



Florida's Turnpike Enterprise

# LANDSCAPE BRAND GUIDELINES

*The Less Stressway*



*Prepared for:*

**Florida's Turnpike Enterprise**

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# FLORIDA TURNPIKE ENTERPRISE LANDSCAPE BRAND GUIDELINES

## INTRODUCTION

Each FDOT District was tasked to develop a Landscape **BRAND** that would uniquely identify the visual character of their respective district. The Florida's Turnpike Enterprise (FTE) goal was to develop an approach and guidelines to implement a Landscape **BRAND** that is **CONSISTENT, PREDICTABLE AND REPEATABLE** for their highway system.

To accomplish this task, FTE established a list of important criteria that serves as the foundation for creating a unique LANDSCAPE **BRAND** for all Florida's Turnpike roadways. They are as follows:

- Create **CONSISTENT** landscape patterns that can help identify Florida's Turnpike.
- Incorporating specific and limited plant species that become **PREDICTABLE** and recognizable.
- Develop typical planting themes, configurations and conditions for a **REPEATABLE** design.
- Recognize the unique conditions of different geographic and environmental locations.
- Consider landscaping hardiness zones for plant species selection.
- Preserve, utilize, and reinforce natural vegetation.
- Strive to blend with the existing (desirable) vegetation.
- Embrace the **"BOLD VISION"** approach for roadway beautification to create a more attractive place to do business and attract visitors.
- Use of flowering trees for seasonal color.
- Establish wildflower fields.

***The Florida's Turnpike  
Enterprise system maintains  
460 miles of limited access  
toll highways. An average of  
1.8 million motorists uses  
these roadways daily.***

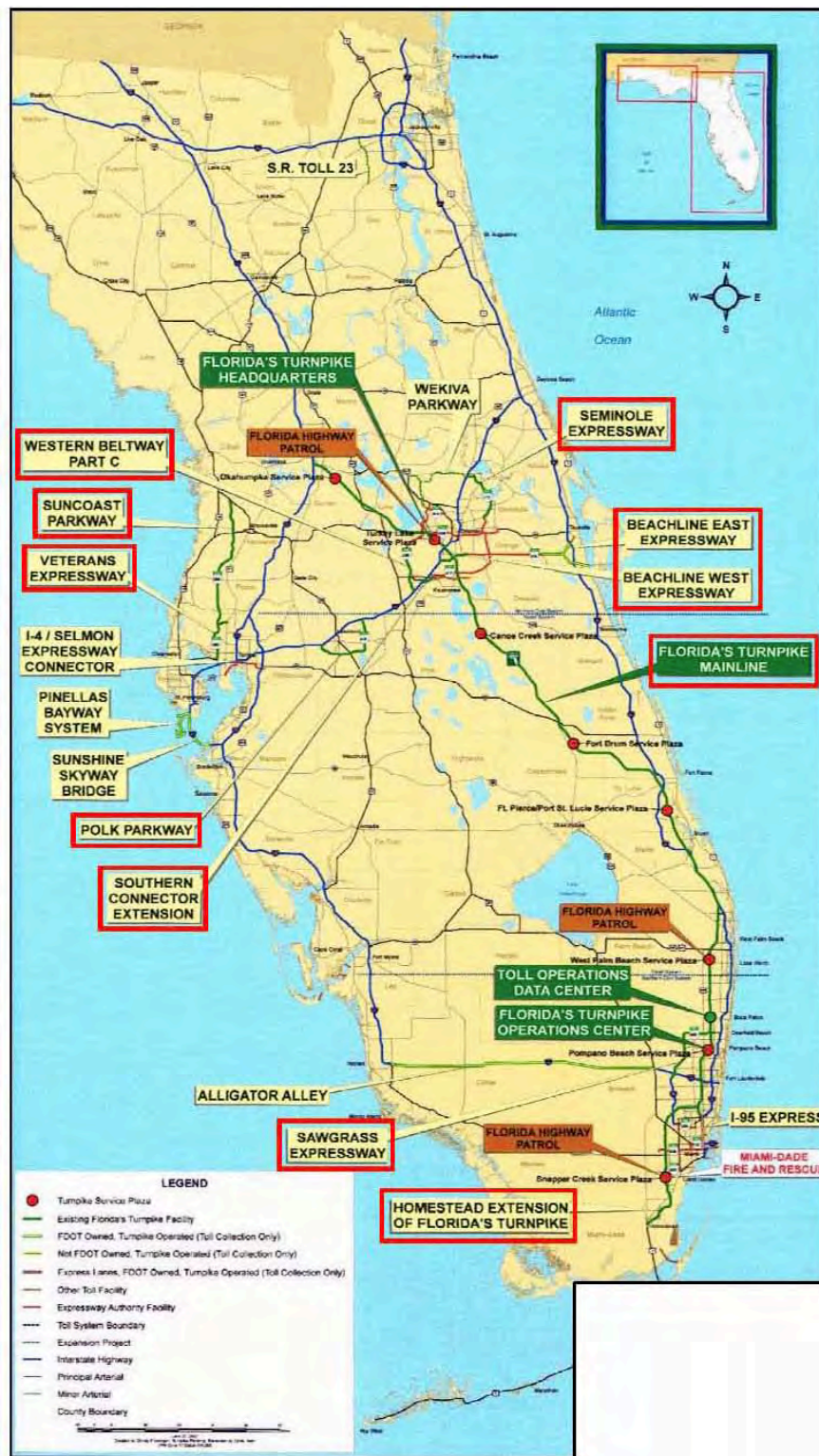


Source: FTE Web Site

FTE is unique in that it maintains and operates 460 miles of limited access toll highways across the State of Florida. These include the following: Turnpike Mainline from Miami to North Central Florida (SR 91), as well as the Homestead Extension (HEFT-SR 821), Sawgrass Expressway (SR 869), Seminole Expressway (SR 417), Beachline Expressway (SR 528), Southern Connector Extension of the Central Florida GreeneWay (SR 417), Western Beltway (SR 429), the Veterans Expressway (SR 589), Suncoast Parkway (SR 589) and Polk Parkway (SR 570). (See Figure 1) The SR 91 Mainline alone consists of 312 miles extending through 11 counties. An average of 1.8 million motorists utilizes these highways daily.







### FLORIDA'S TURNPIKE ENTERPRISE FACILITIES

Source: NAVTEQ © 2011, Florida Department of Transportation 2012

Figure 1



## DESIGN APPROACH

FTE's philosophy is to incorporate the intent of the FDOT "**BOLD VISION**" design approach which can generally be summarized as designing beautification projects using many large palms and trees and few, if any, shrubs. With thoughtful site specific design, this fundamental approach will produce the highest visual impact and distinctive sense of place at the lowest design, construction and maintenance cost, focus on providing a sense of continuity throughout the Turnpike system and creating a **BOLD** statement. With thoughtful site specific design, this approach will produce the highest visual impact and a distinctive "sense of place" throughout the system.

***FTE definition of BRAND is to create repeatable patterns of landscape materials and placements that are based on consistent and identifiable plant palettes within the proposed budget allocations. This provides a predictable and repeatable planting theme that enhances the roadway experience for motorist.***

The aesthetic hierarchy created as part of FTE's approach places the **highest priority and budgets** on those areas with the greatest traffic volumes and maximum opportunities for attracting business and tourism. Concentrations of new landscaping at these locations will provide FTE with the highest impact and greatest value on our 'Landscape Investment'.

The hierarchy of locations is broken down in order of priority into the following categories:

- **Gateways**
- **Interchanges and Gantries**
- **Overpass/Underpass Crossings**
- **Landscape Buffers**
- **Noise Walls Buffers**
- **Cross Street (as applicable)**

For the purpose of assisting the landscape design consultants in implementing the FTE **BRAND**, typical roadway configurations that occur within the Turnpike system were identified as templates. Each template was then refined recognizing levels of importance as Options where varying intensity can be implemented as needed through the project design. These Options are identified as LOW PROFILE (Level 1),



MODERATE PROFILE (Level 2) and, in the cases of Interchanges and Overpasses, HIGH PROFILE (Level 3). Although varying in design, all Options reinforce the consistent and repeatable landscape **BRAND** pattern.

Variations of the Option designs reflect degrees of planting intensity or quantities and selection of specific plant species. General cost for each Option was provide and to be used to assist the Landscape Architect of Record (LAOR) in project analysis as a guide. The LOW PROFILE is the least cost with the HIGH PROFILE being the larger cost.

Using these tools, the length of each Turnpike project can be broken down into individual parts that first determine the hierarchy of each identified location, and then establish an appropriate level of profile. Combining the hierarchy of location and the design approach it will be possible for the LAOR to balance design intensity with the FTE work program landscape budget.



For illustrative purposes the template Options provided within this document has used the SOUTH REGION plant palette.

While utilizing the plant lists provided, the LAOR will have the responsibility to determine the optimum plant species based on site conditions, environmental criteria and microclimates. Site visit(s) by the LAOR are critical to fully understand the varied conditions that existing prior to beginning design. The LAOR will be responsible for site adaption of the templates based on existing site conditions and conformity with all FDOT and jurisdictional codes, design standards and guidelines as a part of their design efforts.

This approach will provide the FTE roadway system with a **CONSISTENT**, **PREDICTABLE** and **REPEATABLE** landscape **BRAND** in addition to the highest visual impact and a distinctive sense of place. It will also provide early design direction for the LAOR and minimize the costs for construction and maintenance in the long term. The Turnpike Landscape Architect will review the conceptual and 90% landscape submittals (at a minimum) to verify the implementation of this approach and the compliance with the Landscape **BRANDING** initiatives provided herein. The Turnpike and Florida Department of Transportation Landscape Architects will review the Conceptual and 90% Landscape Plans submittals for compliance with the **BOLD** Landscape Vision for Highway Beautification.

**CONSISTENT**

**PREDICTABLE**

**REPEATABLE (CPR)**



## DESIGN GUIDELINES

The aesthetic hierarchy and consistent **BRAND** will be defined for each project and implemented with the landscape design. Plant palette and patterns are the most important elements that ultimately define the **BRAND**.

To ensure consistency in the design for typical roadway configurations, the design templates utilized the following guidelines:

- Strong accents at the most visible locations.
- Emphasis on large palm and tree materials and placement of large groupings to provide a **BOLD** and immediate visual impact.
- Minimize use of shrubs except in specific settings (see below).
- Indigenous and hardy non-native plant species that are appropriate for the environmental conditions at proposed locations.
- Reinforce native canopy where applicable with proposed plant species selections.
- Respect the neighboring urban and suburban characteristics where applicable.
- Utilize Xeriscape (Florida Friendly) planting principles.
- Use of low maintenance and sustainable plant materials.
- Provide a lasting and memorable visual statement with the use of seasonal flower or foliage color and unique and contrasting plant types that reflect the tropical Florida climate.
- Promote large displays of wildflowers including in large dry retention areas as alternative to sod.
- Removal of Category 1 Invasive exotic plant material that threaten the native plant communities. Refer to [WWW.fleppc.org](http://WWW.fleppc.org) for current listings.
- No category I invasive exotic plants shall be proposed on a FTE system. Category II invasive exotics may be considered only on a case by case basis subject to FTE approval.

A strong element of implementing the **BOLD VISION** is the directive to design with few (if any) shrubs. There are some circumstances, however, that allow for shrub utilization only on a limited basis. Other exceptions may occur on a site but must be reviewed on a site by site basis.



- Placement on steep slope conditions to minimize mowing maintenance efforts (i.e. interchanges, overpasses or cross road embankments).
- Screen gantry equipment from travel ways.
- Soften or accent noise walls.
- Screening undesirable views from high intensity or other unsightly land uses, such as industrial areas, where no noise walls are present.
- Addressing Community commitments agreed to during the public involvement process or other jurisdictional requests.





## ADDITIONAL DESIGN CONSIDERATIONS

There are several issues relating to aesthetics and standards that should be considered in all design. It is essential the LAOR coordinate with other design disciplines early and frequently in the design process to understand the existing and proposed site conditions that will affect locations of the new landscape. In this fashion, the LAOR will be able to maintain landscape opportunities to the greatest extent possible. These issues may include, but are not limited to:

- Research and document the intensity of development adjacent to the roadway, which may vary from urban to rural. Plant material selections must respond to the surrounding areas.
- Consideration of plant material placement to buffer or enhance view corridors as applicable.
- Compliance with all FDOT clear lines of sight for traffic movements and roadway offsets (FDOT Indexes 546 and 700) and maintenance operation requirements. Also FDOT landscape installation standards (Index 544).
- Identify all (above and below ground) utility locations and apply appropriate setbacks for the proposed landscape.
- Contour elevations and soil conditions that may restrict or promote specific planting species.
- Ensure no conflicts with storm water function and maintenance.
- Maintain clear viewing for ITS poles and roadway signage.
- No obligate or facultative wetland species shall be located within 25' of seasonal high water elevation of any storm water management facility or wetlands.
- Research potential impacts related to future construction projects and constrained areas within the FTE right-of-way limits, etc.
- Identify and establish the vegetative view zones for all Outdoor Advertising Signs in accordance with the Florida Administrative Code (FAC) requirements.
- Provide appropriate setbacks to accommodate maintenance activities along noise walls, retaining walls, fences, guard rails and other roadway structures.



The LAOR must be aware of and understand the plan delivery method prior to start of design. Traditional methods include Design/Bid/Build, Design/Build and 'Maintenance Let', Stand Alone contracts. FTE is also looking at alternative delivery methods such as the "Push Button" landscape and Variable Scope Design Build.

Although each method requires a different approach to design, the implementation of the **BRANDING** philosophy and approach will continue to be consistent.

Landscape plans shall comply with all applicable FDOT and FTE specifications, standards, Indexes and other applicable requirements that address landscape and irrigation installation, establishment period and maintenance schedule.



## IMPLEMENTING THE DESIGN OPTIONS

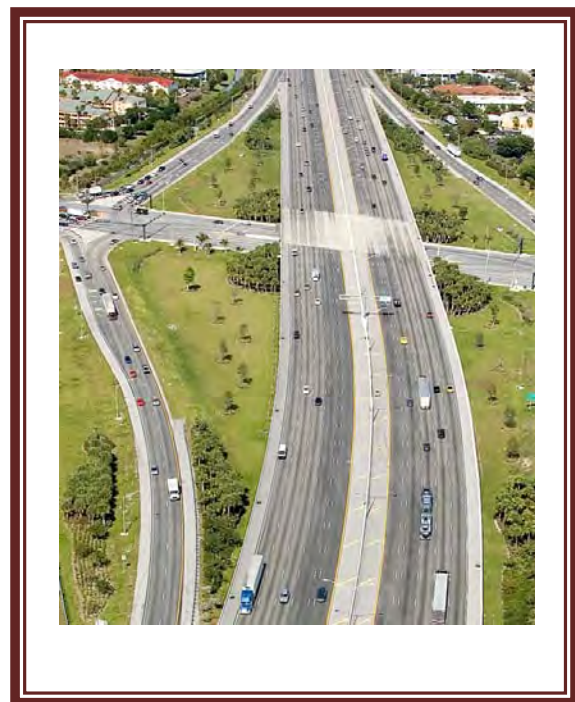
Design templates were prepared to illustrate typical landscape solutions for the various roadway configurations within the FTE system.

Although Gateways bear the highest importance in the hierarchy of locations, they are unique and require the greatest focus in terms of intensity and budget. They are typically entrances to a Turnpike roadway, welcome signage, an interchange with a major highway or an entrance to an important economic center. Gateway templates are not provided in this document but the planned FTE Okahumpka Welcome Sign project is provided instead for reference. See rendered plan and elevation views (Exhibits 10-A and 10-B).

The hierarchies of the roadway templates, (with the exception of Gateways), are ranked in terms of importance. The more complex the roadway configuration and importance, the higher the hierarchy and budget allocation will be. Templates in order of hierarchy are as follows:

### Roadway Templates

1. Interchanges
  - a. Loop ramp /Diamond configuration.
  - b. Trumpet ramp configuration.
2. Roadway crossings – (roadway elevated over another road or canal.
3. Mainline Gantry
4. Ramp Gantry
5. Buffering
  - a. Adjacent land uses
  - b. Noise walls
6. Cross Street – streets that may be affected by FTE construction, but are not part of the Turnpike system. These may be locations where community involvement and input may require replacement or mitigation of lost vegetation resulting from roadway construction.



Each design option, LOW PROFILE (Level 1), MODERATE PROFILE (Level 2) and, in most cases, HIGH PROFILE (Level 3), has been assigned a budget range. Based on the importance of location, these cost range options serve as a basis in developing a design concept for each site that ultimately must be balanced to fit within the landscape budget and still create a consistent and unified look along the FTE system.





There are factors in which a location may affect the intensity of proposed landscape. Such examples are locations where the adjacent land use may dictate a higher hierarchy level, such as an intersection with a major highway, major tourist or commercial centers, hospitals, universities, etc. In these cases, a design consistent with the more intensive HIGH PROFILE Option may apply. Each option design includes a different mix of plant species and quantities which can then be quantified as a cost range. To reflect assigned budget to each site, this will help the LAOR in choosing which pattern to utilize in the ultimate design. It will be the responsibility of the LAOR to provide actual Cost Estimates with each Landscape Plan submittal.



It must also be recognized that some sites may be physically constrained that poses a challenge to find opportunities for landscape. Improvements for pavement, overhead or underground utilities, retention requirements, signage, ITS, etc. may leave little room for plantings. These areas will require the LAOR to be creative, particularly if they are considered important to the overall design.

Providing for a **BRAND** and **BOLD** landscape will require early and frequent discussions and coordination with the design team to help maximize landscape opportunities that are available. Required off-set, maintenance access will restrict planting placements. For example, occasional palms in key areas may be permitted in dry retention areas subject to concurrence with Drainage, Environmental Management and Maintenance divisions on a case by case basis.

Using all these tools, the LAOR can achieve the landscape **BRAND**, maximize the design and adhere to the budget.

**IMPORTANCE OF  
EARLY SITE  
COORDINATION  
AND ADAPTION IS  
CRITICAL IN  
ACHIEVING THE FTE  
BRAND AND  
BOLD VISION  
LANDSCAPE**



## PLANT MATERIAL SELECTION PALETTE

The core of Florida's Turnpike **BRANDING** is the selection and consistency of plant materials that meet the **BOLD** landscape statement by promoting the use of large tree and palm materials. It is important to not only select materials that will acclimate into the harsh roadway environment and to thrive within the hardiness zones of that location with minimal maintenance, but to reinforce those desirable species already repeated throughout the highway system or identified in the Master Plant Pallet. Understand the level of maintenance that each site will receive over its lifetime must be considered when selecting plant species and placement. All plants shall meet Florida No. 1 or better according to the most current Grades and Standards for Nursery Plants, Fla. Dept. of Agriculture and Consumer Services, Division of Plant Industry. **Proposing plant material less than 7 gallon containers are discouraged.**

The Turnpike system extends from Miami-Dade County to Wildwood in Sumter County and across the state from the Atlantic Ocean to the Gulf of Mexico. It crosses four plant hardiness zones as established by the US Department of Agriculture. Based on the variation of hardiness zones, the FTE system has been divided into two distinct plant palettes.

