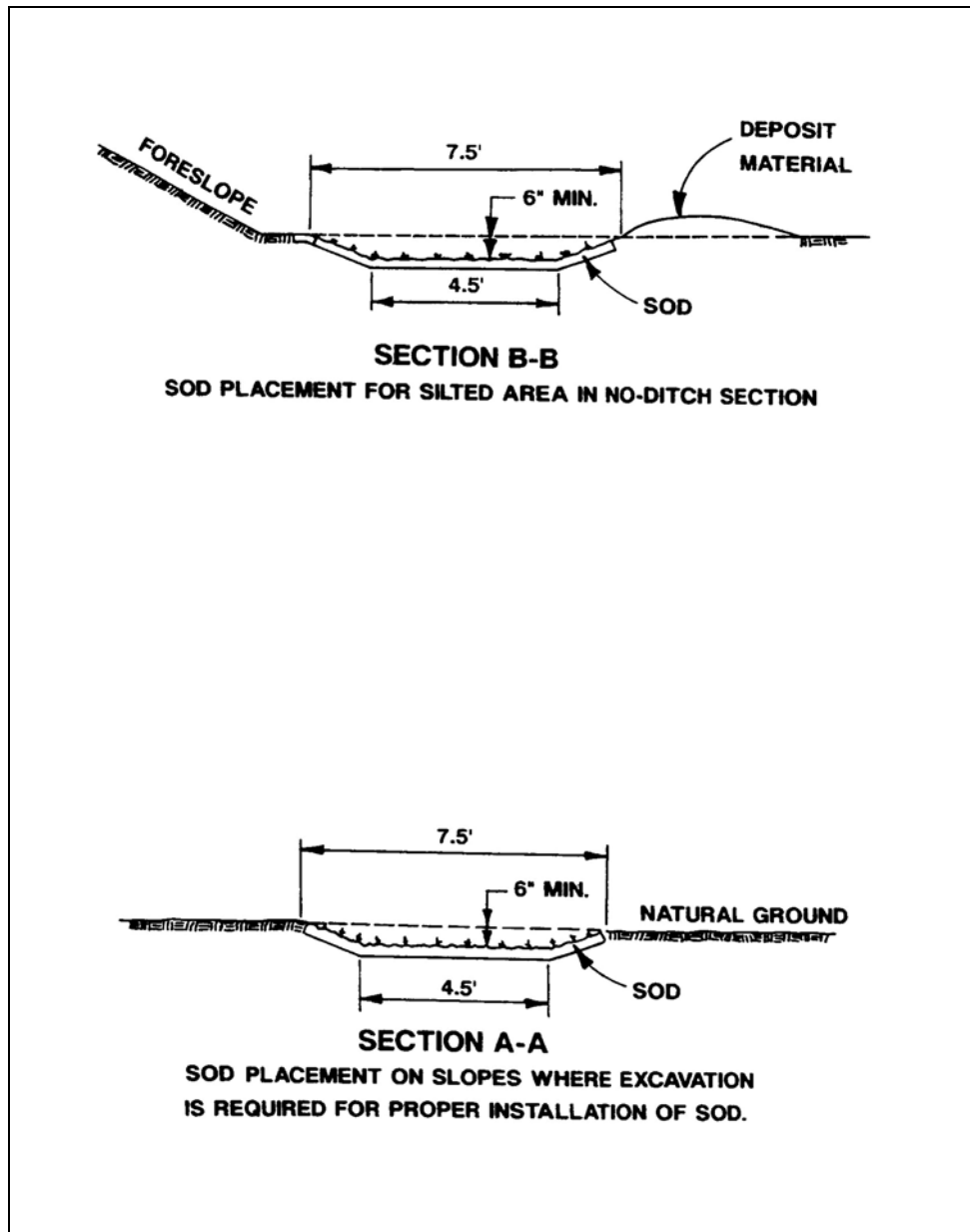


Figure 2.17. Sod placement in no-ditch and slope situations (Source: Department of Civil, Construction, and Environmental Engineering, Iowa State University)

