

RESOLUTION NO. 14-1170

**A RESOLUTION OF THE TOWN COUNCIL OF THE TOWN OF MIAMI LAKES, FLORIDA ADOPTING TOWN-WIDE BEAUTIFICATION MASTER PLAN; AUTHORIZING THE TOWN MANAGER TO BEGIN THE SELECTION PROCESS, WHICH INCLUDES BUT IS NOT LIMITED TO THE ISSUANCE OF REQUESTS FOR PROPOSALS, FOR ACCESS MANAGEMENT AND LANDSCAPE IMPROVEMENT SERVICES; AND PROVIDING FOR AN EFFECTIVE DATE**

**WHEREAS**, in Resolution No. 12-1028 the Town approved a Work Order Proposal from one of the Town's contracted architectural firms, Bermello Ajamil and Partners, Inc., for a Town-wide Beautification Master Plan;

**WHEREAS**, Resolution No. 12-1028 authorized the Town Manager to take all steps necessary to implement the terms and conditions of the Work Order Proposal from Bermello Ajamil and Partners, Inc. for a Town-wide Beautification Master Plan which has been completed and submitted herewith as Exhibit "A;"

**WHEREAS**, the purpose of the Town-wide Beautification Master Plan is to serve as a vision and guidance as to what and how the physical environment within the Town's right of ways and parks should be articulated;

**WHEREAS**, the Town-wide Beautification Master Plan addresses issues including median planting improvements, pocket/neighborhood park beautification, gateways, and other Right-of-Way improvements typical of most street scape beautification projects;

**WHEREAS**, Town staff has worked with the architectural firm, Bermello Ajamil and Partners, Inc., to inventory the Town's green spaces and roadways, create concepts to beautify these areas, and develop a document that is in line with the community's vision for what the Town should look like in the future;

**WHEREAS**, the process culminated with a citizen outreach effort which collected over 110 resident surveys that assisted with finalizing the selection of key concept areas in the Town-wide Beautification Master Plan;

**WHEREAS**, the Town Council seeks to adopt the Town-wide Beautification Master Plan with concepts for the Gateways, Intersections, and Roadway locations based on resident

feedback surveys and professional recommendations from the Town's architectural firm and staff;

**WHEREAS**, the Town-wide Beautification Master Plan is actionable and can be fully implemented over a five to ten year span;

**WHEREAS**, the Town has budgeted \$300,000 this year to begin plan implementation beginning with the development of three new gateways and roadway landscape improvements;

**WHEREAS**, for the initial implementation phase, the design will be completed and brought back to the Council for approval with associated construction, landscape, and maintenance costs;

**WHEREAS**, after review and endorsement by Staff, the Staff respectfully recommends that the Town Council of the Town of Miami Lakes, Florida adopt the Town-wide Beautification Master Plan as presented in Exhibit "A" by Bermello Ajamil and Partners, Inc. and authorize the Town Manager to begin the selection process, which includes but is not limited to the issuance of Requests for Proposals, for Access Management and Landscape Improvement Services consistent with the Master Plan.

**NOW, THEREFORE, BE IT RESOLVED BY THE TOWN COUNCIL FOR THE TOWN OF MIAMI LAKES, FLORIDA, AS FOLLOWS:**

**Section 1. Recitals.** The foregoing recitals are true and correct and are incorporated herein by reference.

**Section 2. Adopting Town-Wide Beautification Master Plan.** The Town Council of the Town of Miami Lakes, Florida hereby adopts the Miami Lakes Town-Wide Beautification Master Plan and authorizes the Town Manager to begin the selection process, which includes but is not limited to the issuance of Requests for Proposals, for Access Management and Landscape Improvement services consistent with the Master Plan.

**Section 3. Effective Date.** This Resolution shall be effective immediately upon adoption.

Passed and adopted this 14<sup>th</sup> day of January, 2014.