- NORTH REGION (zone 9A & 9B)
- SOUTH REGION (zones 10A & 10B).



There are isolated areas that have irrigation systems, but for the most part, there will be **no irrigation** proposed for the majority of new landscape plantings on FTE roadways.

**North** and **South Region** Master Plant Palettes shall be used as a guide for the LAOR in their designs. The Master Plan List and Sizes provide minimum plant sizes and on-center spacing to obtain the **BOLD** theme (See Exhibits). Some plant materials are included on both lists for statewide **CONSISTENCY** based on their ability to tolerate a wide range of climatic conditions. Final selection of plant species by the LAOR must be **APPROPRIATE** for location and surrounding environment and maintainable. Larger sizes than indicated may be used if appropriate for the site. Additional species may be suggested but shall be subject to approval by the Turnpike Landscape Architect and Maintenance Division.



Each Plant Palette has been broken down into plant categories with the following general description of their intent:

- **SHRUBS** – Used to stabilize steeply sloped areas to prevent erosion and reduce expensive slope mowing operations primarily associated with roadway overpasses and other embankments.
- **SCREENING PLANTS** – Screen unsightly views from the roadway to industrial/commercial areas, buffer or “soften” views of roadway structures such as noise walls, buildings, mechanical equipment, above ground equipment, etc. A combination of species may range from shrubs, understory trees to canopy trees depending on circumstances and available planting area.
- **FLOWERING/ACCENT TREES** – Provide visual interest and seasonal color. Also to break up large expansive areas, to create a massing effect and to provide an interplay of color variations.
- **CANOPY TREES** – Create shade along the roadway as a temperature reduction method, to break up large expansive areas, to screen adjacent areas or to blend with existing vegetation.
- **LARGE/MEDIUM PALMS** – Reinforce the tropical Florida climate and provide strong accents in critical locations. Combinations used as strong accents that are repeated along the roadway.
- **SMALL PALMS** – Placement in locations where the use of larger palms may be limited due to space constraints, or as understory to larger material.

Wildflowers along the FTE roadway are an important element that can be enjoyed by millions of residents and visitors every day. To comply with the State of Florida’s Wildflower Program, FTE has planted approximately 80 acres on the Turnpike system. Continuing to incorporate wildflowers into the design can benefit wildlife, reduce stress on natural resources and reduce maintenance costs.



Contributing to a pleasant and LESS STRESSWAY experience, FTE manages 30 miles of wildflowers of more than 20 native species.

Using the guiding principles of protection, establishment and management, FTE identified the following wildflower planting designations:

**Natural stands** – extensions or remnants of neighboring areas that contain wildflowers.

**Roadside meadows** – long blooming areas with a species mix that is best suited for a site.

**High impact** – presenting a **BOLD** visual statement for high profile locations.

The LAOR shall consider potential and future wildflower sites within their projects. Contact the FTE Roadway Maintenance Department to coordinate appropriate wildflower seed species, locations and installation/establishment techniques.

**BOLD    CONSISTANT    APPROPRIATE**





# FLORIDA'S TURNPIKE ENTERPRISE MASTER PLANT PALETTE - NORTH REGION

## SHRUBS

Serenoa repens - Saw Palmetto



SAW PALMETTOS AND SABAL PALMS

## SCREENING PLANTS

Forestiera segregata - Florida Privet  
 \*Hamelia nodosa - Dwarf Firebush  
 Illicium floridanum - Florida Anise  
 Ilex opaca - American Holly  
 Ilex vomitoria - Yaupon Holly  
 Juniperus virginiana silicicola - Southern Red Cedar  
 Myrica cerifera - Wax Myrtle  
 Magnolia grandiflora - Southern Magnolia  
 Pinus elliotii - Slash Pine  
 Pinus palustris- Long Leaf Pine  
 Podocarpus macr. - Podocarpus  
 Sabal palmetto - Sabal Palmetto  
 \*Spartina bakeri - Sand Cordgrass  
 Viburnum odoratissimum - Sweet Viburnum  
 Viburnum Obovatum - Black Haw  
 Podocarpus macr. 'Maki' - Podocarpus

*\*USE ONLY WITH FTE APPROVAL*



SLASH PINE



AMERICAN HOLLY



WAX MYRTLE



PODOCARPUS





# FLORIDA'S TURNPIKE ENTERPRISE MASTER PLANT PALETTE - NORTH REGION

## CANOPY TREES

Acer rubrum - Red Maple  
Liquidambar styraciflua - Sweetgum  
Pinus elliotii - Florida Slash Pine  
Platanus occidentalis - American Sycamore  
Quercus virginiana - Live Oak  
Taxodium Distichum - Bald Cypress  
Ulmus alata - Winged Elm



RED MAPLE



BALD CYPRESS



LIVE OAK



WINGED ELM

## FLOWERING/ACCENT TREES

Ilex vomitoria 'pendula' - Weeping Yaupon Holly  
Juniperus virginiana silicicola - Southern Red Cedar  
Lagerstroemia indica 'spp' - Crape Myrtle  
Magnolia grandiflora - Southern Magnolia  
Magnolia grandiflora 'Little Gem' - Little Gem Magnolia  
Nerium oleander - Oleander



CRAPE MYRTLE



SOUTHERN MAGNOLIA



SOUTHERN RED CEDAR





# FLORIDA'S TURNPIKE ENTERPRISE MASTER PLANT PALETTE - NORTH REGION

## LARGE/ MEDIUM PALMS

Bismarckia nobilis 'silver select' - Silver Bismarck Palm  
 Livistonia decipiens - Ribbon Palm  
 Phoenix dactylifera 'Medjool' - Medjool Date Palm  
 Phoenix sylvestris - Wild Date Palm/Sylvester  
 Phoenix 'HYBRIDS' - Hybrid Date Palm  
 Sabal causiarum - Puerto Rican Hat Palm  
 Sabal palmetto - Sabal Palmetto  
 Sabal palmetto - Sabal Palmetto - CURVED  
 Washingtonia filifera - Desert Fan Palm



SILVER BISMARCK PALM



WILD DATE PALM



MEDJOOOL DATE PALM



SABAL PALM

## SMALL PALMS

Acoelorrhaphe wrightii - Paurotis Palm  
 Butia capitata - Pindo Palm  
 Chamaerops humilis - European Fan Palm



PINDO PALM



EUROPEAN FAN PALM



PAUROTIS PALM





# FLORIDA'S TURNPIKE ENTERPRISE MASTER PLANT PALETTE - SOUTH REGION

## SHRUBS

Serenoa repens 'Cinerea' - Silver Saw Palmetto



SAW PALMETTOS AND SABAL PALMS

## SCREENING PLANTS

Annona glabra - Pond Apple  
Conocarpus erectus - Green Buttonwood  
Conocarpus erectus var. sericeus - Silver Buttonwood  
Chrysobalanus icaco 'Red Tip' - Red Tip Cocoplum  
Clusia guttifera - Small Leaf Clusia Shrub & Tree Form  
Clusia guttifera 'Nana' - Dwarf Clusia  
Coccoloba uvifera - Sea Grape  
Eugenia foetida - Spanish Stopper  
\*Ficus macrophylla 'Green Island' - Green Island Ficus  
Juniperus virginiana silicicola - Southern Red Cedar  
Myrcianthes fragrans - Simpson's Stopper  
Myrica cerifera - Wax Myrtle  
Pinus elliotii densa - So. Florida Slash Pine  
Sabal palmetto - Sabal Palmetto  
\*Spartina bakeri - Sand Cordgrass



CLUSIA (BACK), GREEN ISLAND FICUS (FRONT)

*\*USE ONLY WITH FTE APPROVAL*



RED TIP COCOPLOM



SAND CORDGRASS



WAX MYRTLE





# FLORIDA'S TURNPIKE ENTERPRISE MASTER PLANT PALETTE - SOUTH REGION

## CANOPY TREES

Acer rubrum - Red Maple  
Bursera simaruba - Gumbo Limbo  
Conocarpus erectus - Green Buttonwood  
Lysiloma latisilqua - Wild Tamarind  
Quercus virginiana - Live Oak



RED MAPLE



GREEN BUTTONWOOD



LIVE OAK



GUMBO LIMBO

## FLOWERING/ACCENT TREES

Bombax ceiba - Red Silk-cotton Tree  
Conocarpus erectus var. sericeus - Silver Buttonwood  
Cassia fistula - Golden Shower Tree  
Cassia javanica - Apple Blossom Shower Tree  
Delonix regia - Royal Poinciana  
Chorisia speciosa - Floss Silk Tree  
Jatropha - Jatropha Bush  
Juniperus virginiana silicicola - Southern Red Cedar  
Lagerstroemia speciosa - Queen's Crape Myrtle  
Lagerstroemia indica - Crape Myrtle  
Lysiloma sabicu - Sabicu  
Peltophorum dubium - Yellow Poinciana  
Simarouba glauca - Paradise Tree  
Tabebuia caraiba - Silver Trumpet Tree  
Swietenia mahoganii - Mahogany



SILVER BUTTONWOOD



CAPE MYRTLE



ROYAL POINCIANA



QUEEN'S CRAPE MYRTLE



JATROPHA BUSH





# FLORIDA'S TURNPIKE ENTERPRISE MASTER PLANT LIST - SOUTH REGION

## LARGE/ MEDIUM PALMS

Acoelorrhapee wrightii - Paurotis Palm  
Bismarckia nobilis 'Silver' - Silver Bismarck Palm  
Latania lontaroides - LatanPalm  
Livistonia decora - Ribbon Palm  
Phoenix dactylifera 'Medjool' - Medjool Date Palm  
Phoenix sylvestris - Wild Date Palm/Sylvester  
Roystonea regia - Florida Royal Palm  
Sabal palmetto - Sabal Palmetto  
Sabal palmetto - Sabal Palmetto - CURVED TRUNKS  
Veitchia montgomeryana - Montgomery Palm



SILVER BISMARCK PALM



ROYAL PALM



MEDJOOOL DATE PALM



SABAL PALM



PAUROTIS PALM

## SMALL PALMS

Butia capitata - Pindo Palm  
Chamaerops humilis - European Fan Palm  
Coccothrinax argentata - Florida Silver Palm  
Dypsis lutescens - Areca Palm  
Hyophorbe lagenicaulis - Bottle Palm  
Hyophorbe verschaffeltii - Spindle Palm  
Phoenix roebelenii - Pygmy Date Palm  
Ptychosperma elegans - Solitaire Palm  
Thrinax radiata - Thatch Palm



EUROPEAN FAN PALM



SPINDLE PALM



PYGMY DATE PALM



PINDO PALM



BOTTLE PALM



## INSTALLATION, ESTABLISHMENT AND MAINTENANCE

The primary purpose is to strategically use of Large Palms and Trees to create BOLD and dramatic landscape design and maintain healthy plants. It is the LAOR responsibility as Designer of Record to also meet these goals including quality control services during the entire Design, Installation and Maintenance process.

Landscape Installation and Establishment specifications shall be according to the attached Modified Special Provisions Section 580 (MSP 580), Landscape Installation and Establishment. (See attachment)

There are several design and construction methods that FTE may utilize for implementing a landscape project. They are:

- Design/Build/Build Contract;
- Design / Build Contract;
- Stand Alone Maintenance Let Contract; and
- Push Button Contract.

Conceptual Landscape Plans used for all construction methods are prepared to define the landscape intent.

In a Design/Bid/Build method, The LAOR will provide construction documents with several reviews by FTE within an established budget. With the Design/Build scenario, FTE must provide detailed criteria relating to the design FTE requires to achieve with no budget provided.

In a Design/Build method, the Concept Plans will only be considered as a guide to be included in an RFP document and potentially listed as “Other Documents”. It will require the RFP text to include a Concept Plant Palette listing the following: plant species, minimum height and spread, container size, spacing as applicable and a Minimum Mandatory Quantity Requirement. The text must also define other essential planting criteria in sufficient detail to achieve the BOLD landscaping and consistence with FTE BRAND landscape directives.



In addition to CEI and Maintenance personal, common LAOR Post Design roles during installation typically include the following:

- Attendance of a Pre-construction Meeting;
- Approve the landscape materials (this may include looking at a photos or visiting nursery sites);
- Field review and approval of tree/palm locations and bed layouts;
- Review Shop Drawing;
- Respond to RFI(s) and RFC(s); and
- Conduct Pre-Final Inspection and prepare Punch List.

After a project's final acceptance the LAOR will be responsible of various requirements during the Establishment Period, also referred to as the Warrantee Period. Depending on the construction method, The LAOR may be retained either by FTE or the Contractor. These requirements include:

- Act as the Responsible Party's Landscape Quality Control representative.
- Inspect landscape monthly/quarterly and submit findings in report form of items listed in MSP 580, whichever is applicable.
- Submit report after performing inspections and make any corrections and resubmit.

Each project will have unique set of circumstances. Determination of process, information and level of detail required on the plans for RFP text shall be determined on a case by case basis.



## IMPLEMENTATION PROCESS

Key elements to implement successful landscape plans are briefly outlined below.

- Clearly understand the BOLD Vision for landscape, FTE Landscape BRAND Guidelines and the scope of services or the RFP requirements of their respective project.
- Kick Off meeting attendance by the LAOR and the FTE Landscape Architect to ensure a mutual understanding of the landscape design objectives.
- Conduct site visit(s) to become familiar with the existing conditions of entire project limits.
- Participate in design progress meetings early in the design phase for coordination with other disciplines to fully understand impacts that affects potential landscape opportunities. These disciplines include: roadway, drainage, utilities, environmental, signing, ITS, lighting, structures, architecture, etc. It is through participation at the beginning of the project the designs may be able to identify and preserve landscape opportunities.
- Development of a Preliminary or Concept Landscape Plan based on site specific solutions in a roll plot format that incorporates existing and proposed conditions while maintaining landscape objectives.
- The Preliminary or Concept Plan must provide sufficient details to clearly define the design, plant quantity/species/sizes and establish a cost estimate.
- Approved Preliminary or Concept Landscape Plan will become basis of subsequent submittals.
- Incorporate comments provided at each phased submittal.





## RIGHT PLANT / RIGHT PLACE AND HELPFUL HINTS

Although these BRAND Guidelines and FDOT standards and Indexes are the primary sources for developing a compliant landscape design, there are additional factors that may not be specifically covered. The list below describes typical conditions that may be encountered in plan design to ensure the Right Plants are used in the Right Place. It also provides some helpful hints based on past experiences. These factors should be considered when designing landscape plans for all FTE projects.

- The designing Landscape Architect is responsible for conducting a sufficient number of site visits to ensure they have a clear understanding of the existing site conditions including: existing vegetation, soil conditions, adjacent land uses, awareness of seasonal changes, roadway configurations, structures, drainage, utilities, ITS, view sheds, billboards, signage, etc. The Landscape Architect shall continue visual verification of these elements throughout the design process.
- Selection of proposed plants must consider size at maturity to ensure they will not block visibility to: signs, ITS cameras, sight lines, etc.
- Ensure that all plants are appropriate for their location regarding hardiness zones and micro-climatic conditions.
- Do not locate plants that require moist soils (such as Royal palms, Paurotis, Maple, Sycamore, etc.) on highway embankments, side slopes or dry areas.
- Do not locate plants that require dry soils (such as Date palms, Royal Poinciana, etc.) within wet or seasonally moist areas.
- Do not plant tree types that have excessively large rootballs on slopes that are 1 to 3 or steeper, such as multi-stemmed palms or very large trees or palms.
- Do not plant very tall palms (16' clear trunk height or greater) within 15' to the guardrail or within 20' to a roadway in order to avoid the potential of them falling into the roadway prior to establishment.
- Avoid rows of trees at matched sizes and regular spacing. Utilize staggered plant sizes in informal, irregular spacing and irregular spaced clusters where possible.
- Provide grey wood (GW), clear trunk (CT) **and** overall heights (OA) dimensions on large specimen palms including, but not limited to: Bismarck, Date, Ribbon and Pindo palms to prevent the 'over pruning' of lower fronds.



- Consider designing with a variety of flowering tree species that provide year round seasonal color.
- Do not utilize trees with large or spiny fruits or with staining foliage such as Sweetgum, Mahogany, Black Olive, etc., near AET facilities, paved areas, parking lots, pedestrian areas, etc.
- Ensure shrubs are appropriately sized and spaced so they fill-in as soon as possible to minimize weeding operations. Do not space plants too closely together where air circulation and controlling pest infestations becomes problematic.
- Avoid plan notes that repeat or conflict with the FDOT Standards Specifications, Design Standards or Indexes.
- Where existing vegetation preservation is proposed and located **within** the construction and silt fence limits, provide a “Tree Protection Barricade”, per FDOT Index 544, on the plans around the vegetation to be preserved. Where vegetation preservation is **outside** the construction and silt fence limits, no tree protection barricades need to be shown on the plans. The Landscape Plan, however, shall indicate all areas of vegetation to be preserved in either case. The Landscape Plans shall make reference to the drawing sheets which show the construction and silt fence limits. The LAOR shall review these sheets to confirm accuracy and the plants to be preserved are protected.



