

SECTION 1664
SODDING

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40

1664-1 DESCRIPTION

Prepare soil, furnish and place limestone, fertilizer, sod and water; and other operations necessary for the permanent establishment of vegetation from sod on shoulders, slopes, ditches or other roadside areas.

Adapt operations to variations in weather and soil conditions so as to assure the successful establishment and growth of grasses.

Preserve the required line, grade and cross section of the area treated.

The actual conditions which occur during the construction of the project will determine the quantity of water used and mowing required. The quantity of water or mowing may be increased, decreased or eliminated entirely at the direction of the Engineer. Such variations in quantity will not be considered alterations in the details of construction or a change in the character of the work.

1664-2 MATERIALS

Refer to Division 10.

Item	Section
Fertilizer	1060-2
Limestone	1060-3
Sod	1060-7
Water	1060-9

The contract will state the analysis of fertilizer and the kinds of sod.

1664-3 SODDING**(A) Handling and Storing Sod**

Exercise extreme care during all operations of loading, transporting, unloading, storing, placing, tamping and staking sod, to prevent breaking the sod sections and to prevent the sod from drying out. Any sod that is torn, broken or too dry will be rejected. Torn or broken sod, if kept moist, may be used for filling unavoidable small gaps in sod cover as permitted.

Place sod on the designated areas within 48 hours after being cut unless otherwise directed.

(B) Soil Preparation

Remove litter and other debris. Mow and satisfactorily dispose of weeds or other unacceptable growth on the areas to be sodded.

Bring the area to be sodded to a firm uniform surface at such elevation that the surface of the complete sodding conforms to the finished grade and cross section as shown in the plans.

Scarify or otherwise loosen soil to a depth of not less than 5". Break clods and work the top 2" to 3" of soil into an acceptable soil bed by using soil pulverizers, drags or harrows.

Place limestone and fertilizer before placing the sod. The contract will state the kind and grade of fertilizer, and the rates of application of limestone and fertilizer. Distribute the limestone and fertilizer uniformly over the area and thoroughly mix in the top 5" of the soil by discing, harrowing or other approved methods.

Prepare the area by harrowing, dragging, raking or other approved methods to give a lawn type finish. Remove all trash, debris and stones larger than 1 1/2" in diameter or

Section 1664

1 other obstructions that could interfere with the placing of the sod. Moisten the finished
2 surface with water before placing the sod.

3 (C) Placing Sod

4 The contract will state the seasonal limitations for sodding and the kind of sod to use.

5 Sod handling and placement will be a continuous process of cutting, transporting and
6 installing without appreciable delays. Install sod within 48 hours after being cut and
7 water immediately after installation.

8 Place sod firmly and carefully by hand within 24 hours after soil preparation is completed
9 and accepted by the Engineer. Pack each piece of sod tightly against the edge of adjacent
10 pieces so that the fewest possible gaps will be left between the pieces. Close unavoidable
11 gaps with small pieces of sod.

12 When placing sod on a slope, begin at either the top or the toe of the slope. Place sod
13 with the long edge horizontal and with staggered vertical joints. Turn the edge of the sod
14 slightly into the ground at the top of a slope and place a layer of earth over it and compact
15 so as to divert the surface water over and onto the top of the sod.

16 Stake sod in place by driving stakes flush with the sod, on all slopes 2:1 or steeper, in
17 drainage channels, on other areas shown in the plans, and on any areas that are in such
18 condition that there is danger of sod slipping. Perform staking concurrently with sod
19 placement and before tamping with sound wooden stakes which are approximately one
20 inch square or one inch in diameter and not less than 12" in length. Place enough stakes
21 to prevent slipping or displacement of the sod. Drive stakes perpendicular to the slope.
22 Where backfill is necessary on cut slopes to obtain a uniform sodding area, provide
23 stakes of sufficient length to reach at least 3" into the solid earth underneath the backfill.