The foregoing resolution was offered by C. Mestre who moved its adoption. The motion was seconded by Tony Lama and upon being put to a vote, the vote was as follows:

Mayor Wayne Slaton	<u>Yes</u>
Vice Mayor Manny Cid	<u>Yes</u>
Councilmember Tim Daubert	<u>Yes</u>
Councilmember Tony Lama	<u>Yes</u>
Councilmember Ceasar Mestre	<u>Yes</u>
Councilmember Frank Mingo	<u>Yes</u>
Councilmember Nelson Rodriguez	<u>Yes</u>

Wayne Slaton  
Wayne Slaton  
MAYOR

Attest:

M. Tejada  
Marjorie Tejada  
TOWN CLERK

Approved as to form and legal sufficiency:

Raul Gastesi  
Raul Gastesi  
Gastesi & Associates, P.A.  
TOWN ATTORNEY



# BEAUTIFICATION MASTER PLAN

TOWN OF MIAMI LAKES, FLORIDA

## MASTER PLAN REPORT

JANUARY, 2014

## INTRODUCTION

The Town of Miami Lakes is known throughout South Florida for its extensive tree lined streets, shaded neighborhood parks, open spaces and unique Town Center. The Town is committed to become the most uniformly beautiful municipality in the region, and they intend to accomplish this through a number of ambitious initiatives, including this Beautification Master Plan. The purpose of the Beautification Master Plan is to provide a vision and guide, on how to create memorable landscape



*Typical tree canopy over Town roadways*

aesthetics at Gateways, within right-of-ways, and within the Town's many parks. In order to develop the Beautification Master Plan, the Town of Miami Lakes contracted Bermello Ajamil & Partners, Inc. to carry out an evaluation of present Town roadway and park landscape issues and provide a design palette to address different conditions within the Town's rights-of-way and parks.



*Recent aerial of Town - Google Earth*

Subsequent to the evaluation of the landscape conditions on major thoroughfares, Bermello Ajamil & Partners, Inc. provided a series of design options to create gateways and highlight major intersections, city parks and roadways through the use of unique landscape designs. These concepts are outlined in this report.

In the following pages we present the purpose and intent of this project, the methodology and approach, analyses carried out and the proposed improvements.

## PURPOSE AND INTENT

During the Beautification Master Plan kickoff meeting, it was expressed that the over arching primary goal of the master plan endeavor is to create an "I am in the Town of Miami Lakes, the most beautiful Town in Miami-Dade County" effect to people entering the Town.



*View of typical tree lined street with Black Olives*

Beautification priorities include landscape improvements to major roadways and major roadway intersections, with a focus on Miami Lakes Drive and Ludlam Road; landscape improvements to the Town center roadways creating a unique look; improvements to Town gateways, those with signage designation and those without; improvements to numerous cul-de-sacs and suggesting a uniform landscape treatment that will thrive without irrigation.

A major focus of the Town's future landscape improvements is the planned removal and replacement over the next 15 years of the approximately 3,600 existing Black Olive Trees. The current phase-out plan includes removing trees as they decline in health and vigor and can be replaced. Although this approach has worked in the past, the Town now desires a more holistic approach to replacing the extensive number of Black Olive street trees.

The Town stressed that any tree replacement program, including the planned removal of the Black Olive Trees, and other improvement strategies must include principles that will result in a consistent network of street trees. The Town also requested a strategy and ideas for removing some or all of the canopy trees currently under overhead utility lines and replacing them with a more "power-line friendly" (FP&L Right-Tree / Right Place) species. The Town explained that they recently completed a Town-wide inventory of the more than 17,000 trees in public right-of-ways and parks.

## **SECTION I PROJECT BACKGROUND**

### **PROJECT GOALS AND OBJECTIVES**

As stated above, the purpose of the Beautification Master Plan is to serve as a vision and guide on how to articulate landscape aesthetics throughout the Town including improvements at Gateways, within right-of-ways, and in the Town's parks.

This document shall serve as a long-term road map to be used by elected officials and Town staff to achieve beautification and aesthetic goals. Although the Master Plan does not present specific detailed project designs, it provides conceptual ideas for improvements in different situations such as roadways, intersections, gateways and parks.

### **PROJECT APPROACH**

The project approach followed a series of sequential tasks that ranged from data collection and analysis to design proposals/implementation ideas and strategies.



*Town roadway lacking tree canopy*

The project approach followed these steps:

**Existing Conditions** - Given the data provided by the Town, discussions with staff and to better understand existing conditions, site visits were conducted and photos taken of roadways and parks throughout the Town.