## EXHIBITS



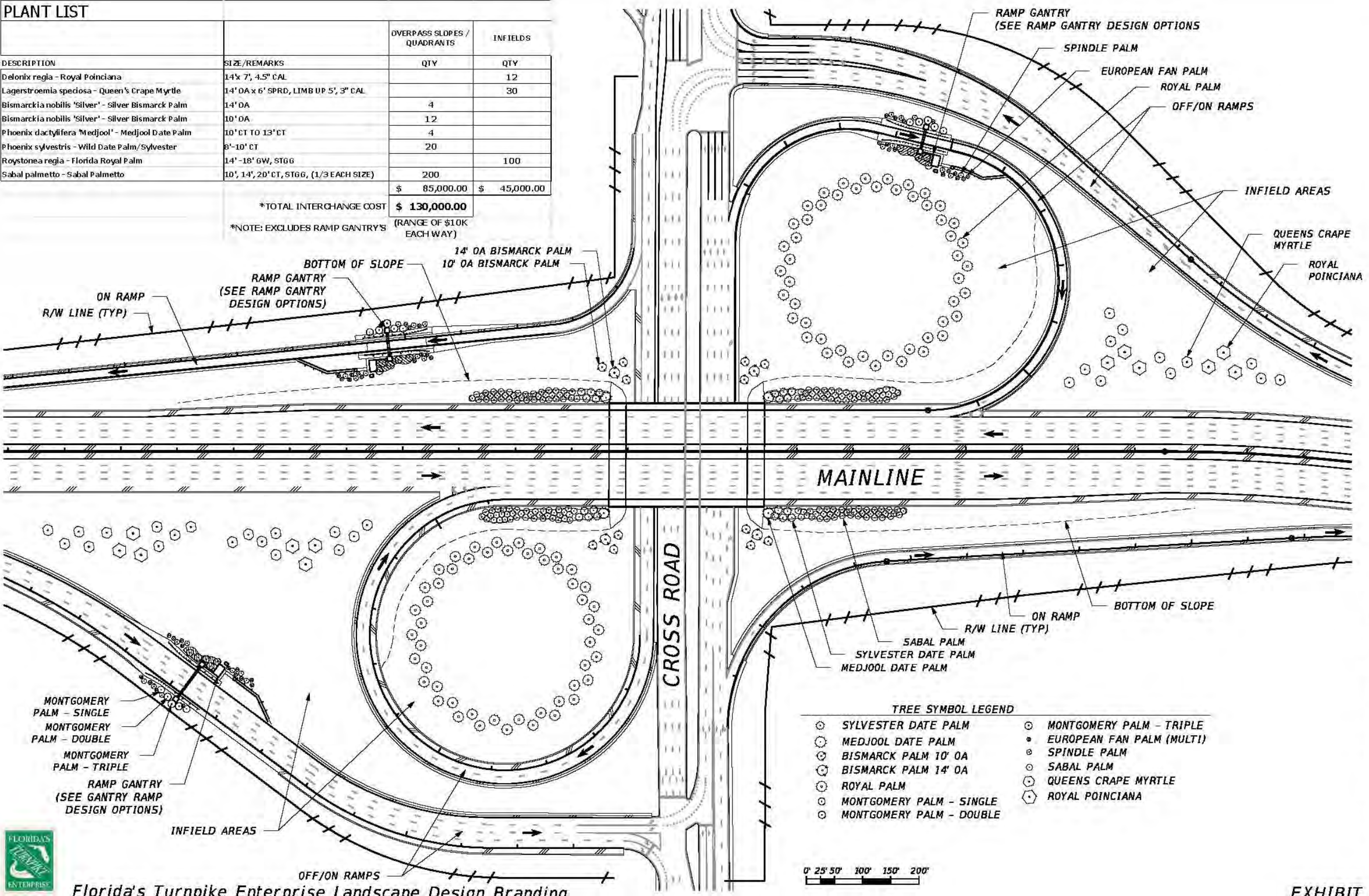


PLANT LIST

DESCRIPTION	SIZE/REMARKS	OVERPASS SLOPES / QUADRANTS		INFIELDS
		QTY	QTY	
Delonix regia - Royal Poinciana	14' x 7', 4.5" CAL			12
Lagerstroemia speciosa - Queen's Crape Myrtle	14' OA x 6' SPRD, LIMB UP 5', 3" CAL			30
Bismarckia nobilis 'Silver' - Silver Bismarck Palm	14' OA	4		
Bismarckia nobilis 'Silver' - Silver Bismarck Palm	10' OA	12		
Phoenix dactylifera 'Medjool' - Medjool Date Palm	10' CT TO 13' CT	4		
Phoenix sylvestris - Wild Date Palm/Sylvester	8'-10' CT	20		
Roystonea regia - Florida Royal Palm	14' -18' GW, STGG			100
Sabal palmetto - Sabal Palmetto	10', 14', 20' CT, STGG, (1/3 EACH SIZE)	200		
		\$ 85,000.00	\$ 45,000.00	

\*TOTAL INTERCHANGE COST \$ 130,000.00

\*NOTE: EXCLUDES RAMP GANTRY'S (RANGE OF \$10K EACH WAY)



TYPICAL INTERCHANGE - LEVEL 1 DESIGN OPTION



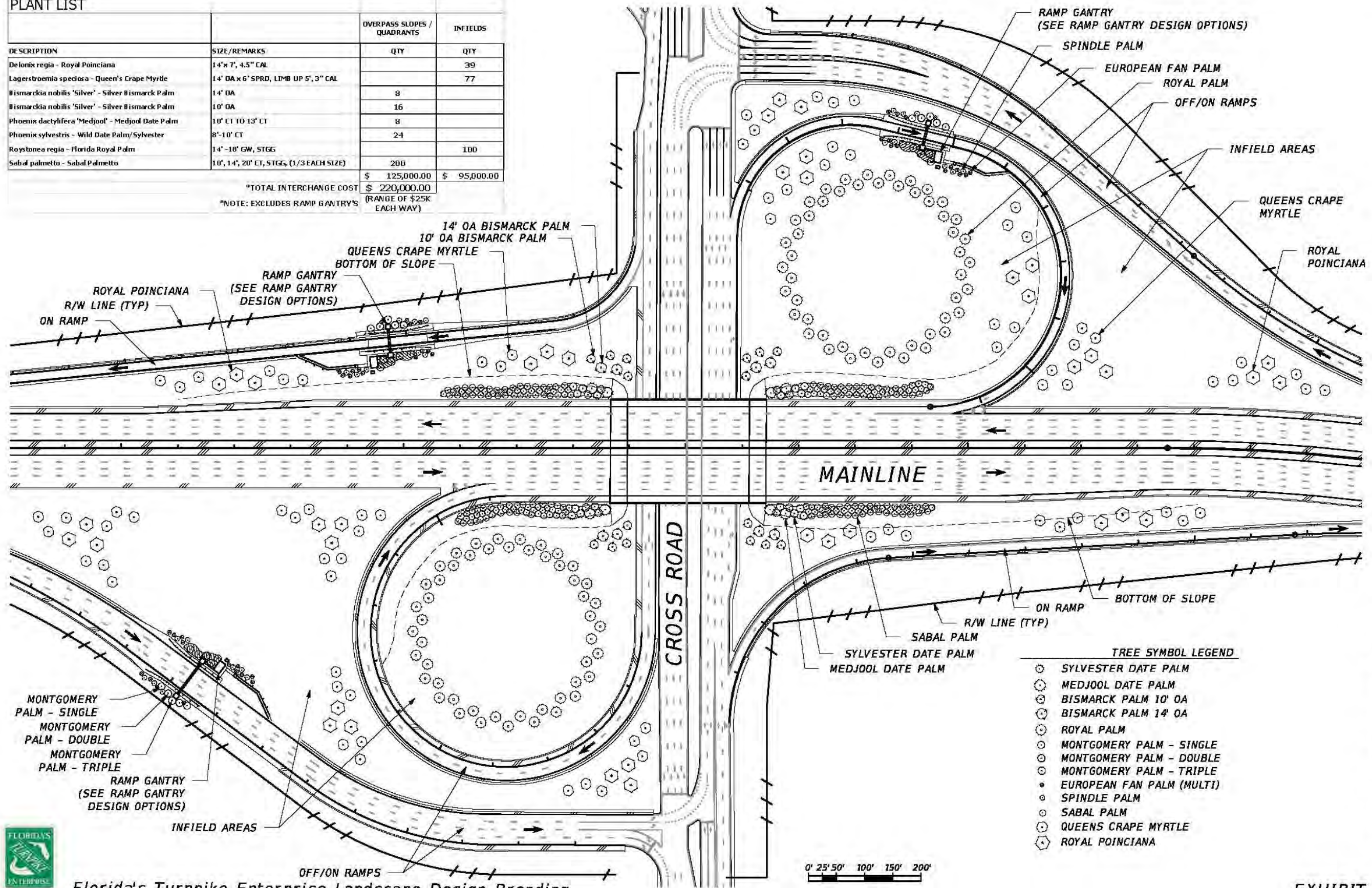
Florida's Turnpike Enterprise Landscape Design Branding

EXHIBIT 1-A



# PLANT LIST

DESCRIPTION	SIZE/REMARKS	QTY	INFIELDS
Delonix regia - Royal Poinciana	14' x 7', 4.5" CAL		39
Lagerstroemia speciosa - Queen's Crape Myrtle	14' OA x 6' SPRD, LIMB UP 5', 3" CAL		77
Bismarckia nobilis 'Silver' - Silver Bismarck Palm	14' OA	8	
Bismarckia nobilis 'Silver' - Silver Bismarck Palm	10' OA	16	
Phoenix dactylifera 'Medjool' - Medjool Date Palm	10' CT TO 13' CT	8	
Phoenix sylvestris - Wild Date Palm/Sylvester	8'-10' CT	24	
Roystonea regia - Florida Royal Palm	14' - 18' GW, STGG		100
Sabal palmetto - Sabal Palmetto	10', 14', 20' CT, STGG, (1/3 EACH SIZE)	200	
*TOTAL INTERCHANGE COST		\$ 125,000.00	\$ 95,000.00
		\$ 220,000.00	
*NOTE: EXCLUDES RAMP GANTRY'S		(RANGE OF \$25K EACH WAY)	



TYPICAL INTERCHANGE - LEVEL 2 DESIGN OPTION



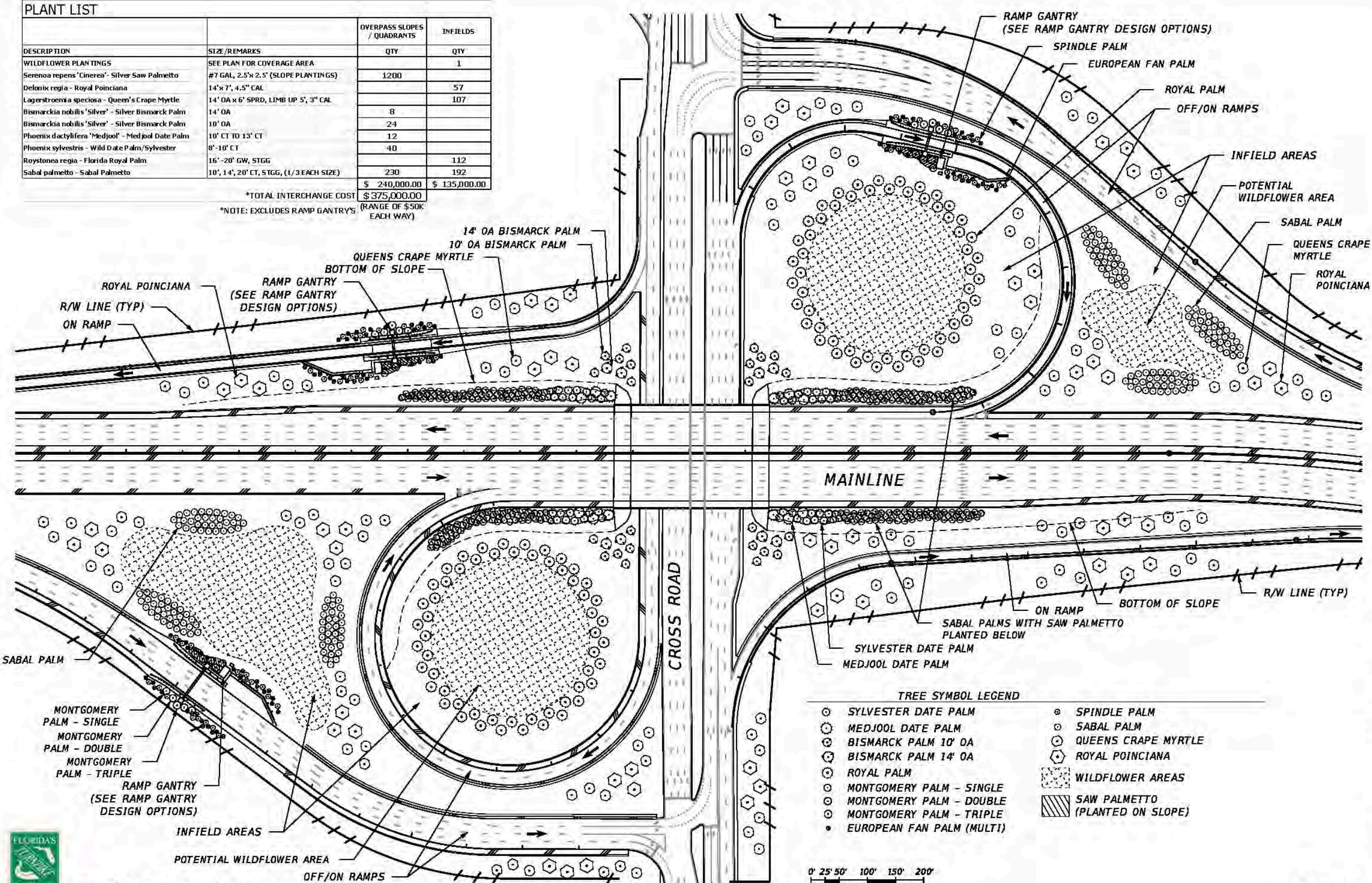
Florida's Turnpike Enterprise Landscape Design Branding

EXHIBIT 1-B



PLANT LIST

DESCRIPTION	SIZE/REMARKS	OVERPASS SLOPES / QUADRANTS	INFIELDS
		QTY	QTY
WILDFLOWER PLANTINGS	SEE PLAN FOR COVERAGE AREA		1
Serenoa repens 'Cinerea' - Silver Saw Palmetto	#7 GAL, 2.5'x 2.5' (SLOPE PLANTINGS)	1200	
Delonix regia - Royal Poinciana	14'x 7', 4.5" CAL		57
Lagerstroemia speciosa - Queen's Crape Myrtle	14' OA x 6' SPRD, LIMB UP 5', 3" CAL		107
Bismarckia nobilis 'Silver' - Silver Bismarck Palm	14' OA	8	
Bismarckia nobilis 'Silver' - Silver Bismarck Palm	10' OA	24	
Phoenix dactylifera 'Medjool' - Medjool Date Palm	10' CT TO 13' CT	12	
Phoenix sylvestris - Wild Date Palm/Sylvester	8'-10' CT	40	
Roystonea regia - Florida Royal Palm	16'-20' GW, STGG		112
Sabal palmetto - Sabal Palmetto	10', 14', 20' CT, STGG, (1/3 EACH SIZE)	230	192
*TOTAL INTERCHANGE COST		\$ 240,000.00	\$ 135,000.00
*NOTE: EXCLUDES RAMP GANTRY'S		(\$375,000.00 (RANGE OF \$50K EACH WAY))	



TYPICAL INTERCHANGE - LEVEL 3 DESIGN OPTION



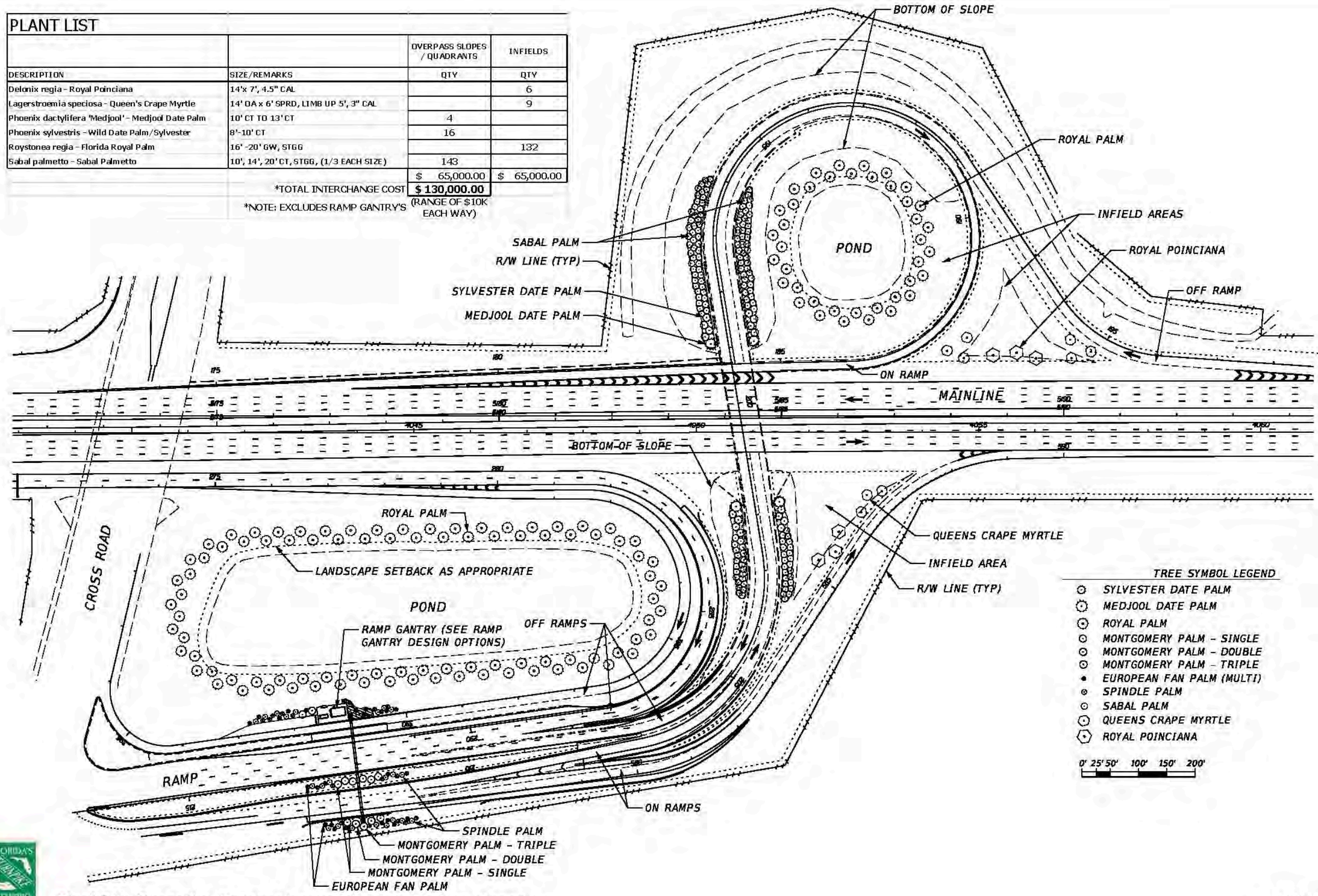
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EXHIBIT 1-C