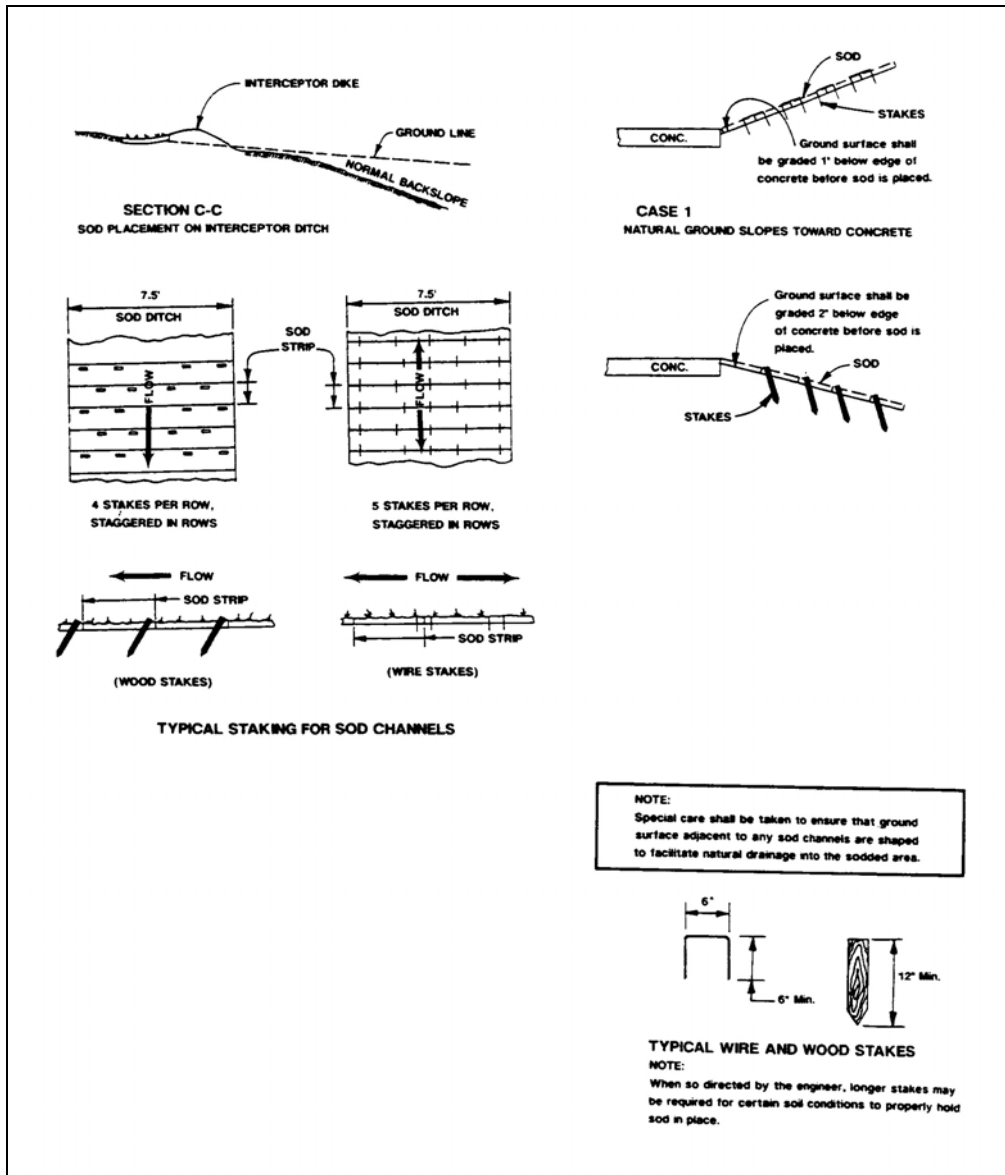


Figure 2.18. Sod staking (Source: Department of Civil, Construction, and Environmental Engineering, Iowa State University)