*Existing Gateway at NW 87th Avenue and I-75*

The Town has a well-established extensive street tree network with most roadways having complete canopy cover. However, on some major thoroughfares, there are long stretches, especially at major roadway intersections, where the established street tree pattern is weak or does not exist. Unlike the consistent street tree



*Typical neighborhood park with playground equipment*

pattern found in many areas of the Town, street right-of-ways in the southwest and northwest quadrant of Miami Lakes (west of NW 87th Avenue) have considerable right-of-way plantings that are made up of a myriad of tree and palm species.

There are seven designated gateways into the Town; three have been built and consist of “welcome” type monument signs developed as part of the Town’s branding efforts. The gateway signage, orientation and landscape are not consistent and vary greatly. Major roadway intersections are highly congested with vehicular traffic and many (as noted above) lack a notable landscape.

The Town has a variety of park types including active recreation facilities; large passive parks; and a variety of neighborhood parks and passive green spaces.

The site furniture and landscape varies greatly from park to park and is not of a consistent palette.

**Kick-Off-Meeting** - The B&A Team met with Town staff to review project goals and objectives and available data including base maps and other information. The Kick-Off-Meeting evaluated project goals and objectives with Town staff.

**Data Collection Phase** - The B&A Team carried out several site visits to gather information on existing tree canopy, existing vegetation, overall ongoing maintenance and the condition of the Town's park and streetscape furniture. The B&A team developed a photographic inventory of the areas visited with specific emphasis on key intersections, roadways and park areas.

**Evaluation of Existing Conditions (Inventory) and Analysis** - Based on the information gathered, the B&A Team evaluated the existing conditions data in order to identify issues and opportunities present in the areas studied. The design team drove, photographed and evaluated the following major Town roadway corridors with special emphasis on landscape infrastructure, tree cover, tree species, and appearance of maintenance issues; Miami Lakes Drive; Ludlam Road; NW 82nd Avenue; NW 79th Avenue; NW 60th Avenue; NW 87th Avenue; NW 89th Avenue; NW 92nd Avenue; NW 153rd Terrace; NW 143rd Street; and NW 146th Street.

**Definition of Issues and Opportunities** – Identification of the salient issues are outlined in this document; as well as the identification of design opportunities to address the respective issues. A series of issues were identified based on the existing conditions analysis, conversations with the Community and Leisure Services Department and the observations of B&A's personnel during site visits and evaluations. Specific design opportunities to address identified issues were also developed. The issues and opportunities address all the major elements that compose the study. Conceptual design options were subsequently developed as part of the planning and design process.

**Staff Presentation and Review** – The B&A team made a presentation to Town staff to discuss the findings and obtain their input on the work carried out.

**Conceptual Master Plan Development** – Development of a conceptual master plan for each of the study areas was identified. This was a preliminary plan to be reviewed by Town staff.

**Staff Presentation** – A final presentation to Town staff was carried out to obtain final comments and make modifications to the plans according to staff review.

**Conceptual Plan Revisions** – B&A made revisions to the plans and concepts based on Town staff comments.

**Final Master Plan** – Development of the Final Master Plan Report identifying the study process and the final recommendations.



Early aerial view of the Town illustrating the extent of undeveloped land



## HISTORICAL BACKGROUND THE 1950's - TOWN OF MIAMI LAKES TOWN PLAN

Miami Lakes is a unique community of Miami-Dade County developed in the 1950's on what was then the Graham Family ranch. It was, for its time, an Avant-garde project that viewed suburban development as the growth of a small Town with its own town center and interconnected roadway system. Regrettably, a copy of the original Master Plan document is not available. As such, it was impossible for the B&A design team to evaluate the original landscape design intent for the streetscape landscape and overall tree selection philosophy.

In order to better understand the original Miami Lakes Master Plan, a conference call with Carol Wyllie-Graham was conducted. Mrs. Wyllie-Graham is one of the daughters of the Town's original developer. Mrs. Wyllie-Graham provided a verbal description of the history of the original master plan; how it was developed and the governing intent of the document.