# PLANT LIST

DESCRIPTION	SIZE/REMARKS	OVERPASS SLOPES / QUADRANTS	INFIELDS
Delonix regia - Royal Poinciana	14'x 7', 4.5" CAL	QTY	QTY
Lagerstroemia speciosa - Queen's Crape Myrtle	14' DA x 6' SPRD, LIMB UP 5', 3" CAL		6
Phoenix dactylifera 'Medjool' - Medjool Date Palm	10' CT TO 13' CT	4	9
Phoenix sylvestris - Wild Date Palm/Sylvester	8'-10' CT	16	
Roystonea regia - Florida Royal Palm	16' -20' GW, STGG		132
Sabal palmetto - Sabal Palmetto	10', 14', 20' CT, STGG, (1/3 EACH SIZE)	143	
		\$ 65,000.00	\$ 65,000.00
	*TOTAL INTERCHANGE COST	\$ 130,000.00	
	*NOTE: EXCLUDES RAMP GANTRY'S	(RANGE OF \$10K EACH WAY)	



TYPICAL TRUMPET INTERCHANGE - LEVEL 1 DESIGN OPTION



Florida's Turnpike Enterprise Landscape Design Branding

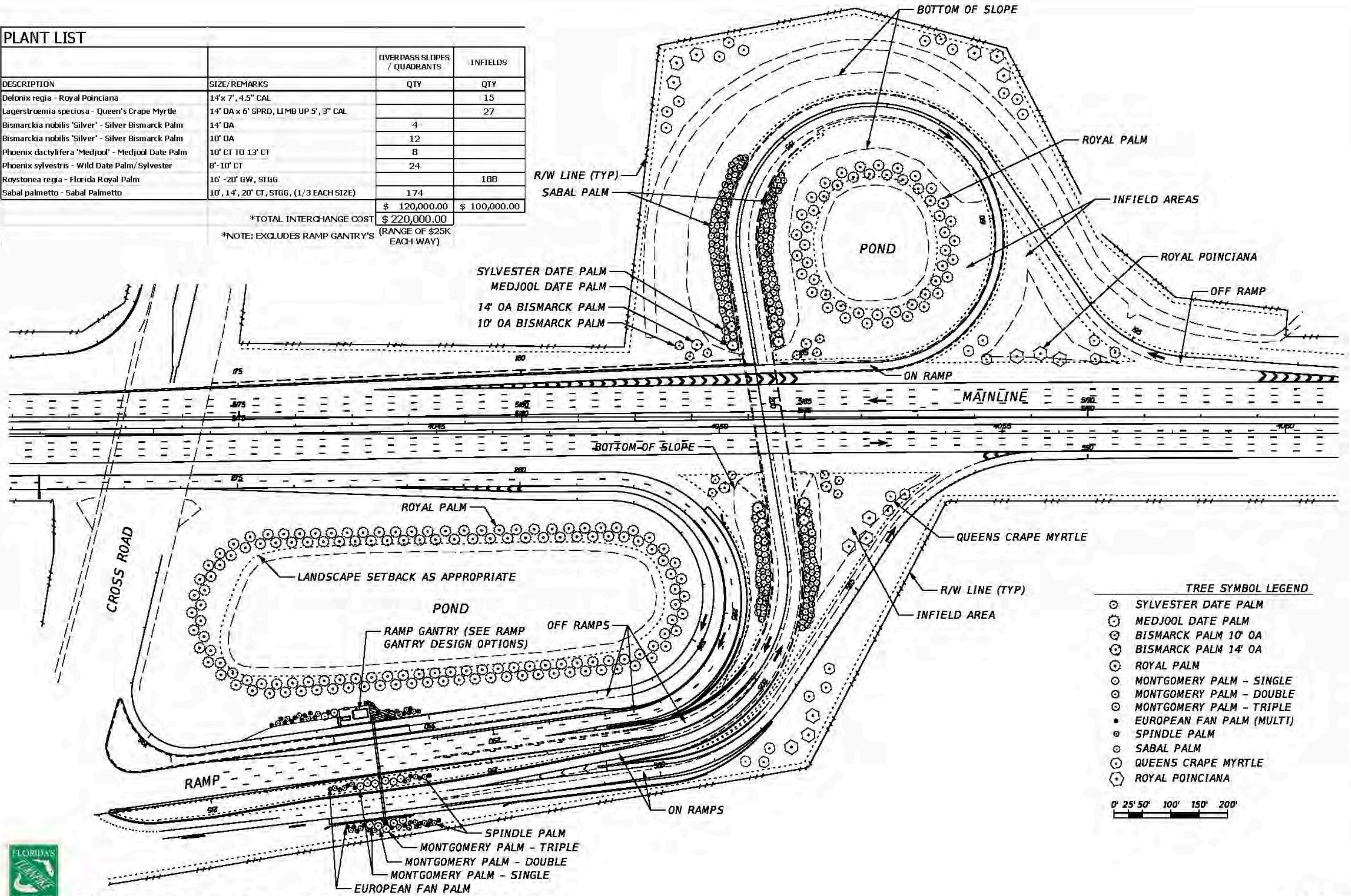
EXHIBIT 2-A



PLANT LIST

DESCRIPTION	SIZE/REMARKS	OVERPASS SLOPES / QUADRANTS QTY	INFIELDS QTY
Delonix regia - Royal Poinciana	14' x 7', 4.5" CAL		15
Lagerstroemia speciosa - Queen's Crape Myrtle	14' OA x 6' SPRD, LIMB UP 5', 3" CAL		27
Bismarckia nobilis 'Silver' - Silver Bismarck Palm	14' OA	4	
Bismarckia nobilis 'Silver' - Silver Bismarck Palm	10' OA	12	
Phoenix dactylifera 'Medjool' - Medjool Date Palm	10' CT TO 13' CT	8	
Phoenix sylvestris - Wild Date Palm/Sylvester	8'-10' CT	24	
Roystonea regia - Florida Royal Palm	16' -20' GW, STGG		188
Sabal palmetto - Sabal Palmetto	10', 14', 20' CT, STGG, (1/3 EACH SIZE)	174	
		\$ 120,000.00	\$ 100,000.00

\*TOTAL INTERCHANGE COST \$ 220,000.00  
\*NOTE: EXCLUDES RAMP GANTRY'S (RANGE OF \$25K EACH WAY)



- TREE SYMBOL LEGEND
- SYLVESTER DATE PALM
  - ⊗ MEDJOOl DATE PALM
  - ⊗ BISMARCK PALM 10' OA
  - ⊗ BISMARCK PALM 14' OA
  - ROYAL PALM
  - MONTGOMERY PALM - SINGLE
  - MONTGOMERY PALM - DOUBLE
  - MONTGOMERY PALM - TRIPLE
  - EUROPEAN FAN PALM (MULTI)
  - ⊗ SPINDLE PALM
  - SABAL PALM
  - ⊗ QUEENS CRAPE MYRTLE
  - ⊗ ROYAL POINCIANA
- 0' 25' 50' 100' 150' 200'

TYPICAL TRUMPET INTERCHANGE - LEVEL 2 DESIGN OPTION



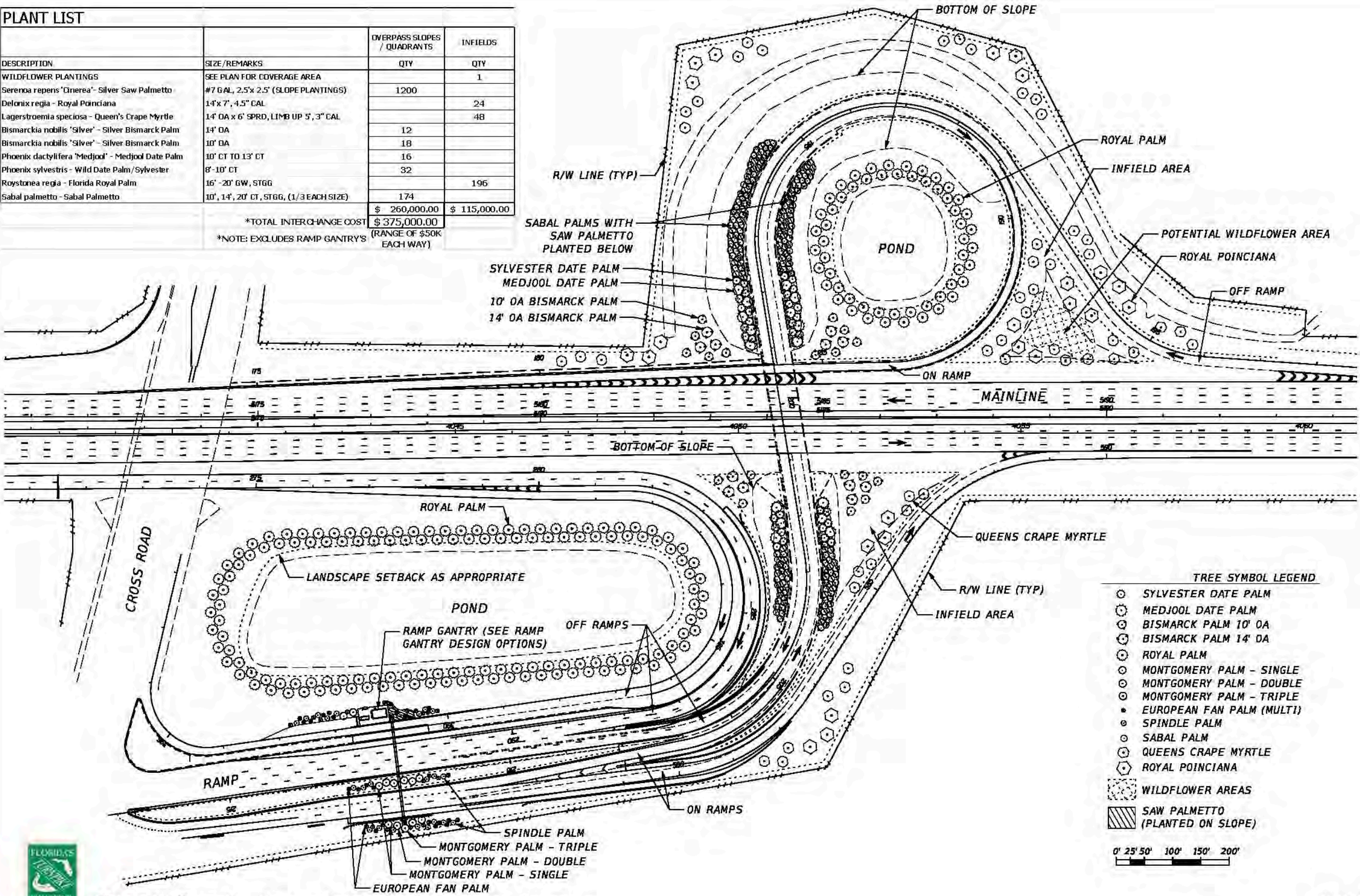
Florida's Turnpike Enterprise Landscape Design Branding

EXHIBIT 2-B



PLANT LIST

DESCRIPTION	SIZE/REMARKS	OVERPASS SLOPES / QUADRANTS	INFIELDS
WILDFLOWER PLANTINGS	SEE PLAN FOR COVERAGE AREA	QTY	QTY
Serenoa repens 'Ginerea' - Silver Saw Palmetto	#7 GAL, 2.5'x 2.5' (SLOPE PLANTINGS)	1200	1
Delonix regia - Royal Poinciana	14'x 7', 4.5" CAL		24
Lagerstroemia speciosa - Queen's Crape Myrtle	14' OA x 6' SPRD, LIMB UP 5', 3" CAL		48
Bismarckia nobilis 'Silver' - Silver Bismarck Palm	14' OA	12	
Bismarckia nobilis 'Silver' - Silver Bismarck Palm	10' OA	18	
Phoenix dactylifera 'Medjool' - Medjool Date Palm	10' CT TO 13' CT	16	
Phoenix sylvestris - Wild Date Palm/Sylvester	8'-10' CT	32	
Roystonea regia - Florida Royal Palm	16' -20' GW, STGG		196
Sabal palmetto - Sabal Palmetto	10', 14', 20' CT, STGG, (1/3 EACH SIZE)	174	
		\$ 260,000.00	\$ 115,000.00
	*TOTAL INTERCHANGE COST	\$ 375,000.00	
	*NOTE: EXCLUDES RAMP GANTRY'S	(RANGE OF \$50K EACH WAY)	



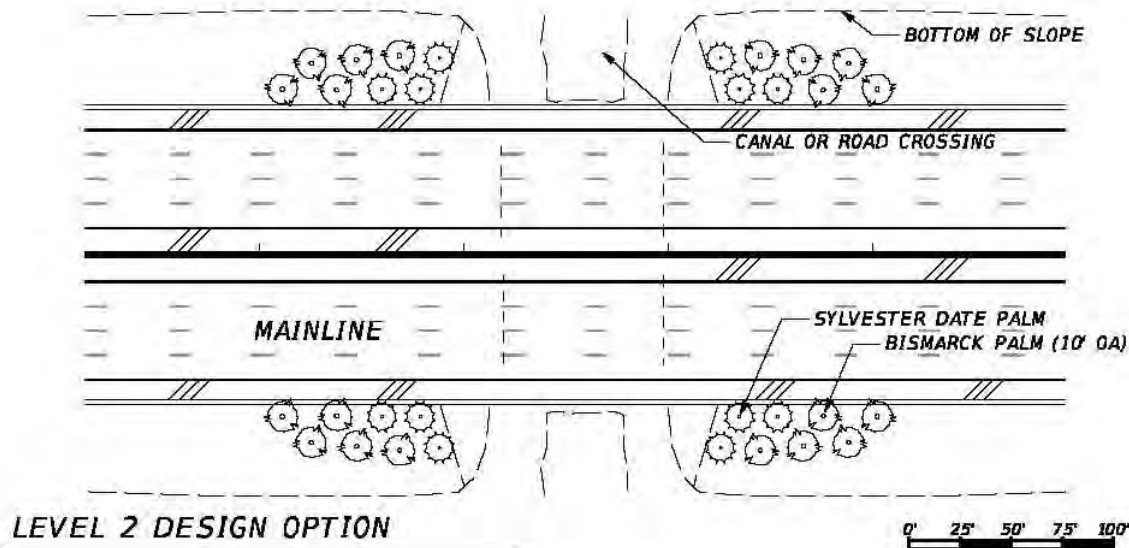
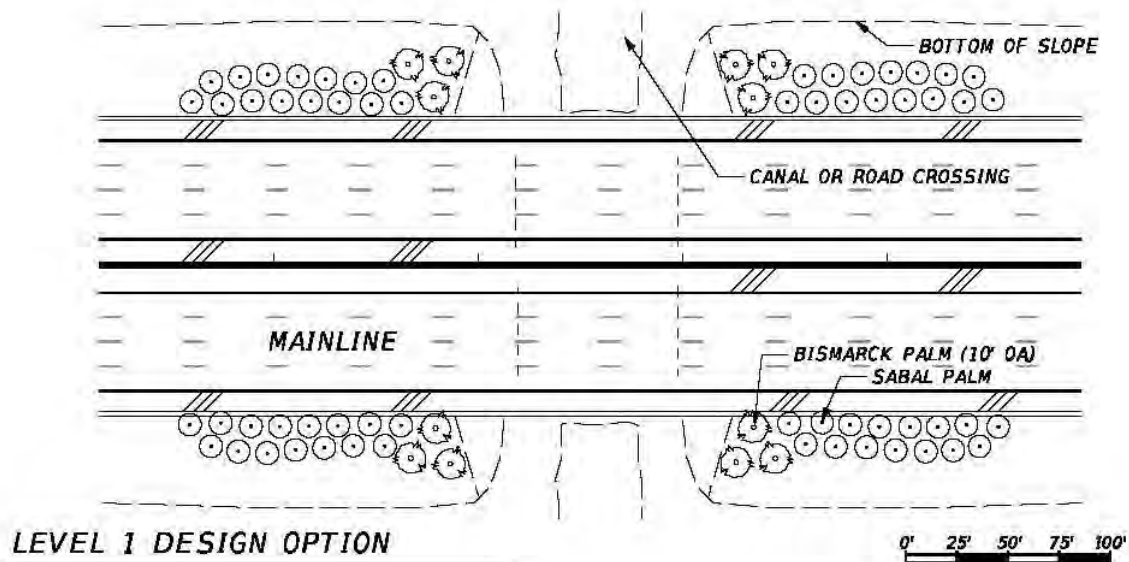
TYPICAL TRUMPET INTERCHANGE - LEVEL 3 DESIGN OPTION



Florida's Turnpike Enterprise Landscape Design Branding

EXHIBIT 2-C





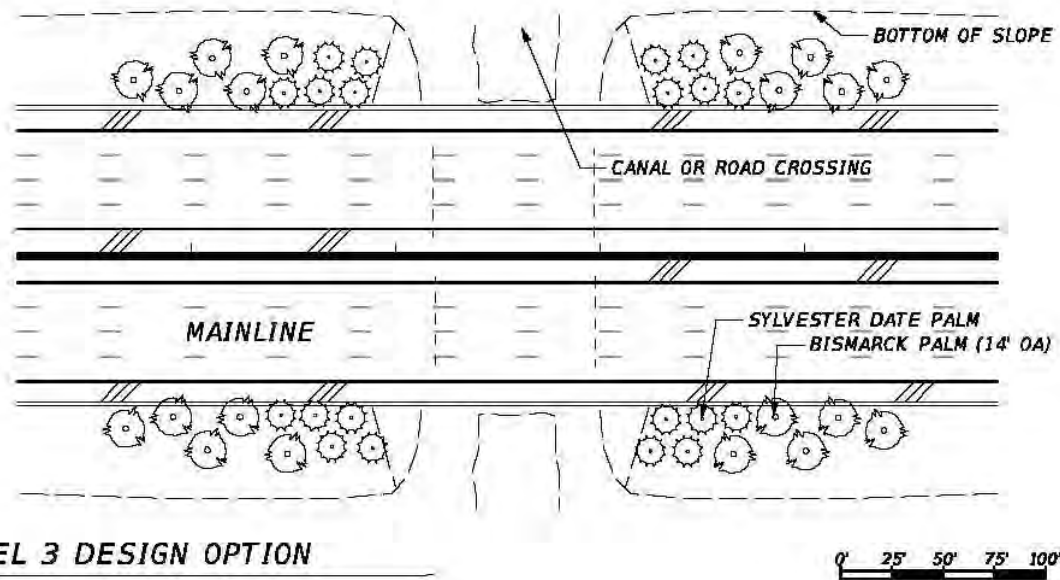
PLANT LIST		ECONOMICAL OPTION	MODERATE OPTION	HIGH PROFILE OPTION
DESCRIPTION	SIZE / REMARKS	QTY	QTY	QTY
Bismarckia nobilis 'Silver' - Silver Bismarck Palm	14' OA			20
Bismarckia nobilis 'Silver' - Silver Bismarck Palm	10' OA	12	20	
Phoenix sylvestris - Wild Date Palm/Sylvester	8'-10' CT		12	20
Sabal palmetto - Sabal Palmetto	10', 14', 20' CT, STGG, (1/3 EACH SIZE)	60		
TOTAL COST		\$ 15,000.00	\$ 20,000.00	\$ 31,000.00



