Chapter 9

Landscape and Community Features

9.1	General			9-1
	9.1.1	Referen	ces	9-2
9.2	Landscaping			9-3
	9.2.1 Design Intent			9-3
	9.2.2	Design Elements		9-4
9.3	Maintenance Plan			9-6
9.4	Cost Es	stimate	9-8	
9.5	Community Aesthetic Features			
	9.5.1	Categor	9-10	
	9.5.2			
		9.5.2.1	Coordination and Review	9-13
		9.5.2.2	Approval	9-14
9.6	Place Name Signs			9-15

THIS PAGE LEFT BLANK INTENTIONALLY

Chapter 9

Landscape and Community Features

9.1 General

"Landscape" or "Landscaping" means any vegetation, mulches, irrigation systems, and any site amenities, such as, street furniture, specialty paving, tree grates, walls, planters, fountains, fences, and lighting (excluding public utility street and area lighting), as defined in *Rule Chapter 14-40, Florida Administrative Code, Highway Beautification and Landscape Management*. Landscaping may be constructed as a stand-alone project or as a component of a roadway project or Community Feature.

Community Features refers to enhancements within the State Highway System or interstate right-of-way including Public Art, Local Identification Markers and Place Name Signs. These features are designed, maintained, and entirely paid for by the local governmental entity, and may be constructed by the local governmental entity or as part of a Department project. These features may include landscaping. Public Art and Local Identification Markers are Community Aesthetic Features designed and placed on the highway right-of-way for the sole purpose of representing, reflecting, or recognizing nearby community cultural and/or natural values and resources, or to enhance the sense of place through which a highway passes.

There are two categories of Public Art and Local Identification Markers, (1) stand-alone and (2) add-on. Stand-alone features consist of free-standing structures. Add-on features are placed or adhered to existing structures or walls.

9.1.1 References

Additional information regarding landscape plans may be found in:

- 1. Florida Accessibility Code for Building Construction
- 2. Florida-friendly Best Management Practices for Protection of Water Resources
- 3. Florida's Best Native Plants; 200 Readily Available species, Gil Nelson, 2003, University Press of Florida
- 4. Florida Building Code
- 5. Highway Beautification Policy # 000-650-011
- 6. FDOT Design Standards
- 7. FDOT Drainage Manual
- 8. FDOT Utility Accommodation Manual
- 9. FDOT Voluntary Code of Conduct regarding Invasive exotic plants
- 10. FDOT-Florida Highway Landscape Guide.
- 11. Florida Power and Light-Right Tree for Right Place: http://www.fpl.com/residential/trees/right_tree_right_place.shtml
- 12. Highway Landscape, Beautification, and Plan Review Procedure (Topic No. 650-050-001)
- 13. *Identification & Biology of Non-Native Plants in Florida's Natural Areas*, Langeland and Burks, 1998, University of Florida
- 14. Rule Chapter 14-40, Florida Administrative Code, Highway Beautification and Landscape Management
- 15. Transit Cooperative Research Program Report 19 Guidelines for the Location and Design of Bus Stops (for additional guidance in areas where transit is present)
- 16. Turf and Landscape Irrigation Best Management Practices, Irrigation Association, December 2010
- 17. Rule Chapter 62-610, Florida Administrative Code, www.flrules.org
- 18. Sections 125.568, 166.048, 255.259, 335.167, 369.251, 373.185, 373.227, and 581.091 Florida Statutes, www.leg.state.fl.us/statutes
- 19. Florida's Highway Beautification Programs, www.MyFloridaBeautiful.com

9.2 Landscaping

9.2.1 Design Intent

Landscaping is designed to complement and enhance the natural and man-made environment. This may include irrigation systems and site amenities such as street furniture, specialty pavement, tree grates, walls, planters, fountains, fences, and lights. Plans shall include the following elements:

- 1. Large plants as defined in the **Basis of Estimates Manual** pay item 580 with combined value of 50% or more of the estimated value of all plants specified in the plans.
- 2. Plant selection and placement that:
 - a. Preserves visibility of community aesthetic features, permitted outdoor advertising signs, and highway signing
 - b. Adheres to agreed maintenance requirements established by District Maintenance Engineer or maintenance agreement
 - c. Complements the performance and function of existing stormwater systems
 - d. Adheres to <u>Florida Friendly Landscaping</u>. The Department shall use and require the use of Florida-friendly landscaping practices, as defined in <u>Florida Statutes Chapter 373.185</u>, in the construction and maintenance of all new state highways, wayside parks, access roads, welcome stations, and other state highway rights-of-way constructed upon or acquired after June 30, 2009
 - e. Minimizes soil erosion
 - f. Avoids conflicts with existing and proposed ITS devices, above and below ground utilities
- 3. When a part of the Contract Documents, Irrigation system design that:
 - a. Avoids overspray into the roadway, sidewalks, or any other paved surfaces, buildings, transit stops, etc.
 - b. Complies with state and local requirements (e.g., *Florida Building Code*, *Water Management Districts*, *Florida Administrative Code*, etc.)
 - c. Promotes water conservation (e.g., control system technologies including SMART irrigation technologies, reclaimed and reuse sources, etc.)
 - d. Uses durable materials that are traffic rated and ultraviolet light resistant

9.2.2 Design Elements

Plans should consider the following elements:

- 1. Conservation of natural roadside growth (vegetation) and scenery.
- 2. Relocation of existing vegetation.
- 3. Selective clearing and thinning of existing vegetation.
- 4. Natural regeneration and succession of native plants.
- 5. Florida native plants with known provenance (original source of plants stock) to be as close to planting site as possible.
- 6. Plant selection and placement that minimizes impacts to natural areas.
- 7. Recycled and recyclable materials.

The Landscape should be designed to permit sufficiently wide, clear, and safe pedestrian walkways, bicycle ways, and transit waiting areas. Requirements for sight distances and clearance to obstructions shall be observed, especially at intersections.

No landscaping shall screen from view a legally permitted outdoor advertising sign. The extent of the screening prohibition is provided in **Section 479.106(6)**, **Florida Statutes (F.S.)**. Additional information is found in **Rule Chapter 14-10 and 14-40**, **Florida Administrative Code (F.A.C.)**. Irrigation systems shall adhere to any additional requirements set forth by local governmental entity and water management districts.

When a legally erected and permitted outdoor advertising sign is within the project limits (adjacent to the right of way), and there is no permitted view zone, the landscape architect will notify the sign permittee that a highway landscape project is proposed. An example letter and other useful information are available at www.myfloridabeautiful.com. The sign permittee will have 30 days to establish a view zone by submitting an Application to Permit Vegetation Management at Outdoor Advertising Sign (Form 650-050-06) that proposes a view zone (see Rule 14-10.056, F.A.C..). If an Outdoor Advertising Sign is submitted within 30 days, a view zone will be established in accordance with the provisions of Rule Chapter 14-10, F.A.C., upon approval of the application by the Department. If the sign owner does not respond to the notice within the 30-day time frame provided, and the specific location of the view zone is not established by permit or agreement, the view zone will be within an area beginning at a point on the edge of pavement perpendicular to the edge of the sign facing nearest the highway and continuing in the direction of approaching traffic for a

distance of 350 feet for posted speed limits of 35 miles per hour or less and 500 feet for posted speed limits over 35 miles per hour (see **Section 479.106(6), F.S.**). Contact information for any permitted sign may be obtained by contacting the State Outdoor Advertising Administrator, Florida Department of Transportation, 605 Suwannee Street, MS 22, Tallahassee, Florida 32399-0450.

Modification for Non-Conventional Projects:

Delete **PPM** 9.2.2 and see the RFP for requirements.

9.3 Maintenance Plan

A performance based maintenance plan for all proposed landscape improvements, including the irrigation system, must accompany the landscape plans. This may be on separate plan sheets or written documents. This maintenance plan will not be part of the construction contract documents, and does not affect the contractor's responsibility during the plant establishment period. The maintenance plan is intended to make sure that the landscape architect and the local governmental entity responsible for maintenance understand what resources and practices will be necessary to maintain the irrigation system and its components to ensure safety, efficient water delivery, conservation of water resources, and to maintain the landscape in a safe and vigorous condition that meets the project objectives many years after construction is completed. The intent of design elements, such as to screen a view, maintain a clear sight distance, watering schedule, or assist with water retention, must be included in a description of the project, accompanied by a written or graphic guide describing the performance requirements of the maintaining agency. The maintenance plan shall define the limits of the maintenance activities that will be performed. When necessary, the maintenance plan must include a temporary traffic control plan. The maintenance plan must also include performance requirements necessary to maintain and manage the following, as applicable:

- 1. Sight distance
- 2. Horizontal and vertical clearance
- Accessibility
- 4. Plant health, form, height and spread
- 5. Turf (mowing)
- 6. Mulch thickness and cover
- 7. Edges
- 8. Weeds and litter
- 9. Irrigation system(s) (see irrigation performance requirements listed below)
- 10. Erosion control
- 11. Hardscape, lighting, benches, and site amenities
- 12. Other requirements necessary for the design intent to be fulfilled

The maintenance plan shall include the following performance requirements for the irrigation system:

- 1. The frequency of scheduled inspections
- 2. Reporting parameters for performance conditions

- 3. Detailed requirements associated with the system components inspection against the original design parameters
- 4. Adjustments necessitated over time as the landscape matures
- 5. A written or graphic guide describing the plant water needs across changing weather conditions at the station or zone level

The maintenance plan must also include performance requirements necessary to maintain and manage the following:

- 1. Performance of backflow prevention
- 2. Water supply and pressure requirements
- 3. Desired operating pressure for pressure regulators
- 4. Filters and filtration requirements
- 5. Operation of controller, including battery backup
- 6. Sensors
- 7. Valve flow and operation
- 8. Flow regulators
- 9. Head adjustment and spray pattern
- 10. Testing requirements
- 11. Manufacturer specifications and user manuals
- 12. Winterization requirements (if applicable)
- 13. Future audit requirements
- 14. Other requirements necessary for the performance intent to be fulfilled

When the landscape and irrigation system is to be maintained by the Department, a maintenance cost estimate based on anticipated maintenance activities must be provided independently from the plans. Consult with District Maintenance when developing the cost estimate. The estimate allows the Department to evaluate the landscape plan and determine if revisions are necessary. When the landscape and irrigation project is to be maintained by a local governmental entity, the maintenance plans will become an exhibit to the maintenance agreement. The designer should meet with the local governmental entity during development of the maintenance plan.

For Landscape Plan contents refer to Chapter 26 of Volume 2.

9.4 Cost Estimate

A cost estimate for all proposed landscaping must accompany the landscape plans. The cost estimate shall include a total unit cost for each individual plant type and size, as tabulated on *Exhibit LD-1*, *Volume 2*, *Chapter 26*. The breakout cost for large plants and small plants must include all incidental costs associated with the landscape plans, as defined in *Volume 2*, *Chapter 26*, *Landscape Plans*. This must be on separate plan sheets or written documents. This cost estimate will not be part of the construction contract documents. The cost estimate is intended solely for use by the Department. This estimate is to be provided to the Project Manager.

Modification for Non-Conventional Projects:

Delete PPM 9.4.

9.5 Community Aesthetic Features

Communities may have an active interest in placing aesthetic features on the Department's right-of-way. Community Aesthetic Features on the Department's right-of-way require a *Community Aesthetic Feature Agreement* (*Form Number 625-010-10*) between the local governmental entity and the Department. Community Aesthetic Feature projects shall meet the environmental demands of the roadside and the Department requirements governing safety, access, and maintenance of the highway.

Plans for placing a Community Aesthetic Feature within the Department's right-of-way must be accompanied by a resolution of the local governmental entity indicating their financial support for the feature's design, construction and perpetual project maintenance

The Community Aesthetic Feature Agreement must be executed by the local governmental entity and the Florida Department of Transportation prior to any construction in the Department's right-of-way. This agreement provides for the removal/relocation of the Community Aesthetic Feature at the local governmental entity's expense should it not be maintained by the local governmental entity or if the Department needs the right-of-way for transportation purposes.

These features are not eligible for regular federal-aid. They would not be eligible for repair or replacement under Federal Highway Administration's (FHWA) Emergency Relief (ER) program.

9.5.1 Categories and Criteria

Community Aesthetic Features, as defined in **Section 9.1**, consist of four categories:

- Stand-Alone Public Art
- Add-On/ Affixed Public Art
- Stand-Alone Local ID Marker
- Add-On/ Affixed Local ID Marker

While there are some criteria unique to each category, all Community Aesthetic Features must meet the following criteria:

- 1. Except where parking is available, the site shall be selected and the site plan shall be laid out so as to deter drivers from stopping within the roadway. If drivers are expected to stop or park, the plan shall provide for parking. If public access is available, all Department Standards and Specifications must be met, including ADA requirements. Public access to the Community Aesthetic Feature shall be prohibited when located within the mainline interstate or Interchange right-of-way.
- 2. The feature must not contain any signs as defined in the 2009 Manual on Uniform Traffic Control Devices (MUTCD), Part 1, Chapter 1A.13, traffic control features, auditory devices, reflective surfaces, flashing lights, moving parts or moving illumination. It must be devoid of advertising per the MUTCD and 23 C.F.R., 1.23 which prohibits advertising on or commercial use of the right of way. Lighting of the feature must not be directed at motorists, bicyclists or pedestrians. For lighting criteria see Section 7.3, Table 7.3.3 of PPM, Volume 1. When located near an airport, the feature must not create a hazard as defined by Section 333.01(3), F.S.
- 3. Commercial advertising on state right of way is prohibited by *Chapter 479, Florida Statutes*, including charitable, fraternal, religious, or political signs, symbols, logos, banners or any other such device. Also, advertising visible from the traveled way on interstate right-of-way is prohibited in accordance with *23 C.F.R.*, *752*.
- 4. Only one Stand-alone feature shall be allowed per mainline interchange approach (for a maximum of two installations); thus, the local governmental entity must pick one site from amongst the ramp and the mainline, along the outside of a ramp, or the area inside a loop ramp.
- 5. The feature must meet all applicable building codes and design criteria for similar structures or landscape placed adjacent to the highway's right of way, including wind loading commensurate with highway signs in the area.

- 6. The feature must not cause adverse impacts to property access, air quality, noise, water quality, wetlands, floodplain encroachments, endangered or threatened species or their critical habitat, historical resources, or create public controversy.
- 7. The feature, including amenities (landscape, fencing, etc.) must not obstruct any signs or interfere with any sight distance, sight triangle or view zone (see **Section 9.1**).
- 8. The design of all Community Aesthetic Features must be signed and sealed by a responsible professional licensed in Florida.
- Stand-Alone and Add-On Local ID Markers are not allowed on the interstate unless it is part of an overall aesthetic treatment plan that can include landscaping and other aesthetic components. Community Aesthetic Features are not allowed in the median of the interstate.

In addition, Community Aesthetic Features must meet the following criteria:

A. Stand-Alone Public Art:

- 1. The location must be outside the appropriate clear zones and should be as close to the right-of-way line as practical. Placement on interstate routes should be well outside the minimum clear zone, a minimum of 50 feet, 100 feet preferred, from edge of the travel lane or ramp, whether guardrail is present or not. The 50 feet minimum, 100 feet preferred lateral placement will help to minimize driver distraction, and reduce the likelihood that vertical structures will become storm debris blown across the roadway.
- 2. The structure may not display messages with text, or contain any words or alpha-numeric characters.
- The artist's insignia may be inscribed or etched on a small plaque affixed to the art work, or placed on the art work itself. The insignia shall not be visible from the roadway so as to not cause a distraction for drivers or bicyclists.
- 4. The feature may be placed in the median of urban roadways with curb or curb and gutter where the Design Speed is less than or equal to 45 mph and rightof-way is restricted. A minimum offset of six feet from the edge of the inside travel lane is required.
- 5. The object's highest point must not be greater in elevation than 25 feet above the nearest point of the roadway.

B. Add-On/ Affixed Public Art:

- 1. The feature may not display messages with text, or contain any words or alpha-numeric characters.
- 2. The artist's insignia may be inscribed or etched on a small plaque affixed to the art work, or placed on the art work itself. The insignia shall not be visible from the roadway so as to not cause a distraction for drivers or bicyclists.
- 3. If affixed to a bridge, it must not reduce the vertical clearance over the roadway.

C. Stand-Alone Local ID Marker:

- 1. The location must be outside the appropriate clear zones and should be as close to the right-of-way line as practical. Placement on interstate routes should be well outside the minimum clear zone, a minimum of 50 feet, 100 feet preferred, from edge of the travel lane or ramp, whether guardrail is present or not. The 50 feet minimum/100 feet preferred lateral placement will help to minimize driver distraction, and reduce the likelihood that vertical structures will become storm debris blown across the roadway.
- The structure may contain text such as the municipality name, county name or community area name with a short phrase or message. For interstate installations the maximum letter height is four feet and a short phrase or message is not allowed.
- 3. The feature may be placed in the median of urban roadways with curb or curb and gutter where the Design Speed is less than or equal to 45 mph and rightof-way is restricted. A minimum offset of six feet from the edge of the inside travel lane is required.
- 4. The object's highest point must not be greater in elevation than 25 feet above the nearest point of the roadway.

