# 944 Landscape Plans

## 944.1 General

This chapter provides the requirements for the development of Landscape Plans. See ***FDM 270*** through ***276*** for the requirements of landscape designs.

Landscape Plans are most often developed as a standalone maintenance project or occasionally as a component set of plans. Projects with minor landscaping may include Landscape Plan sheets in the Lead Component Plans set.

### 944.1.1 Estimated Quantity Report

Prepare an Estimated Quantity (EQ) Report in accordance with ***FDM 902***. Landscape quantities are determined by location identified by a site number, location description, or both. The location description can be identified as:

- "project-wide" for small projects,
- individual Landscape Plan sheets, or
- designated areas within a sheet.

Pay items categorized as small are plants with less than a 7-gallon container size.

Pay items categorized as large are plants with a 7-gallon or greater container size.

### 944.1.2 Landscape Construction Cost Estimate

Include a Landscape Construction Cost Estimate (typically an Excel spreadsheet) at each phase submittal beginning with Phase III. The estimate provides the cost for all landscape improvements, including irrigation systems and hardscape.

Do not include the cost estimate in the construction contract documents. It is intended solely for use by the Department.

## 944.2 Key Sheet and Signature Sheet

The Key Sheet is the first sheet of the Landscape Plans set. The Signature Sheet, when required, is placed behind the Key Sheet. These sheets are created using the FDOT CADD Software.

Follow the same requirements contained in ***FDM 910*** for the development of a Key Sheet and Signature Sheet. Assemble the Landscape Plans in the following order:

**Index of Landscape Plans**

(1) Key Sheet

(2) Signature Sheet

(3) General Notes

(4) Legend

(5) Planting Plans and Details

(6) Irrigation Plans and Details

(7) Hardscape Plans and Details

(8) Temporary Traffic Control Plan

Landscape Plans may require the insertion of sheets that were prepared independently of the current design phase (aka early works). See ***FDM 910.2.6.1*** for guidance on including early works sheets.

For standalone maintenance contracts, include the list of Contract Plans Components even if the Landscape Plans set is the only component.

## 944.3 General Notes Sheet

The General Notes sheet provides site-specific requirements not covered by the ***Standard Plans*** or ***Standard Specifications***.

General notes may include:

- Benchmark datum
- Maintaining authority contact information
- Utility information and owners contact information
- Mowing requirements, including requirements for wildflower areas
- Planting area preparation (e.g., soil scarification and amendment requirements)

Notes are written to the contractor and should be written as commands. Do not include “Contractor must”, “by the Contractor”, or similar phrases in notes. Also, use “must” instead of “shall”.

### 944.3.1 Pay Item Notes

Place pay item notes on the General Notes sheet.

Information on how quantities are determined is contained in the EQ Report and should not be repeated in the plans as a pay item note.

Pay item notes are used to provide unique project information not covered by the basis of payment information contained in the ***Standard Specifications***, such as:

- Clarify how incidental work is to be paid for.
- Clarify the purpose, uses, or requirements.

### 944.3.2 Plant Legend

Place a plant legend (e.g., plant symbol, abbreviated plant name (code), and common name) and other abbreviations used in the Landscape Plans on the General Notes sheet, or on a separate “Plant Legend” sheet.

## 944.4 Landscape Plan Sheets

Landscape Plan sheets convey a graphic depiction and necessary information for the installation of plant materials, irrigation systems, and hardscape elements.

Plan sheets may be produced on sheets that are contained in the FDOT CADD Software. The standard horizontal scale is 1″ = 50′; however, an alternate scale may be approved by the Department Project Manager.

For simple landscape projects, all elements of the landscape design may be shown together on a single “Landscape Plan” sheet. For most landscape projects, each element of the landscape design is shown on individual sheets, as follows:

- Planting Plan
- Irrigation Plan
- Hardscape Plan

### 944.4.1 Planting Plan

Planting designs may be displayed on aerial photography or on available topographic surveys. Information from a prior construction project may also be used.

Display and label existing topography, including R/W lines, roadways and driveways, buildings, underground and overhead utilities, walls, sidewalks and curbs, fencing, guardrail, railroads, bridges, drainage structures, and other similar items that are relevant to the planting design. Existing topography elements are often displayed as “gray-screened”.

Display the proposed roadway improvements when the landscape project follows or is part of a roadway project (e.g., edge of pavement and shoulder, sidewalks, utilities, lighting, or signal installations).

Display a north arrow and scale within each plan view, typically in the upper right portion. Display the centerline of construction or baseline of construction such that the stationing is increasing from left to right. Indicate beginning and end project limits.

Display and label the following planting design information:

(1) Location of new planting areas, indicating:

  (a) Planting Area ID number for location identification in the EQ Report. This is required only when multiple areas (locations) are designated within a sheet.

  (b) Plant Symbol, abbreviated plant name (code), and number of plants, trees, or palms.

  (c) Clear trunk height for trees and palms.

  (d) Delineated mulch area with estimated cubic yards of material needed.

(2) Location and depth to improve soil structure (a.k.a., soil scarification), amend existing soil, or replace existing soil with Landscape Soil.

(3) Demonstrate the following requirements are met:

  (a) Clear zones or lateral offsets

  (b) Limits of clear sight (see ***FDM 212.11***)

  (c) View zones for outdoor advertising signs

  (d) Setbacks from structural elements or drainage systems

(4) Mowing limits

(5) Installations of tree protection fencing

(6) Selective Clearing and Grubbing activities (remove or relocate trees, eradicate undesirable vegetation, and branch and root pruning) are often shown on the Planting Plan sheet, but can be shown on separate Selective C&G sheets when the work is significant. See ***FDM 924*** for Selective C&G sheet requirements.

### 944.4.1.1 Planting Details

Planting Details sheets provide details and information that are applicable to the project and are not addressed in the Standard Plans or ***Standard Specifications***.

Construction details for tree bracing during root establishment are provided in Standard Plans***, Index 580-001***. Provide tree bracing details in the plans when ***Index 580-001*** does not apply.

## 944.4.2 Irrigation Plan

When separate Irrigation Plan sheets are necessary, use the Planting Plan sheets, “gray screened” in the background, and devoid of unnecessary text and labeling.

Display and label the location of spray heads and rotors, valves, mainlines, lateral lines, sleeves (noting the diameter sizes), controllers, water sources and points of connection, backflow preventers, and isolation valves.

### 944.4.2.1 Irrigation Details

Irrigation Details sheets provide details and information that are applicable to the project and not addressed in the Standard Plans or ***Standard Specifications***.

Include a legend depicting the symbology used on the Irrigation Plan sheets and an associative description for each entry. Additional information such as the nozzle and component schedule, irrigation zone, or pipe schedule can be included on these sheets.

## 944.4.3 Hardscape Plan

When separate Hardscape Plan sheets are necessary, use the Planting Plan sheets, “gray screened” in the background, and devoid of unnecessary text and labeling.

Display and label hardscape and site amenities, e.g., street furniture, specialty paving, tree grates, walls, planters, fountains, fences, and lighting (excluding public utility street and area lighting).

### 944.4.3.1 Hardscape Details

Hardscape Details sheets provide details and information that are applicable to the project and not addressed in the Standard Plans or ***Standard Specifications***.

## 944.5 Landscape Maintenance Guide Sheet

The Landscape Maintenance Guide sheet provides the long-term design intent, the limits of landscape maintenance, and the necessary activities for maintaining the planting and irrigation designs.

See ***FDM 273*** for more information on the Landscape Maintenance Guide.