## TYPICAL OVERPASS DESIGN OPTIONS

## EXHIBIT 3-A

Florida's Turnpike Enterprise Landscape Brand



PLANT LIST				
		ECONOMICAL OPTION	MODERATE OPTION	HIGH PROFILE OPTION
DESCRIPTION	SIZE / REMARKS	QTY	QTY	QTY
Bismarckia nobilis 'Silver' - Silver Bismarck Palm	14' OA			20
Bismarckia nobilis 'Silver' - Silver Bismarck Palm	10' OA	12	20	
Phoenix sylvestris - Wild Date Palm/Sylvester	8'-10' CT		12	20
Sabal palmetto - Sabal Palmetto	10', 14', 20' CT, STGG, (1/3 EACH SIZE)	60		
TOTAL COST		\$ 15,000.00	\$ 20,000.00	\$ 31,000.00

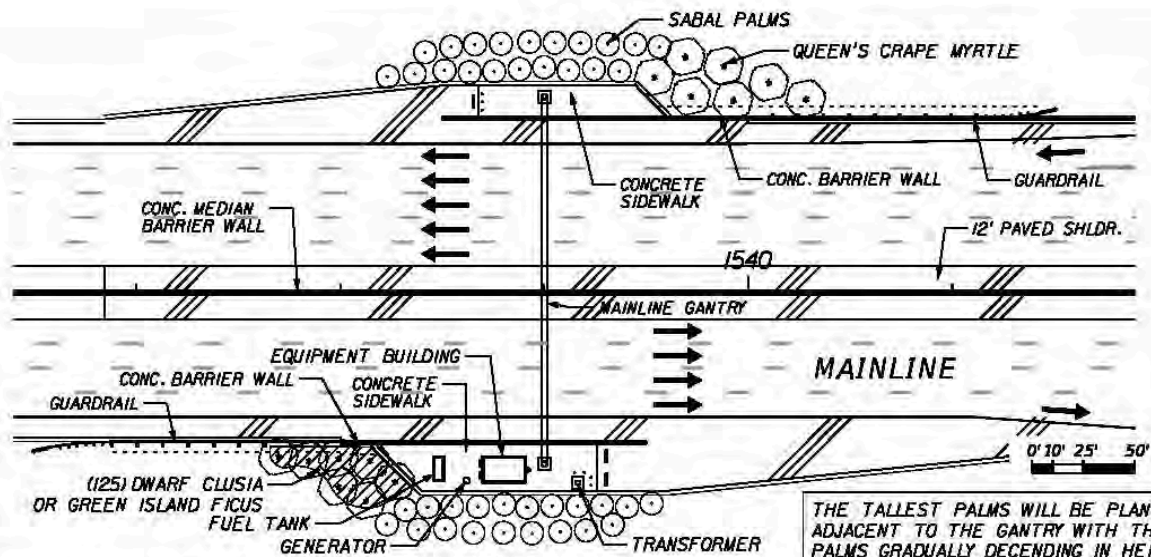


## TYPICAL OVERPASS DESIGN OPTIONS

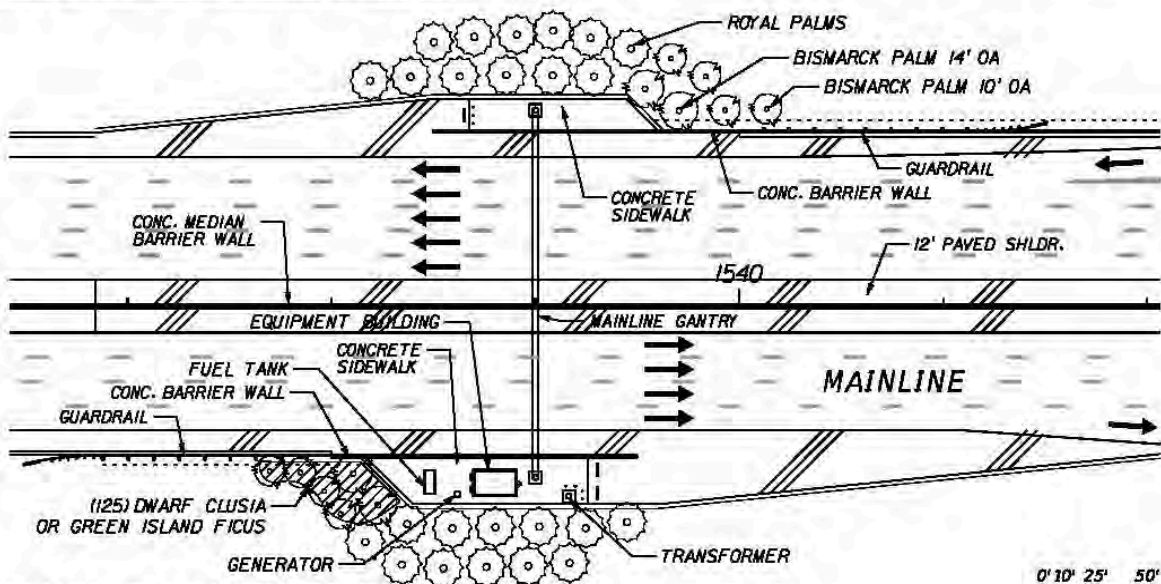
## EXHIBIT 3-B

Florida's Turnpike Enterprise Landscape Brand





### LEVEL 1 DESIGN OPTION



### LEVEL 2 DESIGN OPTION

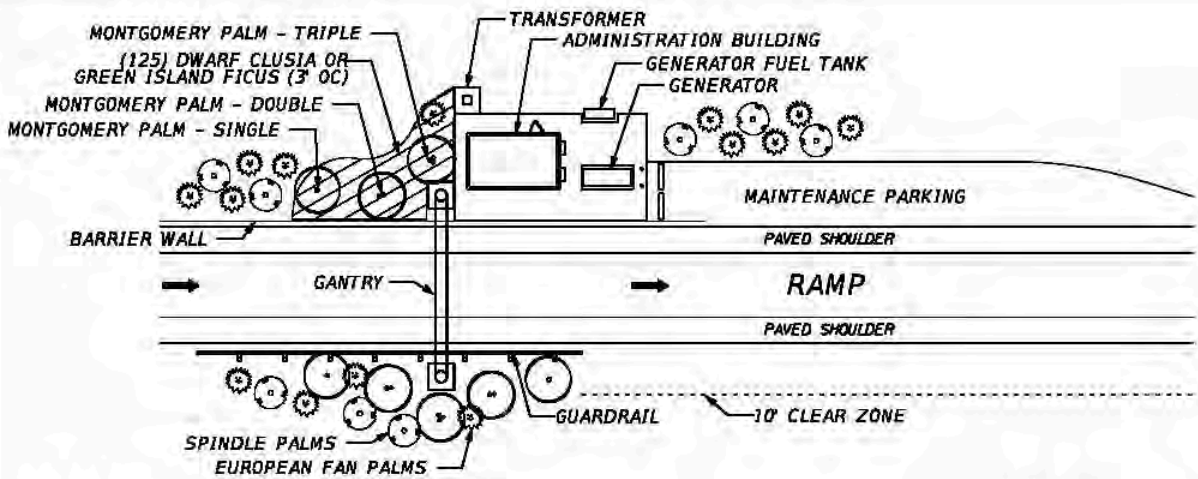
PLANT LIST		ECONOMICAL OPTION	MODERATE OPTION
DESCRIPTION	SIZE / REMARKS	QTY	QTY
Clusia guttifera 'Nana' - Dwarf Clusia	2'x 2', 3' OC	125	125
Lagerstroemia speciosa - Queen's Crape Myrtle	14' OA x 6' SPRD, LIMB UP 5', 3" CAL	14	
Bismarckia nobilis 'Silver' - Silver Bismarck Palm	10' OA		8
Bismarckia nobilis 'Silver' - Silver Bismarck Palm	14' OA		4
Roystonea regia - Florida Royal Palm	14' -18' GW, STGG		24
Sabal palmetto - Sabal Palmetto	12', 14', 22' CT, STGG, (1/3 EACH SIZE)	40	
TOTAL COST		\$15,000.00	\$20,000.00

### TYPICAL MAINLINE GANTRY DESIGN OPTIONS

### EXHIBIT 4

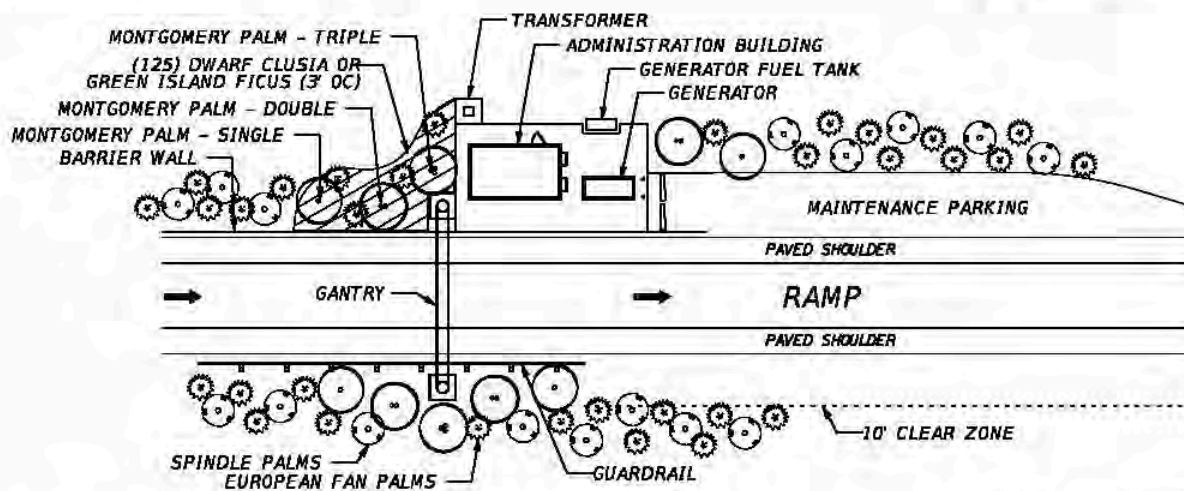


Florida's Turnpike Enterprise Landscape Design Branding



**LEVEL 1 DESIGN OPTION**

0' 10' 25' 50'



**LEVEL 2 DESIGN OPTION**

0' 10' 25' 50'

**PLANT LIST**

DESCRIPTION	SIZE / REMARKS	ECONOMICAL OPTION	MODERATE OPTION
		QTY	QTY
Ficus macrophylla 'Green Island' - Green Island Ficus	2'x 2', 3' OC		
Clusia guttifera 'Nana' - Dwarf Clusia	2'x 2', 3' OC	125	125
Veitchia montgomeryana - Montgomery Palm	SINGLE STEM, 12' TO 14' CT MIN	4	4
Veitchia montgomeryana - Montgomery Palm	DOUBLE STEM, 12' TO 14' CT MIN	4	4
Veitchia montgomeryana - Montgomery Palm	TRIPLE STEM, 12' TO 14' CT MIN	2	2
Chamaerops humilis - European Fan Palm	5'-6' OA, MULTI	14	32
Hyophorbe verschaffeltii - Spindle Palm	6'-8' OA	8	16
		\$ 11,500.00	\$ 18,500.00

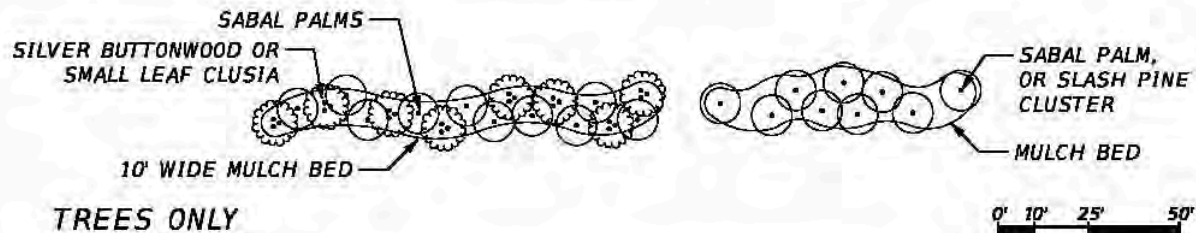
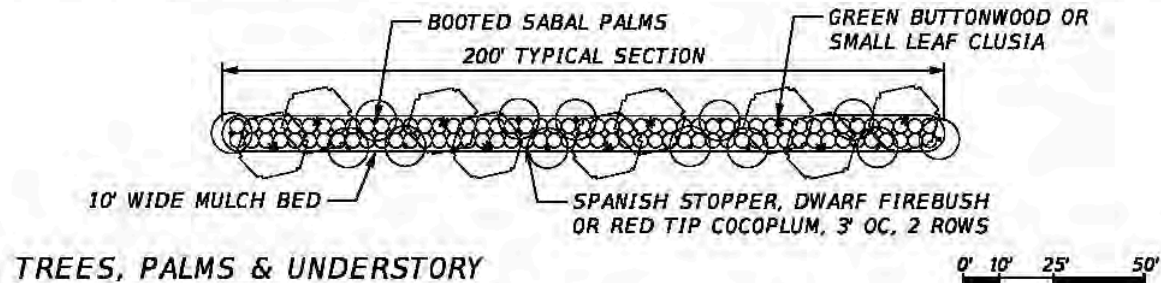
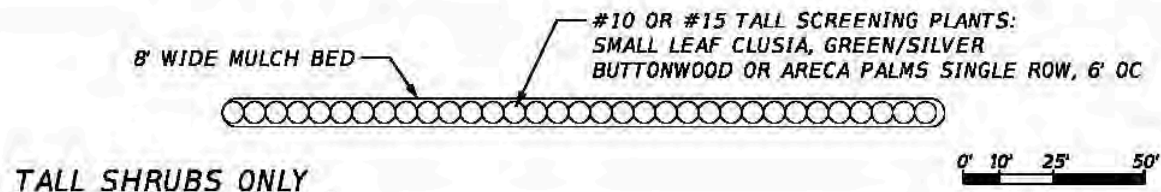


**TYPICAL RAMP GANTRY DESIGN OPTIONS**

**EXHIBIT 5**

Florida's Turnpike Enterprise Landscape Design Branding





## PLANT LIST

		TALL SHRUBS ONLY	TREES, PALMS & UNDERSTORY	TREES ONLY
DESCRIPTION	SIZE / REMARKS	QTY	QTY	QTY
Conocarpus erectus - Green Buttonwood	# 10/# 15 GAL, 6' x 5', 6' OC	33		
Conocarpus erectus var. sericeus - Silver Buttonwood	# 10/# 15 GAL, 6' x 5', 6' OC			
Dypsis lutescens - Areca Palm	# 10/# 15 GAL, 7' x 5', FULL, 6' OC			
Clusia guttifera - Small Leaf Clusia	# 10/# 15 GAL, 5' x 4', FULL, 6' OC			
Clusia guttifera - Small Leaf Clusia	12' x 6', TREE FORM			8
Hamelia nodosa - Dwarf Firebush	2' x 2', 3' OC			
Chrysobalanus icaco 'Red Tip' - Red Tip Cocoplum	2' x 2', 3' OC			
Clusia guttifera - Small Leaf Clusia	# 7 GAL, 3' x 2', 4' OC			
Eugenia foetida - Spanish Stopper	2.5' x 2', 3' OC		98	
Serenoa repens 'Cinerea' - Silver Saw Palmetto	# 7 GAL, 2.5' x 2.5'			
Pinus elliotii densa - So. Florida Slash Pine	8' DA, 3" CAL			9
Conocarpus erectus - Green Buttonwood	12' x 5'		9	
Sabal palmetto - Sabal Palmetto	10', 14', 18' CT, STGB, (1/3 EACH SIZE)		13	10
TOTAL COST PER PLANTING (200' SECTION)		\$ 2,000.00	\$ 5,500.00	\$ 7,000.00
TOTAL COST PER 2,000' SECTION (CONTINUOUS X 10 PLANTINGS)		\$ 20,000.00	\$ 55,000.00	\$ 70,000.00
TOTAL COST PER 2,000' SECTION (@ 500' OC X 4 PLANTINGS WITH 300' GAP)		\$ 8,000.00	\$ 22,000.00	\$ 28,000.00
TOTAL COST PER 2,000' SECTION (@ 666' OC - X 3 PLANTINGS WITH 466' GAP)		\$ 6,000.00	\$ 16,500.00	\$ 21,000.00
TOTAL COST PER 2,000' SECTION (@ 1000' OC - X 2 PLANTINGS WITH 800' GAP)		\$ 4,000.00	\$ 11,000.00	\$ 14,000.00

BUFFER OPTIONS ARE SHOWN IN TYPICAL 200' SECTIONS. ACTUAL LENGTH AND NUMBER OF INTERVALS TO BE DETERMINED BASED ON SITE CONDITIONS AND AVAILABLE BUDGET.