D. Add-On/ Affixed Local ID Marker:

- The feature may contain text such as the name of the municipality or county with a short phrase. For interstate installations the maximum letter height is four feet and a short phrase or message is not allowed.
- 2. If affixed to a bridge, the feature must not reduce the vertical clearance over the roadway.

9.5.2 Process and Agreement

The application process is conducted in two phases, the Concept Phase and the Final Design Phase. The Concept Phase includes District coordination with the applicant to ensure that the proper Community Aesthetic Feature category is selected, the corresponding criteria is achievable and acceptable, and the conditions of the Agreement are acceptable. The District Design Engineer (DDE) will then submit a concept drawing and documentation to the State Roadway Design Engineer (SRDE). Upon review by the SRDE, conceptual approval may be granted. Conceptual approval will be provided by memo or e-mail to the DDE and is intended to indicate that the Central Office is in agreement with the concept, in agreement that the proposed feature meets the appropriate criteria and any proposed Design Variations are acceptable. Otherwise, conceptual approval will be denied with comments. For applications to place a feature on interstate right-of-way, the District should also coordinate with the FHWA District Transportation Engineer during the Concept Phase before the submittal to the SRDE.

The Final Design Phase includes the preparation and review of all final documents. The DDE will forward the final documents with a recommendation for approval to the SRDE. The SRDE will review the application and provide approval to place the feature; otherwise final approval will be denied with comments. Features on the interstate System will also require FHWA approval.

Approval of a Design Variation by the SRDE is required when any of the Community Aesthetic Feature criteria in **Section 9.5.1** cannot be met.

9.5.2.1 Coordination and Review

Informal coordination may take place at any time between the District and the entity desiring to place a feature on the Department's right-of-way. The District should work with the potential applicant to resolve issues related to feature category, compliance to criteria, optimum location for placement and identification of possible Design Variations. Before submittal to the SRDE, the local governmental entity must submit a written request to the DDE to place the Community Aesthetic Feature in the Department's right-of-way. The request shall include at a minimum:

- 1. The designation of the feature category.
- 2. A conceptual drawing/ rendering showing the top, front and side views of the feature with labeled dimensions, material designations including connections, proposed lighting configuration and any alpha-numeric characters. Note: alpha-numeric characters are not allowed on Public Art per **Section 9.5.1**.

- 3. A draft site plan showing the location of the feature in relation to the roadway. If the feature is an add-on to a bridge then the bridge owner must be designated.
- 4. The design speed of all adjacent roadways.
- 5. A citation of the governing **Design Standards**, **Criteria** and **Building Codes** to which the feature will be designed.
- 6. If the feature is an add-on to a bridge, declare what the impact is to the bridge loading.

Upon conceptual approval by the SRDE, the local governmental entity may choose to begin the Design Phase. The conceptual approval is valid for one year, at which time the local governmental entity may request an extension from the DDE. The Design Phase includes the preparation of the following documents:

- 1. Site Plans, including a Traffic Control Plan if temporary maintenance of traffic will be required to place and/ or maintain the feature.
- 2. Structural Plans including wind load analysis.
- 3. Local Governmental Entity Resolution
- 4. The executed **Community Aesthetic Feature Agreement**

9.5.2.2 Approval

Upon approval by the SRDE and, if applicable, FHWA, the District shall notify the local governmental entity that it may proceed with the placement of the feature. The Final Design approval is valid for one year, at which time the local governmental entity may request an extension from the DDE.

9.6 Place Name Signs

Signs within the Department's right-of-way are regulated by the *MUTCD*, *Part 2*. Signs for general information, services, tourist destinations, and recreational/cultural interest areas all have specific chapters in the *MUTCD* which specifies these signs' color, size and lettering requirements. Destination signs are classified in *MUTCD* as Guide Signs and are also regulated therein. Consequently, Place Name Signs within the Department's right-of-way are regulated by the Department. Requirements for Place Name Signs and Customized Place Name Signs are in *Rule Chapter 14-51*, *F.A.C.*, *Part IV Place Name Signs*. Place Name Signs are not allowed on limited access right-of-way.

http://www.dot.state.fl.us/trafficoperations/

THIS PAGE LEFT BLANK INTENTIONALLY