

SECTION 653

VINE AND GROUND COVER PLANTING

653.1-DESCRIPTION:

This work shall consist of furnishing and planting vine and ground cover of the species called for on the Plans and in the manner prescribed or as directed by the Engineer.

653.2-MATERIALS

653.2.1-Topsoil: Topsoil shall conform to the applicable requirements of 651.

653.2.2-Water: Water shall conform to the requirements of 652.2.

653.2.3-Ground Agricultural Limestone: Ground agricultural limestone shall conform to the requirements of 715.25.

653.2.4-Fertilizer: Fertilizer for landscape plantings shall conform to the applicable requirements of 715.26.

653.2.5-Mulch and Mulch Anchor: Mulch material for landscape plantings shall conform to the requirements of 715.27.2.

653.2.6-Vine and Ground Cover Plants: Vine and ground cover plants shall conform to the requirements specified of 715.33. The vine and ground cover plants shall be true to the type and size indicated on the Plans.

CONSTRUCTION METHODS

653.3-PLANTING OF VINES AND GROUND COVER PLANTS:

The method of planting vine and ground cover plants will be determined to a great extent by the site conditions, namely soil, slope, and type of cover. Two methods of planting ground cover are basically row planting and bed planting, as shown on the Plans.

Row Planting--On areas covered with grass or weed mass, the equivalent of one square foot (300 mm) of sod including roots shall be removed and replaced on the lower side of the plant hole to help retain moisture runoff. The foot (300 mm) square area around each individual plant shall be mulched as directed by the Engineer.

Bed Planting--All plant beds shall be free of weeds and grass prior to planting. The bed preparation can be accomplished with either herbicide spray or tillage as described on the Plans.

Bed areas shall be mulched as shown on the Plans.

Plant backfill mixture for vines and ground covers shall be three parts top

soil to one part peat moss with one hundred lb. (45.5 kg) fertilizer added per cubic yard (meter) of backfill. For plants in containers or pots three inch (75 mm) size or less, the backfill mix shall be applied at the rate of one pint per plant. For plants in larger containers, the planting specifications will be shown on the Plans. Any other additives will be shown on the Plans. In loose shale or sand without a sod cover, selection of plant location shall be where the soil is stable and not subject to rapid accumulation or erosion. On steep banks 1½ to 1 or steeper, a slit shall be opened large enough to receive the plant roots and the replaced soil tamped leaving a slight depression to collect moisture. On slopes 2 to 1 or flatter, a small rain basin shall be formed by tamping with the heel and placing sod or excess soil on the slopes below the plant. Plants shall be watered during planting operations as directed by the Engineer.

The Contractor shall furnish material and mark location of all vine and ground cover plants for future reference. A row shall be identified by a stake at each end and a bed or mass identified by stakes around the perimeter. Wire stakes with flags are acceptable as markers.

Planting Season: All initial planting shall be performed between March 15 and July 1.

653.4-CARE OF VINES AND GROUND COVER:

The Contractor shall maintain the plants in a healthy, living condition during the life of the contract, and shall maintain an adequate supply of moisture in the root zone at all times.

The Contractor and the Engineer shall make a monthly inspection of the plantings to determine the need for maintenance and water during the first growing season, June through October. Any maintenance determined necessary shall be taken care of during the two-week period immediately following the inspection. When moisture in the root zone is deficient, watering shall be started within 48 hours with sufficient labor and equipment to completely water all the plants within a two-week period unless otherwise directed by the Engineer. Other maintenance required during the contract period shall include:

- i. The control of weeds and grass growth in beds and around individual plants.
- ii. Protect plants from damage by insects and diseases.
- iii. Any other practices necessary to maintain the plants in a healthy, live condition.

653.5-REPLACEMENT OF VINES AND GROUND COVER:

Between August 1 and 10 following the initial planting period, the Contractor and Engineer will make an inspection of all vines and ground cover plants to determine the replacement necessary.