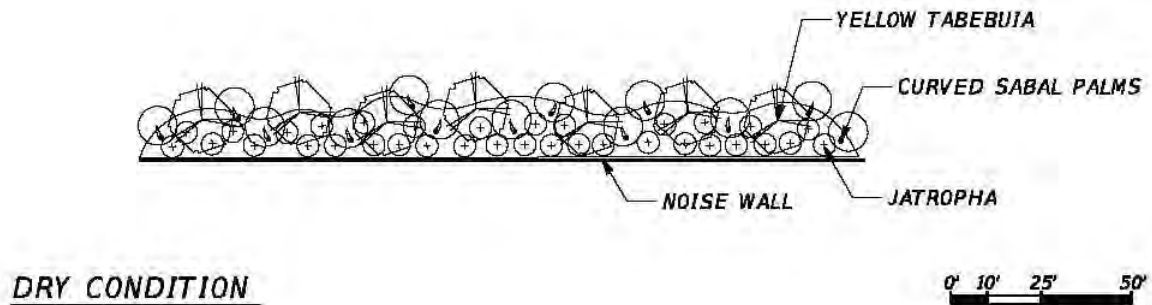
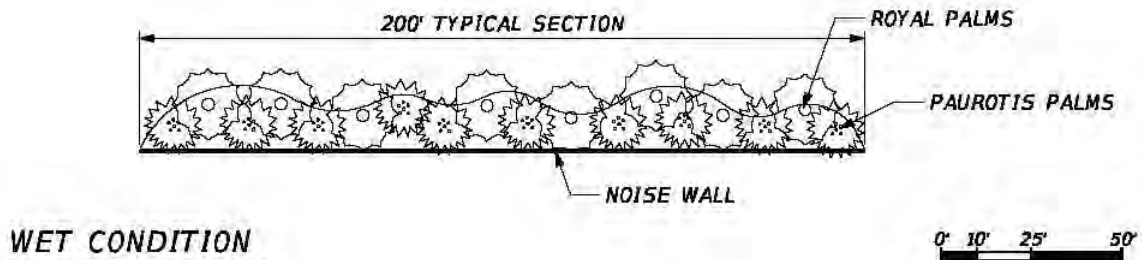


## TYPICAL BUFFER DESIGN OPTIONS

## EXHIBIT 6

Florida's Turnpike Enterprise Landscape Brand





PLANT LIST			
		NOISE WALL - WET CONDITION	NOISE WALL - DRY CONDITION
DESCRIPTION	SIZE / REMARKS	QTY	QTY
Jatropha - Jatropha Bush	5' x 3.5', BUSH FORM		34
Tabebuia caraiba - Silver Trumpet Tree	12' x 6', 4" CAL		7
Acoelorrhapee wrightii - Paurotis Palm	10' x 6', 10 CANES MIN, CLEAN BASE	10	
Roystonea regia - Florida Royal Palm	14' - 18' GW, STGG	8	
Sabal palmetto - Sabal Palmetto	10', 14', 20' CT, STGG, (1/3 EACH SIZE), SLICK, CURVED TRUNK		13
TOTAL COST PER PLANTING (200' SECTION)		\$ 7,800.00	\$ 6,700.00
TOTAL COST PER 2,000' SECTION (@ 500' OC - X 4 PLANTINGS WITH 300' GAP)		\$ 31,200.00	\$ 26,800.00
TOTAL COST PER 2,000' SECTION (@ 666' OC - X 3 PLANTINGS WITH 466' GAP)		\$ 23,400.00	\$ 20,100.00
TOTAL COST PER 2,000' SECTION (@ 1000' OC - X 2 PLANTINGS WITH 800' GAP)		\$ 15,600.00	\$ 13,400.00

BUFFER OPTIONS ARE SHOWN IN TYPICAL 200' SECTIONS. ACTUAL LENGTH AND NUMBER OF INTERVALS TO BE DETERMINED BASED ON SITE CONDITIONS AND AVAILABLE BUDGET.

A 10' MAINTENANCE SETBACK MAY BE REQUIRED AS DETERMINED ON A PROJECT BY PROJECT BASIS.



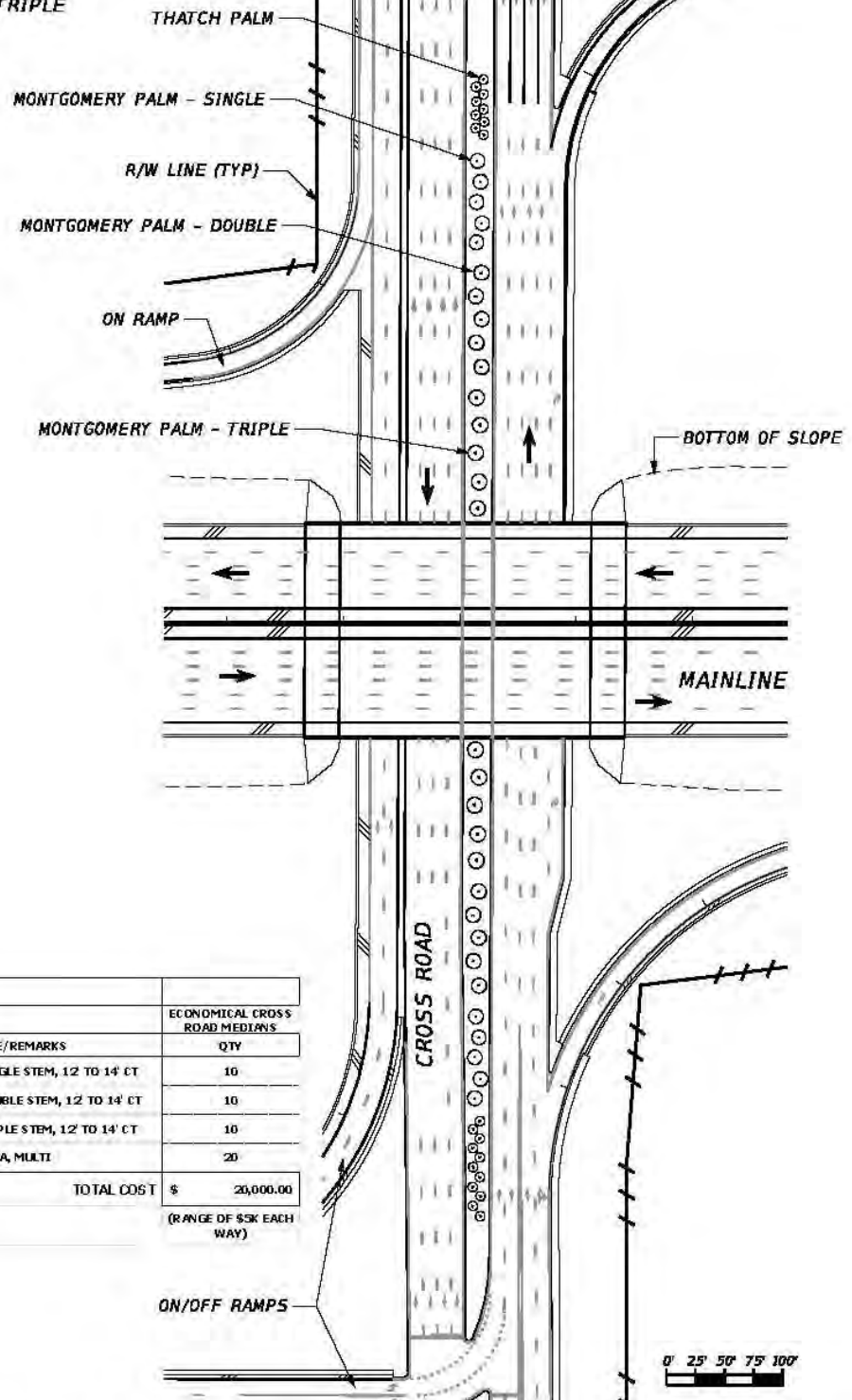
## TYPICAL NOISE WALL DESIGN OPTIONS

## EXHIBIT 7

Florida's Turnpike Enterprise Landscape Brand

# **TREE SYMBOL LEGEND**

- MONTGOMERY PALM - SINGLE
- ⊖ MONTGOMERY PALM - DOUBLE
- ⊗ MONTGOMERY PALM - TRIPLE
- ⊙ THATCH PALM



PLANT LIST		ECONOMICAL CROSS ROAD MEDIANS
DESCRIPTION	SIZE/REMARKS	QTY
Veitchia montgomeryana - Montgomery Palm	SINGLE STEM, 12 TO 14' CT	10
Veitchia montgomeryana - Montgomery Palm	DOUBLE STEM, 12 TO 14' CT	10
Veitchia montgomeryana - Montgomery Palm	TRIPLE STEM, 12 TO 14' CT	10
Thrinax radiata - Thatch Palm	6' DA, MULTI	20
TOTAL COST		\$ 20,000.00
		(RANGE OF \$5K EACH WAY)



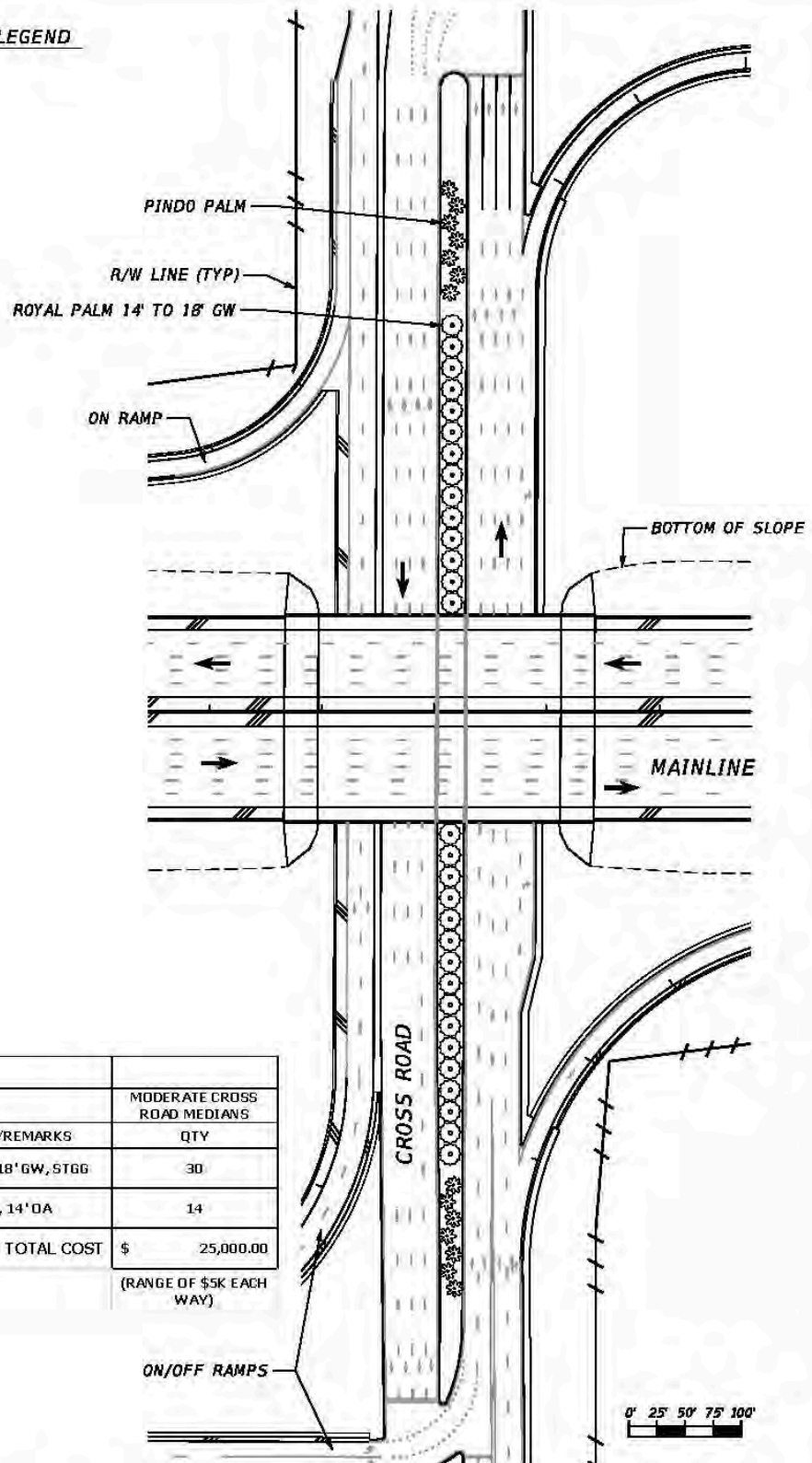
**TYPICAL CROSS ROAD - LEVEL 1 DESIGN OPTION**

**EXHIBIT 8-A**

*Florida's Turnpike Enterprise Landscape Brand*

**TREE SYMBOL LEGEND**

- ⊙ ROYAL PALM
- ✻ PINDO PALM



PLANT LIST		
		MODERATE CROSS ROAD MEDIANS
DESCRIPTION	SIZE/REMARKS	QTY
Roystonea regia - Florida Royal Palm	14' - 18' GW, STGG	30
Butia capitata - Pindo Palm	6' CT, 14' OA	14
TOTAL COST		\$ 25,000.00
(RANGE OF \$5K EACH WAY)		







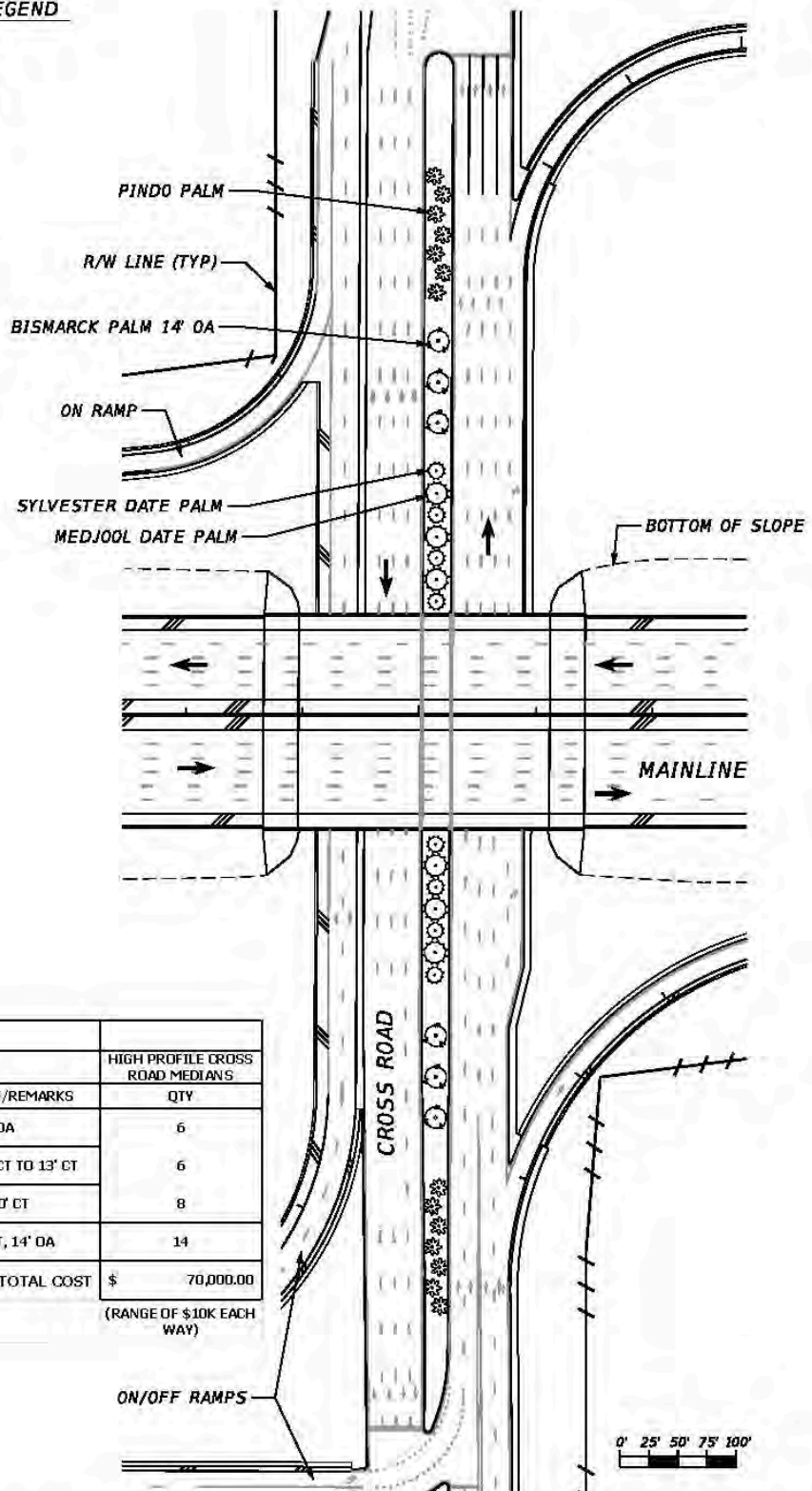
**TYPICAL CROSS ROAD - LEVEL 2 DESIGN OPTION EXHIBIT 8-B**

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**TREE SYMBOL LEGEND**

-  SYLVESTER DATE PALM
-  MEDJOOOL DATE PALM
-  BISMARCK PALM 14' OA
-  PINDO PALM



PLANT LIST		
DESCRIPTION	SIZE/REMARKS	QTY
Bismarckia nobilis 'Silver' - Silver Bismarck Palm	14' OA	6
Phoenix dactylifera 'Medjool' - Medjool Date Palm	10' CT TO 13' CT	6
Phoenix sylvestris - Wild Date Palm/Sylvester	8'-10' CT	8
Butia capitata - Pindo Palm	6' CT, 14' OA	14
TOTAL COST		\$ 70,000.00

(RANGE OF \$10K EACH WAY)