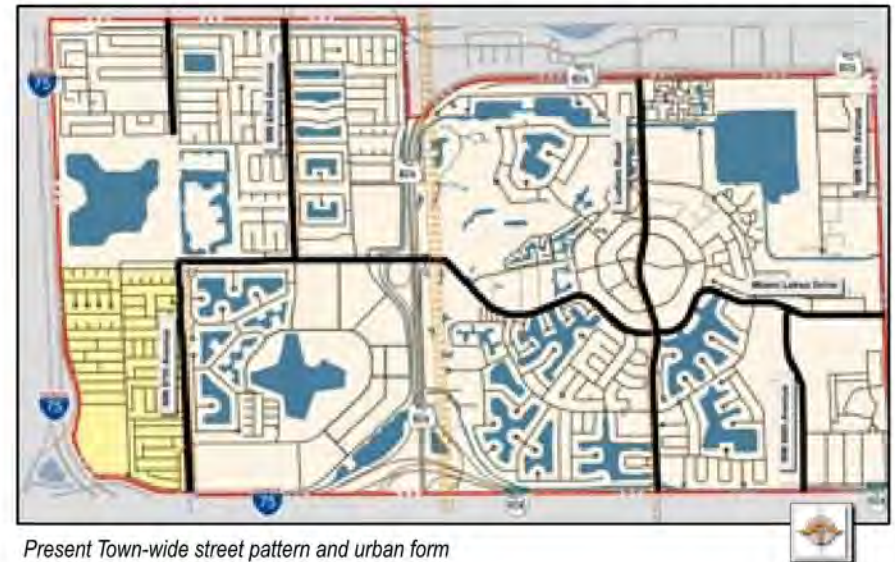
Early construction views of the Main Street shopping area

The original master plan envisioned curvilinear roads; retail establishments within one mile of all residents; lakes which could not be viewed in their entirety from a single vantage point; and distinct residential communities. Landscape in the public right-of-way was intended to be a uniform tree canopy with minimal use of shrubs and groundcover. The use of palms was not part of the original landscape vision.

At the time of the Town's initial construction, Black Olive trees were very popular and were planted extensively. Today, Black Olive trees are discouraged by Miami-Dade County as they are considered nuisance trees because of the leaf, bloom and fruit litter which leaves unattractive stains on streets, sidewalks and cars. The tree species is also susceptible to wind damage and failure.

## TOWN OF MIAMI LAKES URBAN FORM

The Town of Miami Lakes extends east to west from Red Road (NW 57th Avenue) to I-75. It is delimited by State Road 924 on the south and by NW 170th Street and State Road 826 on the north. The Town's rectangular land area is bisected



Present Town-wide street pattern and urban form



*Present view of Main Street shopping area*

into two almost equal parts by the north-south segment of SR 826, the Palmetto Expressway. Miami Lakes Drive provides a roadway spine that connects both sides of the Town. Miami Lakes Drive is the only major thoroughfare that, through an underpass, traverses the Palmetto Expressway. As to be expected, this is a heavily travelled roadway.

Within the segment of the Town east of the Palmetto Expressway to Red Road are the Miami Lakes Town Center and the development that forms part of the original 1950's Miami Lakes Master Plan. Ludlam Road is a major north-south roadway spine on this side of the Town and provides direct access to the Town's most notable landmark, its Town Center. Ludlam Road is also a major collector channeling traffic from the north and south urban areas to the east-west segment of the Palmetto Expressway (SR 826) and north to the County Line and Broward County.

The meeting of Miami Lakes Drive and Ludlam Road forms a major traffic intersection. This intersection defines four clear Town quadrants that have specific



*Aerial View of Town Center*

use sectors with their own identity and land use predominance.

The areas east of Ludlam Road to Red Road, from the Palmetto Expressway south to SR 924, are predominantly residential and are defined by Miami Lakes Drive as it travels to Red Road. It creates north and south residential sectors where NW 60th Avenue is a major roadway that connects to the urban areas to the south.

On Ludlam Road, north of Miami Lakes Drive, is the Town Center. Radiating from the intersection of Ludlam and Main Street, the Town Center roadway plan creates a series of concentric roads that define specific commercial areas. What is recognized as the actual Town Center Main Street is immediately to the west of the intersection of Ludlam Road and Main Street.

The areas west of NW 87th and 82nd Avenues were a subsequent addition to the Town of Miami Lakes and do not present the same urban pattern as the original sectors of the Town Center to the east. The area to the west of SR 826, the Palmetto

Expressway, is defined by SR 826 on the east, Gratigny Expressway on the south, NW 170th Street on the north, and I-75 on the west.

