# SECTION 580 LANDSCAPE INSTALLATION

## 580-1 Description.

Install, establish and maintain landscaping as indicated in the Contract Documents.

#### 580-2 Materials.

#### 580-2.1 Plants:

**580-2.1.1 Grade Standards and Conformity with Type and Species:** Only use nursery grown plant materials purchased from Florida based Nurseryman Stock that comply with all required inspection, grading standards, and plant regulations in accordance with the latest edition of the Florida Department of Agriculture's "Grades and Standards for Nursery Plants."

Unless otherwise specified, minimum grade for all plants is Florida No. 1 or better. All plants must be the specified size and grade at the time of delivery to the site and the minimum grade maintained throughout the project construction period and plant establishment period.

Use only plants that are true to type and species and ensure that the plants not specifically covered by Florida Department of Agriculture's "Grades and Standards for Nursery Plants" conform in type and species with the standards and designations in general acceptance by Florida nurseries. Prior to planting, furnish certification to the Engineer that all plant materials have been purchased from Florida based Nurseryman Stock.

A minimum of two plants of each species on each shipment must be shipped with tags stating the botanical nomenclature and common name of the plant. Should discrepancies between botanical nomenclature and common name arise, the botanical name will take precedence.

**580-2.1.2 Inspection and Transporting:** Move nursery stock in accordance with all Federal and State regulations and accompany each shipment with the required inspection certificates for filing with the Engineer.

**580-2.2 Water:** Meet the requirements of Section 983.

**580-2.3 Mulching:** Use of cypress mulch prohibited.

### 580-3 Planting Requirements.

**580-3.1 Delivery:** All materials must be available for inspection before installation and will be subject to approval or rejection.

**580-3.2 Layout:** Mark proposed planting beds and individual locations of trees and palms as shown in the Contract Documents for Engineer's review, prior to excavation or planting. The Engineer may request to review all proposed construction and maintenance practices before the start of the operations.

Make no changes to the layout, materials or any variations of plant materials from the Contract Documents without the Engineer's written approval.

**580-3.3 Soil Drainage:** All planting holes and beds must drain sufficiently prior to installing any plants. Immediately notify the Engineer of drainage or percolation problems before plant installation.

**580-3.4 Installation of Plants:** For installation of the plants as identified in the Contract Documents, comply with the requirements of the Design Standards, Index No. 544.

Personnel performing these services are under the sole responsibility and supervision of the Contractor and must be competent, experienced, and skilled in all aspects of the required landscape installation and establishment practices.

**580-3.5 Contractor's Responsibility for Condition of the Plantings:** Begin maintenance of all plants immediately after each planting.

Keep all plants watered, fertilized, mulched, pruned, and staked and guyed as necessary to assure specified minimum grade of Florida No. 1 throughout the duration of the project construction period and establishment period. During the establishment period, keep the individual planting locations and planting beds free of litter and undesirable vegetation. Ensure that the plants are maintained so that they are healthy, vigorous, and undamaged throughout the duration of the project construction period and establishment period. For the duration of the establishment period, operate and maintain in good operating condition, all components of any irrigation system installed in compliance with the Contract Documents.

During the establishment period, replace any plants that fall below specified minimum grade. Use replacement plants of the same species, size and planting medium as the plant being replaced and as specified in the Contract Documents.

**580-3.6 Inspection Requirements:** Certify monthly, on a form provided by the Department, that the plants have been installed and are being maintained per the Contract Documents. A Registered Landscape Architect acting as the Contractor's Landscape Quality Control representative will oversee the establishment period.

The Contractor's Landscape Quality Control representative must perform quarterly inspections of planting areas and submit findings in report form to the Department. Information to be included in inspection report from the Contractor's Quality Control representative must include as a minimum the following:

Date of inspection

Description of project

Location of inspection

Weather conditions

Condition of plants - identify by species, location, and number of plants that are no longer the specified minimum.

Condition of planting beds (including mulching, mowing, weeding, fertilizing, watering, and staking and guying), if applicable

Other comments

Signature and seal of Contractor's Landscape Quality Control

representative

Submit the certified inspection report to the Engineer within seven calendar days after performing the inspection. Any corrections to the inspection report must be revised/corrected and resubmitted within three calendar days after notification by the Engineer. Any deficiencies noted on the inspection report must be corrected within ten days of notification from the Department.

Periodic, random verifications will be performed by the Department to ensure the quality of the plants and correctness of the certified landscape inspection report. Any unresolved disputes that arise between the quality control reporting and the verifications performed by the Department will be referred to the Statewide Disputes Review Board.

## 580-4 Disposal of Surplus Materials and Debris.

Remove from the jobsite any surplus excavated material from plant holes unless otherwise directed by the Engineer. Surplus is defined as material not needed after installation of plants per Contract Documents. Upon commencement of the plant installation, remove daily all landscape installation debris from the landscape locations described in the Contract Documents. Remove all excess staking and guying materials from the jobsite.

### 580-5 Plant Establishment Period and Contractor's Warranty.

Take responsibility for the proper maintenance, survival and condition of all plants for a period of one year after final acceptance in accordance with 5-11. Notify the Engineer upon completion of installation of all plants.

Mowing as part of the landscape work will be identified in the Contract Documents. Continue any mowing of the landscape areas specified in the Contract Documents throughout the establishment period.

As a condition precedent to final acceptance in accordance with 5-11, provide a Warranty/Maintenance Bond to the Department in the amount of the total sums bid for all landscape items as evidence of warranty during this plant establishment period. The cost of the bond will not be paid separately, but will be included in the costs of other bid items.

In addition to satisfying the provisions of Section 287.0935, Florida Statutes, the bonding company is required to have an A.M. Best rating of "A" or better. If the bonding company drops below the "A" rating during the Warranty/Maintenance Bond period, provide a new Warranty/Maintenance Bond for the balance of the establishment period from a bonding company with an "A" or better rating. In such event, all costs of the premium for the new Warranty/Maintenance Bond will be at the Contractor's expense.

The Engineer may conduct interim inspections of all landscape items during the plant establishment period, as well as at the end of the plant establishment period. As part of the warranty to the Department, and at no cost to the Department, replace all plants found not to meet minimum specifications as shown in 580-2.1.1 and 580-3.5 within ten days after each inspection.

Prior to the end of the establishment period and after plant establishment has been verified, remove all staking and guying from the project.

At the end of the establishment period, the Engineer will release the Contractor from further warranty work and responsibility provided all plants are established and all previous warranty and remedial work, if any, has been completed to the satisfaction of the Engineer.

#### 580-6 Method of Measurement.

The quantities to be paid will be the items shown in the Contract Documents, completed and accepted.

### 580-7 Basis of Payment.

Prices and payments will be full compensation for all work and materials specified in this Section.