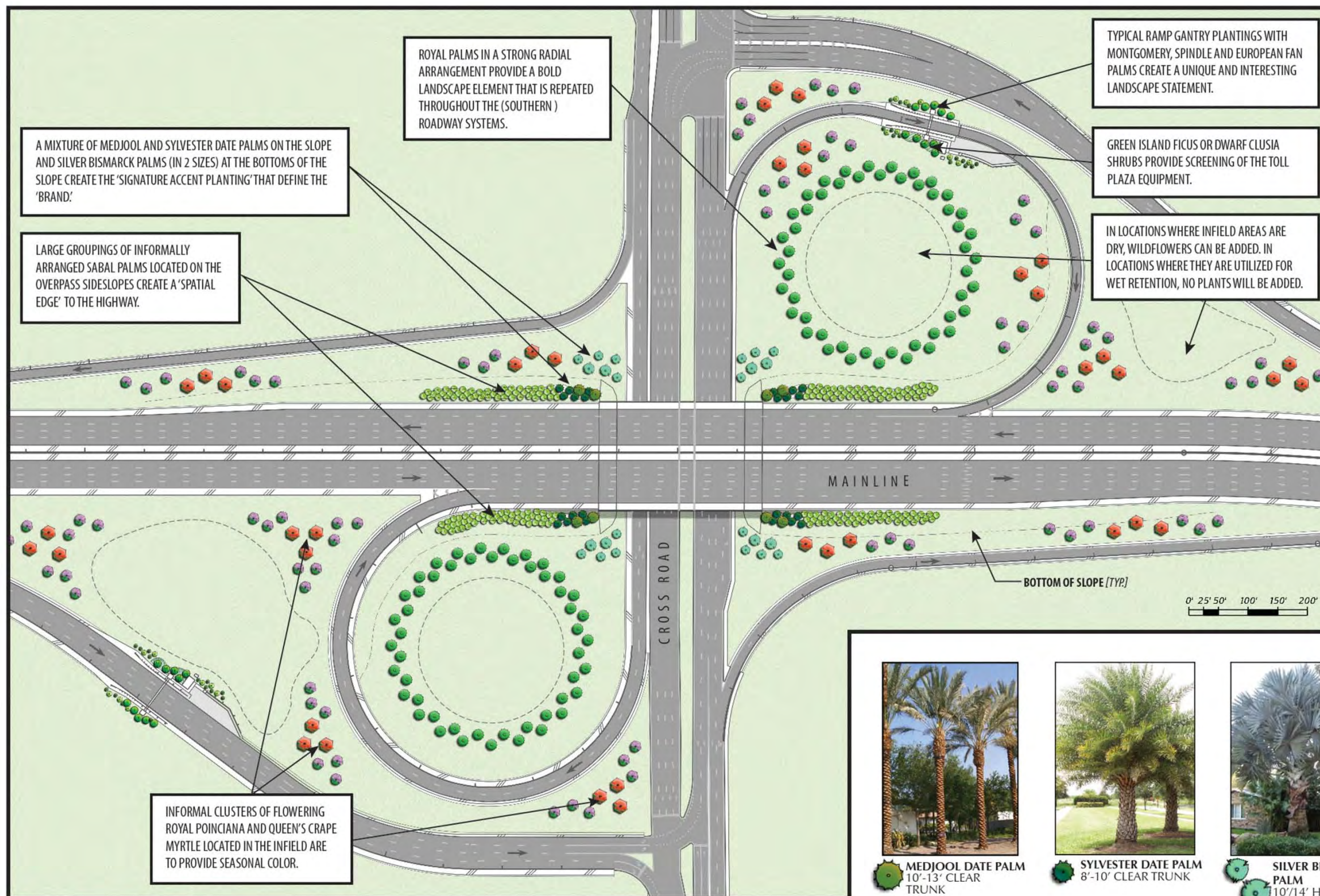


**TYPICAL CROSS ROAD - LEVEL 3 DESIGN OPTION**

**EXHIBIT 8-C**

*Florida's Turnpike Enterprise Landscape Brand*





**SUGGESTED  
LANDSCAPE  
PLANT PALETTE**  
\*HEIGHTS SHOWN ARE AT INSTALLATION



QUEEN'S CRAPE MYRTLE  
14' HEIGHT



ROYAL POINCIANA  
14' HEIGHT



SABAL PALM  
10'/14'/20' CLEAR TRUNK



MEDJOOOL DATE PALM  
10'-13' CLEAR TRUNK



SYLVESTER DATE PALM  
8'-10' CLEAR TRUNK



SILVER BISMARK PALM  
10'/14' HEIGHT



ROYAL PALM  
14'-18' GRAY WOOD



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EXHIBIT 9-A

TYPICAL INTERCHANGE - LEVEL 2 DESIGN OPTION, PLAN RENDERING





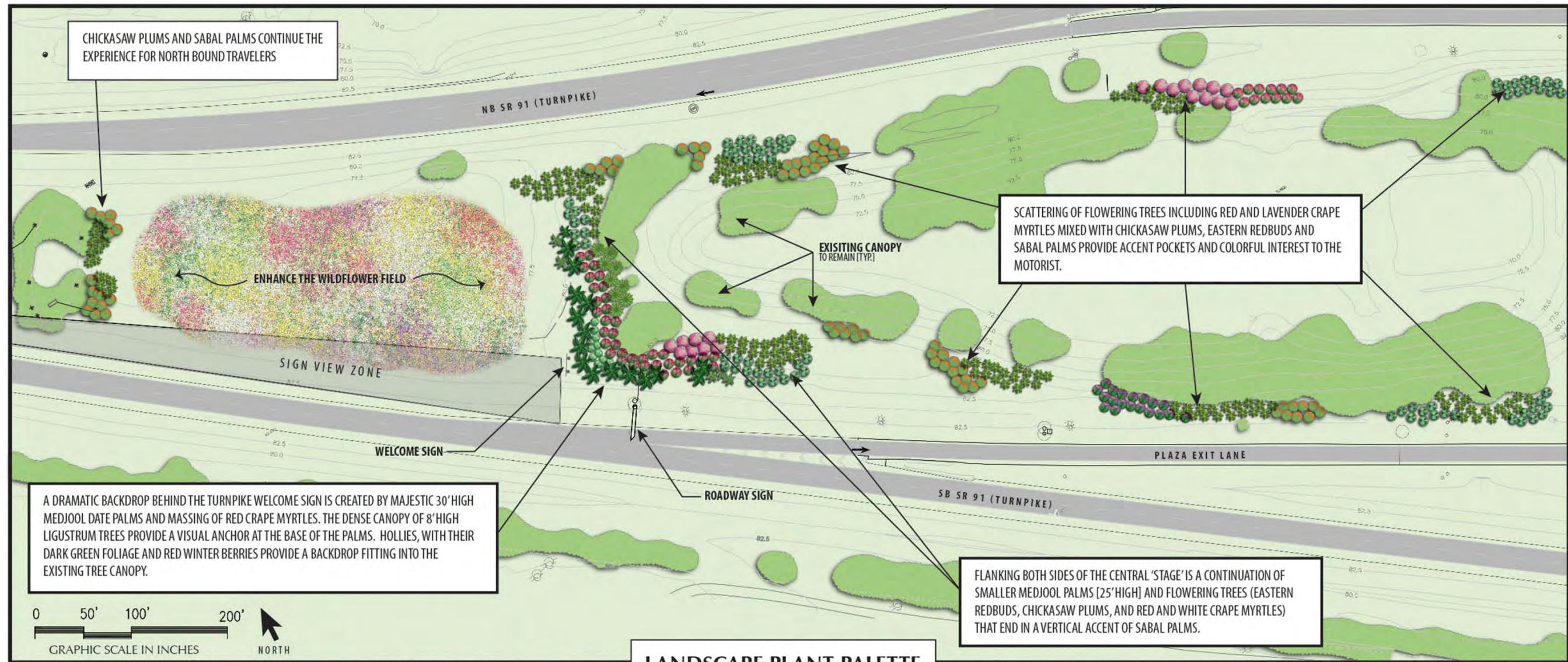
TYPICAL INTERCHANGE - LEVEL 2 DESIGN OPTION, ELEVATION RENDERING



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*EXHIBIT 9-B*





### LANDSCAPE PLANT PALETTE

\*HEIGHTS SHOWN ARE AT INSTALLATION



CHICKASAW PLUM  
8-10' HEIGHT



EASTERN REDBUD  
10-12' HEIGHT



EAST PALATKA HOLLY  
14' HEIGHT



JAPANESE PRIVET  
7-8' HEIGHT



WHITE CRAPE MYRTLE  
12-14' HEIGHT



LAVENDER CRAPE MYRTLE  
12-14' HEIGHT



RED CRAPE MYRTLE  
12-14' HEIGHT



SABAL PALM  
16-28' CLEAR TRUNK



MEDJOL DATE PALM  
24'/18' CLEAR TRUNK

### DESIGN INTENT

STRATEGIC PLACEMENT OF A WELCOME SIGN COUPLED WITH MASSING OF ACCENT PLANTINGS AT THE OKAHUMPKA SERVICE PLAZA PROVIDES A DRAMATIC VISUAL STATEMENT FOR TRAVELERS ENTERING THE FLORIDA'S TURNPIKE. THE MIXTURE OF MAJESTIC PALMS, FLOWERING AND EVERGREEN TREES ARE INTENDED TO PROVIDE INTEREST AND YEAR-ROUND SEASONAL COLOR.



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EXHIBIT 10-A

OKAHUMPKA WELCOME SIGN - LANDSCAPE PLAN





**SOUTH BOUND TRAFFIC VIEW TO THE WELCOME GATEWAY SIGN**

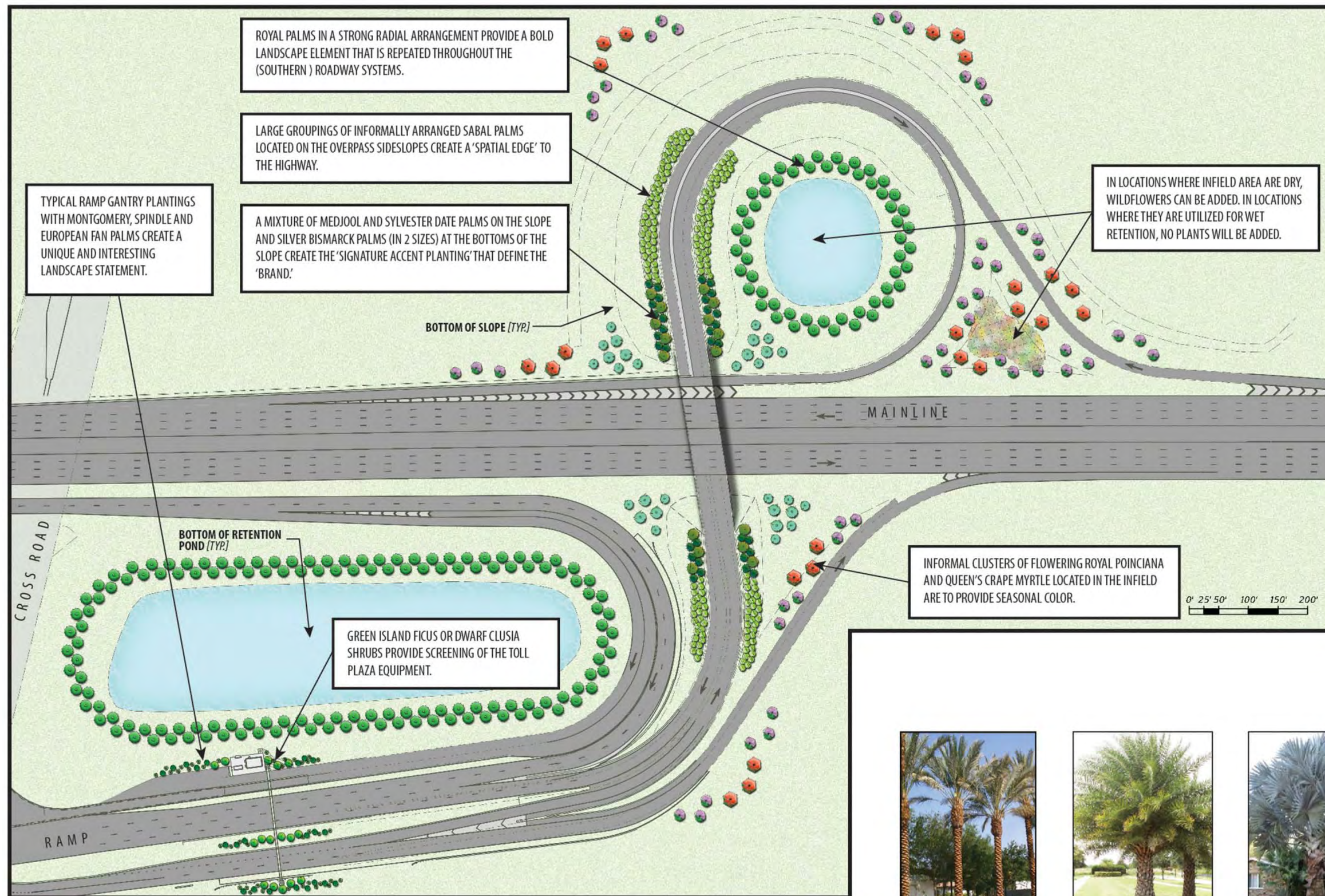
OKAHUMPKA WELCOME SIGN - ELEVATION PLAN



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*EXHIBIT 10-B*





# SUGGESTED LANDSCAPE PLANT PALETTE \*HEIGHTS SHOWN ARE AT INSTALLATION



QUEEN'S CRAPE  
MYRTLE  
14' HEIGHT



ROYAL POINCIANA  
14' HEIGHT



SABAL PALM  
10'/14'/20' CLEAR  
TRUNK



MEDJOL DATE PALM  
10'-13' CLEAR  
TRUNK



SYLVESTER DATE PALM  
8'-10' CLEAR TRUNK



SILVER BISMARCK  
PALM  
10'/14' HEIGHT



ROYAL PALM  
14'-18' GRAY  
WOOD



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EXHIBIT 11-A

TYPICAL TRUMPET INTERCHANGE - LEVEL 3 DESIGN OPTION, PLAN RENDERING





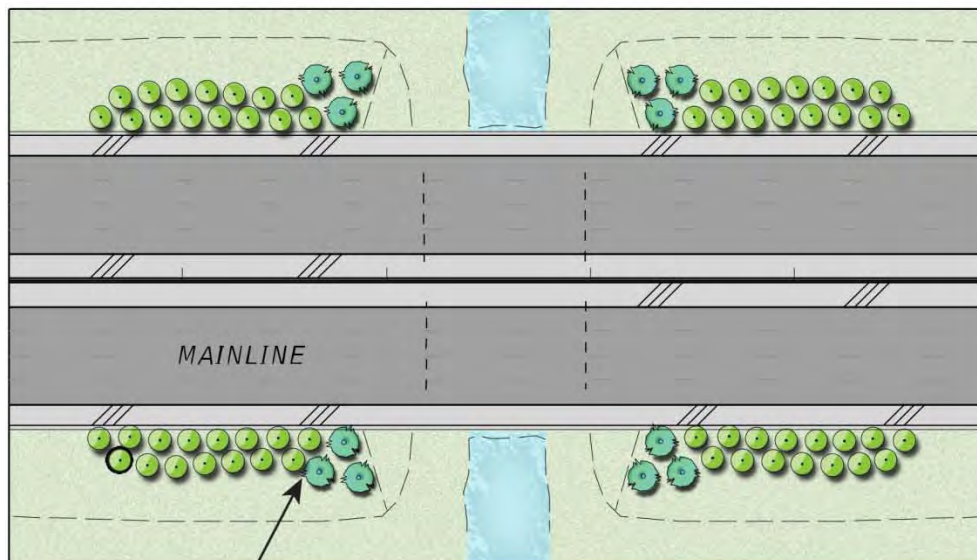
TYPICAL TRUMPET INTERCHANGE - LEVEL 3 DESIGN OPTION, ELEVATION RENDERING



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EXHIBIT 11-B





PLAN VIEW

SABAL PALMS AND SILVER BISMARCK PALMS TO ACCENT THE BRIDGE AND REINFORCE THE 'BRAND'.



SILVER BISMARCK  
PALM  
10'/14' HEIGHT



SABAL PALM  
10'/14'/20' CLEAR  
TRUNK



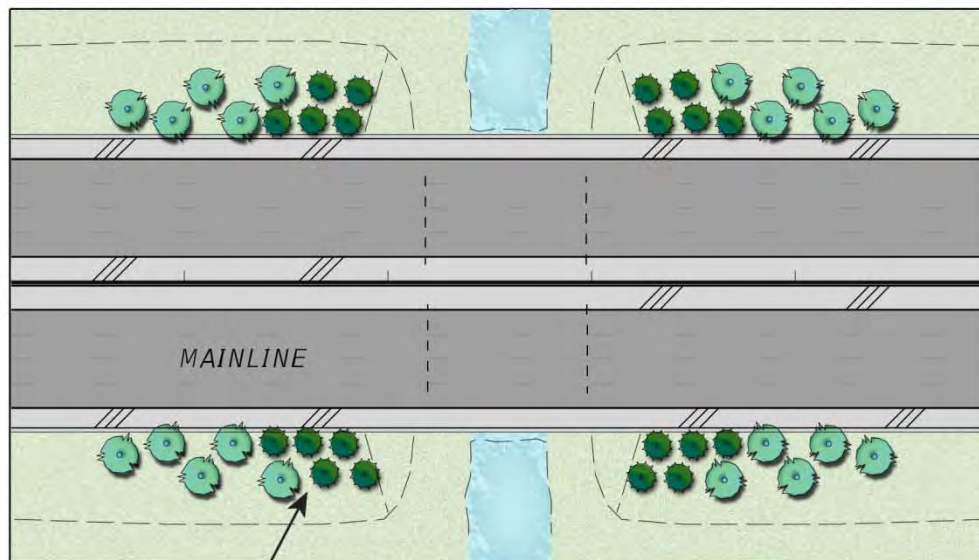
TYPICAL OVERPASS- LEVEL 1



# TYPICAL OVERPASS - LEVEL 1 DESIGN OPTION EXHIBIT 12-A PLAN & ELEVATION RENDERING

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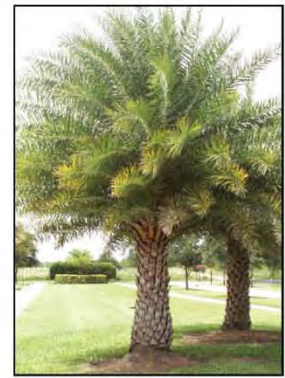


PLAN VIEW

SYLVESTER DATE PALMS AND SILVER BISMARCK PALMS TO ACCENT THE BRIDGE AND REINFORCE THE 'BRAND'.