24 On all other areas, use metal staples in place of wooden stakes. The metal staples should
25 be 12" long, made of 11 gauge new steel wire so as not to bend when pinned or driven
26 through the sod. Shorter staples may be used with the approval of the Engineer.

27 Place, stake and staple the sod where necessary, then tamp or roll carefully and firmly by
28 acceptable means. If rolled, roller shall weigh 150 lb/ft of roller width. Take extreme
29 care to prevent the installed sod from being torn or displaced.

30 Do not place sod when the atmospheric temperature is below 32°F. Do not use frozen
31 sod or place on frozen soil.

32 (D) Watering Sod

33 Water carefully and thoroughly after sod has been placed and tamped. Perform watering
34 as directed until final acceptance. Application of water may be made by the use of
35 hydraulic seeding equipment, farm type irrigation equipment or by other acceptable
36 means.

37 1664-4 MAINTENANCE

38 Maintain sod in a satisfactory and live condition until final acceptance of the project.
39 Maintenance includes watering and mowing at the locations and times as directed.

40 1664-5 MEASUREMENT AND PAYMENT

41 *Sodding* will be measured and paid in square yards, measured along the surface of the ground
42 completed and accepted. No direct payment will be made for mowing the sodding areas
43 before soil preparation as such work will be incidental to sodding. No direct payment will be
44 made for furnishing and applying limestone and fertilizer, as such will be incidental to the
45 work covered by sodding.

46 *Water* will be measured and paid in 1,000 gallon units. Measurement of water will be made
47 by means of an approved metering device at the source of supply, or by determining the

1 volumetric capacity of tank trucks used to deliver water to the project and recording the
2 number of loads delivered by each truck.

3 *Mowing* will be measured and paid in accordance with Section 1660.

4 The above prices and payment will be full compensation for all work covered by this section.

5 Payment will be made under:

Pay Item	Pay Unit
Sodding	Square Yard
Water	1,000 Gallons

6

SECTION 1665

7

FERTILIZER TOPDRESSING

8

1665-1 DESCRIPTION

9 Furnish and uniformly distribute fertilizer as a topdressing to areas on which seeding and
10 mulching, sprigging or sodding are completed and a vegetative cover is established. Top
11 dress previously seeded, sprigged or sodded areas under other contracts when so stated in the
12 contract or where so directed.

13 The actual conditions that occur during the construction of the project will determine the
14 quantity of fertilizer topdressing used. In the event that a vegetative cover has not had
15 sufficient time to develop to a size suitable for topdressing before completion of the project,
16 the work of fertilizer topdressing will be decreased or eliminated entirely. Where the use of
17 additional fertilizer topdressing would be beneficial to the establishment of grasses or
18 legumes, the work of fertilizer topdressing will be increased. The quantity of fertilizer
19 topdressing may be increased, decreased or eliminated entirely as directed. Such variations in
20 quantity will not be considered as alterations in the details of construction or a change in the
21 character of work.

22 1665-2 MATERIALS

23 Use fertilizer containing no urea for topdressing.

24 Refer to Division 10.

Item	Section
Fertilizer	1060-2

25 The analysis of fertilizer shall be as stated in the contract.

26 1665-3 APPLICATION

27 Apply fertilizer topdressing at the locations and times as directed, regardless of whether or not
28 other seeding, sprigging or sodding operations are underway at the time.

29 The contract will state the rate of application and analysis of fertilizer. Distribute fertilizer
30 uniformly without any type of soil disturbance.

31 Refer to the contract for the approval of equipment and the protection of traffic, structures,
32 guardrails, traffic control devices and other appurtenances.

33 1665-4 MEASUREMENT AND PAYMENT

34 *Fertilizer Topdressing* will be measured and be paid in tons. The weight of dry fertilizer will
35 be determined by bag count of standard weight bags or by weighing the fertilizer in trucks on
36 certified platform scales or other certified weighing devices.

37 In the event that an alternative analysis of fertilizer topdressing is approved and used, it will
38 be in an equivalent number of tons of fertilizer, of the specified analysis, based on nutrient
39 value.