If it is estimated that 85 percent or more of the Plan quantity of any individual item in a specific area is living, healthy and in good growing condition, replacements will not be required for that area. Any specific grouping shall have a reasonable distribution of live plants and the allowable

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15 percent loss shall not be concentrated.

If it is determined there is a loss of more than 15 percent in any specific area, the Contractor shall be required to replace all the dead, missing or defective plants in the specific area. All replacements shall be completed during the period September 1 to 15 and maintained until the completion of the Contract.

653.6-CARE DURING AND AFTER DELIVERY:

There is a tendency for bare-root plants to dry out during shipment and during the planting operation; therefore it is important that the roots of all plant material shall be kept moist during shipment and during their planting period.

653.7-METHOD OF MEASUREMENT:

Measurement of vines and ground cover plants shall be the number of plants originally planted, providing a survival of 85 percent was established, or the necessary replacements were made as directed.

The final acceptance and payment for any particular plant will be made after completing proper care and replacement as described in 653.4 and 653.5.

Water for maintenance during the period of establishment will be measured by the gallon (liter), expressed in thousand-gallon (liter) units.

653.8-BASIS OF PAYMENT:

The quantities, determined as provided above, will be paid for at the contract unit price bid for the items listed below, which prices and payments shall be full compensation for furnishing all the materials, including water required during the process of planting, topsoil, ground limestone, fertilizer, and mulch, and doing all the work prescribed in a workmanlike and acceptable manner, including all labor, tools, equipment, supplies, and incidentals necessary to complete the work.

Maintenance work other than watering shall be included in the contract unit price bid for each plant.

The accepted quantities of watering during the period of establishment will be paid for at the contract unit price per 1,000 gal. (L), which price shall be full compensation for furnishing, delivering, applying and performing all other work. No payment will be made for watering at the time of original planting or when planting replacements.

653.9-PAY ITEMS:

ITEM	DESCRIPTION	UNIT
653001-*	VINES, FAST GROWING, "***key number, ***size"	EACH
653002-*	VINES, MEDIUM GROWING, "***key number, ***size"	EACH
653003-*	VINES, CLUMP TYPE, "***key number, ***size"	EACH
653004-*	GROUND COVERS, "***key number, ***size"	EACH
653005-*	WATER FOR PLANTS	THOUSAND GALLON (LITER)

* Sequence number

**Division's "Vines and Ground Cover List" in effect on the date of the invitation for bids. Copies of the complete "Vine and Ground Cover List" in effect on any date may be obtained from the Division.

*** Size designations will be in accordance with the "American Standards for Nursery Stock".

SECTION 654 TREE AND SHRUB PLANTING

654.1-DESCRIPTION:

This work shall consist of furnishing, delivering, and planting nursery-grown or collected plants, in accordance with these Specifications and at locations shown on the Plans or designated by the Engineer. This work shall include the furnishing of topsoil and related materials together with all other work including clean-up of planted areas.

654.2-MATERIALS:

654.2.1-Topsoil: Topsoil for plant backfill shall conform to the applicable requirements of [651](#).

654.2.2-Water: Water shall conform to the requirements in [652.2](#).

654.2.3-Ground Agricultural Limestone: Ground agricultural limestone shall conform to the requirements of [715.25](#).

654.2.4-Fertilizer: Fertilizer for landscape plantings shall conform to the applicable requirements of [715.26](#).

654.2.5-Mulch and Mulch Anchor: Mulch for landscape plantings shall conform to the requirements of [715.27.2](#).

654.2.6-Trees and Shrubs: Trees and shrubs shall conform to the requirements of [715.35](#). The trees and shrubs shall be true to the type and size indicated on the Plans.

Collected plants may be used in place of nursery grown plants only when called for on the plans.

654.2.7-Tree Paint: Tree paint shall conform to the requirements of [715.36](#).

654.2.8-Miscellaneous Materials: Wire, hose, stakes, tree wrapping paper, anti-desiccant spray, and other incidental materials shall conform to the