 **SILVER BISMARCK PALM**  
10'/14' HEIGHT



 **SYLVESTER DATE PALM**  
8'-10' CLEAR TRUNK



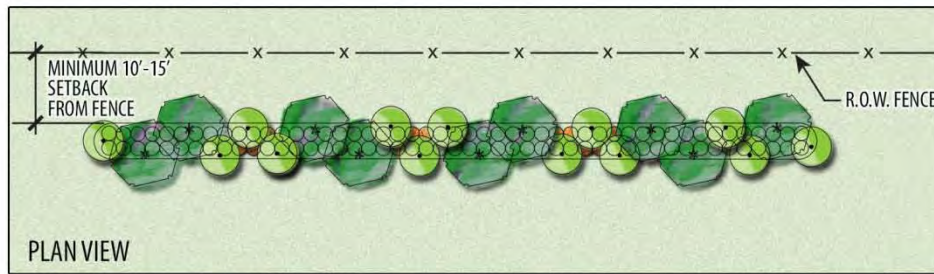
TYPICAL OVERPASS- LEVEL 3



TYPICAL OVERPASS - LEVEL 3 DESIGN OPTION EXHIBIT 12-B  
PLAN & ELEVATION RENDERING

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**GREEN BUTTONWOOD**  
SIZE: 6'X5'



**SABAL PALM**  
10'/14'/20' CLEAR TRUNK



**DWARF FIREBUSH**  
SIZE: 2'X2'



**TYPICAL BUFFER - TREES, PALMS & UNDERSTORY** EXHIBIT 13  
DESIGN OPTION, PLAN & ELEVATION RENDERING

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# EXHIBIT 14: MASTER PLANT LIST AND SIZES – NORTH REGION

DESCRIPTION (Botanical - Common Name)	MINIMUM SIZE and recommended SPACING (as applicable)
<b>SLOPE STABILIZING SHRUBS</b>	
Serenoa repens 'Cinerea' - Silver Saw Palmetto	#7 GAL, 2.5' h x 2.5' s
<b>SCREENING PLANTS</b>	
Forestiera segregata - Florida Privet	2' h x 2' s, 2.5' OC
Hamelia nodosa - Dwarf Firebush	2' h x 2' s, 3' OC
Illicium floridanum - Florida Anise	#7 GAL, 3' h x 3' s, full
Ilex opaca - American Holly	2' h x 2' s, 2.5' OC
Ilex vomitoria - Yaupon Holly	#7 GAL, 3' h x 3' s, full
Juniperus virginiana silicicola - Southern Red Cedar	12' h x 6' s
Myrica cerifera - Wax Myrtle	#25/#30 GAL, 6'-7' OA
Magnolia grandiflora - Southern Magnolia	12' h x 5' s, 2.5" CAL, full canopy
Pinus elliotii - Slash Pine	12'-14' h, 2.5" CAL
Pinus palustris - Longleaf Pine	12'-14' h, 2.5" CAL
Podocarpus macr. - Podocarpus	6-7' h, full
Sabal palmetto - Sabal Palmetto	10-28' CT, STGG, booted
Spartina bakeri - Sand Cord Grass	2' h x 1.5' s, 3' OC
Viburnum odoratissimum - Sweet Viburnum	2' h x 2' s, 2.5' OC
Viburnum Obovatum - Black Haw	2' h x 2' s, 2.5' OC
Podocarpus macr. 'Maki' - Podocarpus	12' h x 5' s, 3" CAL
<b>CANOPY TREES</b>	
Acer rubrum - Red Maple	12' h x 5' s, 2.5" CAL, full
Liquidambar styraciflua - Sweetgum	14' h x 6' s, 3" CAL, full, 5' CT
Pinus elliotii - Slash Pine	#7 GAL, 5'-6' OA
Pinus elliotii - Slash Pine	12-14' OA, 2.5" CAL
Platanus occidentalis - American Sycamore	14' h x 6' s, 3" CAL, full, 5' CT
Quercus virginiana - Live Oak	14' h x 6' s, 3" CAL, full, 7' CT
Quercus virginiana - Live Oak	18' h x 8' s, 4" CAL, full, 8' CT
Taxodium Distichum - Bald Cypress	#7 GAL, 5'-6' OA
Taxodium Distichum - Bald Cypress	12-14' h, 2.5" CAL
Ulmus alata - Winged Elm	14' h x 6' s, 3" CAL, full, 5' CT

## Legend:

h = height  
s = spread  
OC = on center spacing  
OA = overall height  
CAL = caliper  
CT = clear trunk height  
MAX = maximum  
MIN = minimum  
GW = green wood height  
STGG = stagger heights



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## MASTER PLANT LIST AND SIZES – NORTH REGION (continued)

DESCRIPTION (Botanical - Common Name)	MINIMUM SIZE and recommended SPACING (as applicable)
<b>FLOWERING/ACCENT TREES</b>	
Ilex vomitoria 'pendula' - Weeping Yaupon Holly	10' h x 4' s, multi trunk
Juniperus virginiana silicicola - Southern Red Cedar	10' h x 4' s
Lagerstroemia indica 'spp' - Crape Myrtle	12' h x 4' s, multi trunk, limb up to 5'
Magnolia grandiflora - Southern Magnolia	12' h x 5' s, 2.5" CAL, full canopy
Magnolia grandiflora 'Little Gem' - Little Gem Magnolia	12' h x 5' s, 3" CAL
Nerium oleander - Oleander	6' h x 4' s
<b>LARGE/MEDIUM PALMS</b>	
Bismarckia nobilis 'silver select' - Silver Bismarck Palm	10'-14' OA
Livistonia decipiens - Ribbon Palm	8' -10' CT
Phoenix dactylifera 'Medjool' - Medjool Date Palm	10' GW x 13' CT
Phoenix sylvestris - Wild Date Palm/Sylvester	8' -10' CT
Phoenix 'HYBRIDS' - Hybrid Date Palm	multi-stem species
Sabal causiarum - Puerto Rican Hat Palm	6' - 8' CT
Sabal palmetto - Sabal Palmetto	10'-28' CT, 4' STGG between adjacent palms min., booted/slick mix
Sabal palmetto - Sabal Palmetto - CURVED	10'-20' CT, 4' STGG between adjacent palms min., slick, curved trunk
Washingtonia filifera - Desert Fan Palm	14' - 24' CT, STGG
<b>SMALL PALMS</b>	
Acoelorrhaphe wrightii - Paurotis Palm	16' h x 10' s, 10 CANES MIN, CLEAN BASE
Butia capitata - Pindo Palm	6' CT
Chamaerops humilis - European Fan Palm	5'-6' OA, multi trunk

### Legend:

h = height  
 s = spread  
 OC = on center spacing  
 OA = overall height  
 CAL = caliper  
 CT = clear trunk height  
 MAX = maximum  
 MIN = minimum  
 GW = green wood height  
 STGG = stagger heights



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# EXHIBIT 15: MASTER PLANT LIST AND SIZES – SOUTH REGION

DESCRIPTION (Botanical - Common Name)	MINIMUM SIZE and recommended SPACING (as applicable)
<b>SLOPE STABILIZING SHRUBS</b>	
Serenoa repens 'Cinerea' - Silver Saw Palmetto	#7 GAL, 2.5' h x 2.5' s
<b>SCREENING PLANTS</b>	
Annona glabra - Pond Apple	#15/#25 GAL, 6' h x 5' s
Conocarpus erectus - Green Buttonwood	#10/#15 GAL, 6' h x 5' s, 6' OC
Conocarpus erectus var. sericeus - Silver Buttonwood	#10/#15 GAL, 6' h x 5' s, 6' OC
Chrysobalanus icaco 'Red Tip' - Red Tip Cocoplum	2' h x 2' s, 4' OC
Clusia guttifera - Small Leaf Clusia Tree Form	8' h x 6' s, multi-trunk tree form
Clusia guttifera - Small Leaf Clusia	#7 GAL, 3' h x 2' s, 4' OC, shrub form
Clusia guttifera - Small Leaf Clusia	#10/#15 GAL, 5' h x 4' s, full, 6' OC
Clusia guttifera 'Nana' - Dwarf Clusia	2' h x 2' s, 3' OC
Coccoloba uvifera - Sea Grape	#7 GAL, 3' h x 3' s, 4' OC
Eugenia foetida - Spanish Stopper	#7 GAL, 5' h x 2.5' s, 4' OC
Eugenia foetida - Spanish Stopper	2.5' h x 2' s, 4' OC
Ficus macrophylla 'Green Island' - Green Island Ficus	2' h x 2' s, 3' OC
Ilex vomitoria 'Stokes Dwarf' - Dwarf Holly	2' h x 2' s, 3' OC
Juniperus virginiana silicicola - Southern Red Cedar	12' h x 6' s
Myrcianthes fragrans - Simpson's Stopper	8'-10' OA, 3' CT, multi-trunk tree form
Myrcianthes fragrans - Simpson's Stopper	#7 GAL, 3' h x 4' s, 4' OC, shrub form
Myrica cerifera - Wax Myrtle	#25/#30 GAL, 6'-7' OA
Pinus elliotii densa - So. Florida Slash Pine	8'-12' h, 3-3.5" CAL
Pinus elliotii densa - So. Florida Slash Pine	12' h, 3" CAL
Sabal palmetto - Sabal Palmetto	10-28' CT, STGG, booted
Spartina bakeri - Sand Cord Grass	2' h x 1.5' s, 3' OC

Legend:  
 h = height  
 s = spread  
 OC = on center spacing  
 OA = overall height  
 CAL = caliper  
 CT = clear trunk height  
 MAX = maximum  
 MIN = minimum  
 GW = green wood height  
 STGG = stagger heights



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## MASTER PLANT LIST AND SIZES – SOUTH REGION (continued)

DESCRIPTION (Botanical - Common Name)	MINIMUM SIZE and recommended SPACING (as applicable)
<b>CANOPY TREES</b>	
Acer rubrum - Red Maple	12' h x 5' s, 2.5" CAL, full
Bursera simaruba - Gumbo Limbo	14' h x 6' s, 4" CAL, full
Conocarpus erectus - Green Buttonwood	12' h x 5' s
Lysiloma latisiliqua - Wild Tamarind	10'-12' OA, full canopy
Quercus virginiana - Live Oak	14' h x 6' s, 3" CAL, full, 5' CT
<b>FLOWERING/ACCENT TREES</b>	
Bombax ceiba - Red Silk-cotton Tree	12'-14' h x 5' s
Conocarpus erectus var. sericeus - Silver Buttonwood	10' h x 6' s, multi trunk
Cassia fistula - Golden Shower Tree	8' -10' OA
Cassia javanica - Apple Blossom Shower Tree	10'-12' OA
Delonix regia - Royal Poinciana	14' h x 7' s, 4.5" CAL
Chorisia speciosa - Floss Silk Tree	12' h x 5' s, 2.5" CAL, full
Jatropha - Jatropha Bush	5' h x 3.5' s, bush form
Juniperus virginiana silicicola - Southern Red Cedar	12' h x 6' s
Lagerstroemia speciosa - Queen's Crape Myrtle	14' h x 6' s, limb up to 5', 3" CAL
Lagerstroemia indica - Crape Myrtle	12' h x 4' s, limb up to 5', multi trunk
Lysiloma sabicu - Sabicu	#25 GAL, 8'-10' OA, 2.5" CAL
Peltophorum dubium - Yellow Poinciana	12' h x 6' s, 2.5" CAL
Simarouba glauca - Paradise Tree	#25 GAL, 8'-10' OA
Tabebuia caraiba - Silver Trumpet Tree	12' h x 6' s, 4" CAL
Swietenia mahoganii - Mahogany	14' h x 6' s, 3" CAL, full, 5' CT

### Legend:

h = height  
 s = spread  
 OC = on center spacing  
 OA = overall height  
 CAL = caliper  
 CT = clear trunk height  
 MAX = maximum  
 MIN = minimum  
 GW = green wood height  
 STGG = stagger heights



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## MASTER PLANT LIST AND SIZES – SOUTH REGION (continued)

DESCRIPTION (Botanical - Common Name)	MINIMUM SIZE and recommended SPACING (as applicable)
<b>LARGE/MEDIUM PALMS</b>	
Bismarckia nobilis 'Silver' - Silver Bismarck Palm	10'-14' OA
Bismarckia nobilis 'Silver' - Silver Bismarck Palm	14' OA
Latania lontaroides - Latan Palm	10' OA
Livistonia decora - Ribbon Palm	8'-10' CT
Phoenix dactylifera 'Medjool' - Medjool Date Palm	13' CT
Phoenix dactylifera 'Medjool' - Medjool Date Palm	10' CT - 14' CT, STGG
Phoenix sylvestris - Wild Date Palm/Sylvester	8'-10' CT
Acoelorrhapee wrightii - Paurotis Palm	10'x 6', 10 canes min., clean base
Roystonea regia - Florida Royal Palm	10'-20' GW, STGG
Roystonea regia - Florida Royal Palm	20' GW, STGG
Sabal palmetto - Sabal Palmetto	10-28' CT, 4' STGG between adjacent palms min., booted/slick mix
Sabal palmetto - Sabal Palmetto - CURVED TRUNKS	10-20' CT, 4' STGG between adjacent palms min., slick, curved trunk
Veitchia montgomeryana - Montgomery Palm	12-14' CT, single stem
Veitchia montgomeryana - Montgomery Palm	12-14' CT, double stem
Veitchia montgomeryana - Montgomery Palm	12-14' CT, triple stem
<b>SMALL PALMS</b>	
Butia capitata - Pindo Palm	6' CT, 14' OA
Chamaerops humilis - European Fan Palm	5'-6' OA, multi trunk
Coccothrinax argentata - Florida Silver Palm	6' OA
Dypsis lutescens - Areca Palm	#10/#15 GAL, 7 h 'x 5' s, full, 6' OC
Hyophorbe lagenicaulis - Bottle Palm	6'-8' OA
Hyophorbe verschaffeltii - Spindle Palm	6'-8' OA
Phoenix roebelenii - Pygmy Date Palm	6' OA, multi trunk
Ptychosperma elegans - Solitaire Palm	MIN 10' CT, MAX 4" CAL
Thrinax radiata - Thatch Palm	6' OA, multi trunk

Legend:  
h = height  
s = spread  
OC = on center spacing  
OA = overall height  
CAL = caliper  
CT = clear trunk height  
MAX = maximum  
MIN = minimum  
GW = green wood height  
STGG = stagger heights



**LANDSCAPE INSTALLATION.  
(REV 10-2-12)**

SECTION 580 (Pages 766 – 768) is deleted and the following substituted:

**SECTION 580  
LANDSCAPE INSTALLATION AND ESTABLISHMENT**

**580-1 Description.**

Construct landscape consisting of installation, maintenance, and establishment of all landscape materials, including a minimum one year (365 days) establishment period after final acceptance of the Contract in accordance with 5-11.

**580-2 Responsible Party.**

Prior to any landscape material being delivered to or planted on the project, the Contractor shall designate in writing to the Engineer a Responsible Party to install and accept responsibility for maintaining the entire landscaped area, within the project limits, throughout the life of the project and during the one year establishment period. Failure to timely designate the Responsible Party will result in the Contractor being the Responsible Party.

All personnel performing services are under the sole responsibility and supervision of the Responsible Party as defined in this Section.

When the Responsible Party is a subcontractor, the subcontractor must be pre-qualified with the Department in the work class of landscaping. The Contractor and proposed subcontractor must execute and deliver to the Engineer a form, provided by the Department, prior to or concurrent with the Contractor's request to sublet any landscape work, stipulating that the subcontractor assumes all responsibility as the Responsible Party for the entire landscape area during the contract time and throughout the one year establishment period.

Upon final acceptance of the Contract in accordance with 5-11, the Responsible Party's responsibility for maintenance of all the work or facilities within the landscape area limits of the Contract will terminate in accordance with 5-11; with the sole exception being the obligations set forth in this Section for landscape establishment.

**580-3 Statewide Disputes Review Board.**

A Statewide Disputes Review Board will be convened to resolve any and all disputes that may arise involving administration and enforcement of the establishment portion of the Specification. The Responsible Party and the Department acknowledge that use of the Statewide Disputes Review Board is required, and the determinations of the Statewide Disputes Review Board for disputes heard by this Board will be binding on both the Responsible Party and the Department, with no right of appeal by either party.

**580-4 Materials.**

**580-4.1 Plants:**

**580-4.1.1 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, plants must be the specified size and Florida No. 1 grade at the time of delivery to the site and maintained at a minimum grade of Florida No. 1 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, certify to the Engineer that all plant materials have been purchased from Florida commercial nursery 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.

**580-4.1.2 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.

**580-4.2 Water:** Meet the requirements of Section 983.

**580-4.3 Mulching:** Use of Cypress Mulch is prohibited.

#### **580-5 Installation Requirements.**

**580-5.1 Delivery:** All materials must be available for inspection before installation and will be subject to approval or rejection.

**580-5.2 Layout:** Mark proposed mowing limits, plant beds, and individual locations of trees and palms as shown in the Contract Documents for Engineer's review, prior to excavation or planting. Make no changes to the layout, materials or any variations of plant materials from the Contract Documents without the Engineer's written approval.

**580-5.3 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.

**580-5.4 Responsibility for Condition of the Plants and Landscape Areas:** Begin maintenance of all plants immediately after each planting.

At all times throughout the duration of the project construction period and establishment period:

Keep all plants undamaged, watered, fertilized, mulched, pruned, and staked and guyed as necessary to assure specified minimum grade of Florida No. 1.

Keep the individual plant locations and planting beds free of litter and undesirable vegetation.

Keep landscape bed lines correctly located and edged, and mulch groomed and replenished.

#### **580-6 Inspection and Reporting Requirements.**

**580-6.1 Construction Period:** During the landscape installation and thereafter until final acceptance, the Responsible Party must certify monthly on a form provided by the Department that the landscape project is being installed and maintained per Contract Documents.

**580-6.2 Establishment Period:** After final acceptance, during the establishment period, a Registered Landscape Architect (RLA) acting as the Responsible Party's Landscape Quality Control representative will inspect the landscape monthly and submit reports as described herein.



Inspect all plants and landscape areas and submit findings in report form to the Engineer. Information in the inspection report 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 grade
- Condition of plant beds and adjoining areas (including mulch, turf, edges, bedlines, weeds, and staking and guying), if applicable
- Condition and operation of the irrigation system, if applicable
- Responsible Party's response and proposed action
- Other comments
- Signature and seal of Responsible Party's Landscape Quality Control representative

Submit the completed inspection report to the Engineer within five 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 calendar days of submission of the inspection report. Periodic, random inspections may be performed by the Engineer to ensure the quality of the plants and the entire landscape area, and correctness of the landscape inspection report. Any unresolved disputes related to the performance of the landscape will be referred to the Statewide Disputes Review Board.

#### **580-7 Disposal of Surplus Materials and Debris.**

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

#### **580-8 Plant Establishment Period and Remedial Work.**

The establishment period is one year (365 days) after final acceptance in accordance with 5-11.

For the duration of the entire establishment period:

Take responsibility for the proper maintenance and condition of all plants and other landscape materials and areas.

Provide water and, when included in the Contract Documents, operate and maintain all components of any irrigation system.

Notify the Engineer and replace, at no cost to the Department, any plants that fall below specified minimum grade and correct any other deficiencies within ten days of submission of the required monthly inspection report. Use replacement plants of the same species, and planting medium as the plant being replaced and as specified in the Contract Documents. Replacement plant size must match the size of the adjacent grown-in plants of the same species and variety which may be larger than the initially installed size.

Continue any mowing of the landscape areas specified in the Contract Documents throughout the establishment period.

Perform all necessary remedial work described in the monthly inspection report to the





satisfaction of the Engineer at no cost to the Department.

Any disputes regarding the adequacy of the remedial work will be resolved by the Statewide Disputes Review Board. Approval of remedial work does not relieve the Responsible Party from continuing responsibility under the provisions of this Specification.

Remove staking and guying from all plants except for those that have not reached establishment..

At the end of the establishment period, the Engineer will release the Responsible Party from further remedial work and responsibility provided all plants meet the requirements of 580-5.4 and all previous remedial work, if any, has been completed to the satisfaction of the Engineer.

**580-9 Responsible Party's Failure to Perform.**

Should the Responsible Party fail to timely and satisfactorily perform any remedial work associated with landscape establishment, the Department will suspend, revoke or deny the Responsible Party's certificate of qualification under the terms of Section 337.16(d)(2), Florida Statutes, for a minimum of 6 months or until the remedial work has been satisfactorily performed whichever is longer. Should the Responsible Party choose to challenge the Department's notification of intent for suspension, revocation or denial of qualification and the Department's action is upheld, the Responsible Party will have its qualification suspended for an additional minimum of 6 months.

The remedial work is not an obligation of the Contractor's bond required by Section 337.18, Florida Statutes.

**580-10 Method of Measurement.**

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

**580-11 Basis of Payment.**

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