Again, Miami Lakes Drive defines a north and a south sector. NW 87th Avenue as it runs north intersects Miami Lakes Drive and divides the areas south of this east-west roadway into two distinct sectors. To the west of NW 87th Avenue to I-75 is an area composed of tightly spaced mostly single family homes. Barbara Goleman Senior High School is at the south end where Gratigny Expressway and I-75 meet.

South of Miami Lakes Drive to the Gratigny Expressway and east to SR 826, the Palmetto Expressway, are located residential and commercial uses. A major lake forms a center piece of this area and clearly delineates the residential and commercial districts. Residential uses are located immediately off NW 87th Avenue and east to the lake. Commercial uses are located in the areas adjacent to SR 826, the Palmetto Expressway, and west to the lake.

The areas north of Miami Lakes Drive to NW 170th Street are again composed of residential sectors and limited commercial areas. NW 82nd Avenue is the major north-south roadway. East of 82nd Avenue immediately north of Miami Lakes Drive are commercial uses. The Bob Graham Educational Center is just north of this area and abuts the drainage canal adjacent to SR 826, the Palmetto Expressway.

A number of gated private neighborhoods are located along NW 82nd Avenue. Areas to the west of NW 82nd Avenue are primarily single family residential neighborhoods. A major park, Royal Oaks Park, is located in this section of the Town. The rectilinear pattern of residential development west of SR 826 contrasts with the more radial development found in the original Town Center east of SR 826. While both areas are provided with substantial street trees, it is the intent of this study to provide an overall theme through the use of similar plant materials throughout the Town.

## **GATEWAY MONUMENT SIGNS**

The Town has also embarked on the design and installation of Monument signs at vehicular gateway locations. The monument signs are tall rectangular panels made



*Existing gateway at Ludlam Road and SR 826*

of concrete. Embedded in the concrete panel are images of different persons carrying out activities common to the Town; or of objects that promote different Town themes as may be appropriate to the specific area such as golf, sailing, and others. Landscaping is an integral part of the gateway monuments and is crucial to softening the monument design. Its addition, the landscaping provides not only a softening element to contrast with the verticality and straight lines of the monument sign, but also as a means to further tie the Town together through the use of a similar landscape palette. As the Town installs additional monument signs at other designated gateways, it is the intent of this study to provide the landscape palette to accomplish the objectives of unifying the Town.

## **SECTION II**

### **Issues and Opportunities, Design Recommendations and Design Palettes**

On the following pages a series of issues and opportunities are presented for the landscape intervention examples identified. These include Gateways, Major

Roadways, Neighborhood Roadways, Cul-de-sacs, Underpasses, Intersections and Parks.

Each identified issue represents a design opportunity. As such, each opportunity includes specific action(s) that the Town may undertake to address the issue identified. In some instances the proposed opportunity action can be readily undertaken with the proposed landscape designs and design palette. In other instances, further Town research, planning and design may be required.

Following are the issues and opportunities identified for each of the Town's public right-of-way design elements.

## GATEWAYS

The designated gateways announce the entrance to the Town of Miami Lakes. The Gateway design objectives are to create a memorable and aesthetically pleasing environment at the place where vehicles enter the Town and to brand the entrance to the Town. The design intent is to create gateways that are unique to the Region and special to Miami Lakes. When constructed or renovated, the Gateways should not look like those found in surrounding communities and should appear noticeably different from the rest of the roadway on which it is located; as well as different from other public right-of-way landscapes that can be found throughout the rest of the Town of Miami Lakes.

The gateways are categorized as 'major' and 'secondary'. Major gateways (NW 87th Avenue at I-75; Miami Lakes Drive & SR 826; Miami Lakes Drive and Red Road; Ludlam Road and SR 826; Ludlam Road at SR 924) are located at the principal thoroughfares into the Town. With four to six vehicular travel lanes, these roadways carry large volumes of daily traffic.

Secondary gateways (NW 60th Avenue and NW 128th Street; NW 82nd Avenue and NW 170th Street; NW 87th Avenue and NW 170th Street) are located on

streets that have lower traffic volumes with usually two vehicular travel lanes and lead into residential areas.

## GATEWAYS ISSUES AND OPPORTUNITIES

### Issue:

Desire to define gateways into the Town with landscaping and signage

### Opportunity:

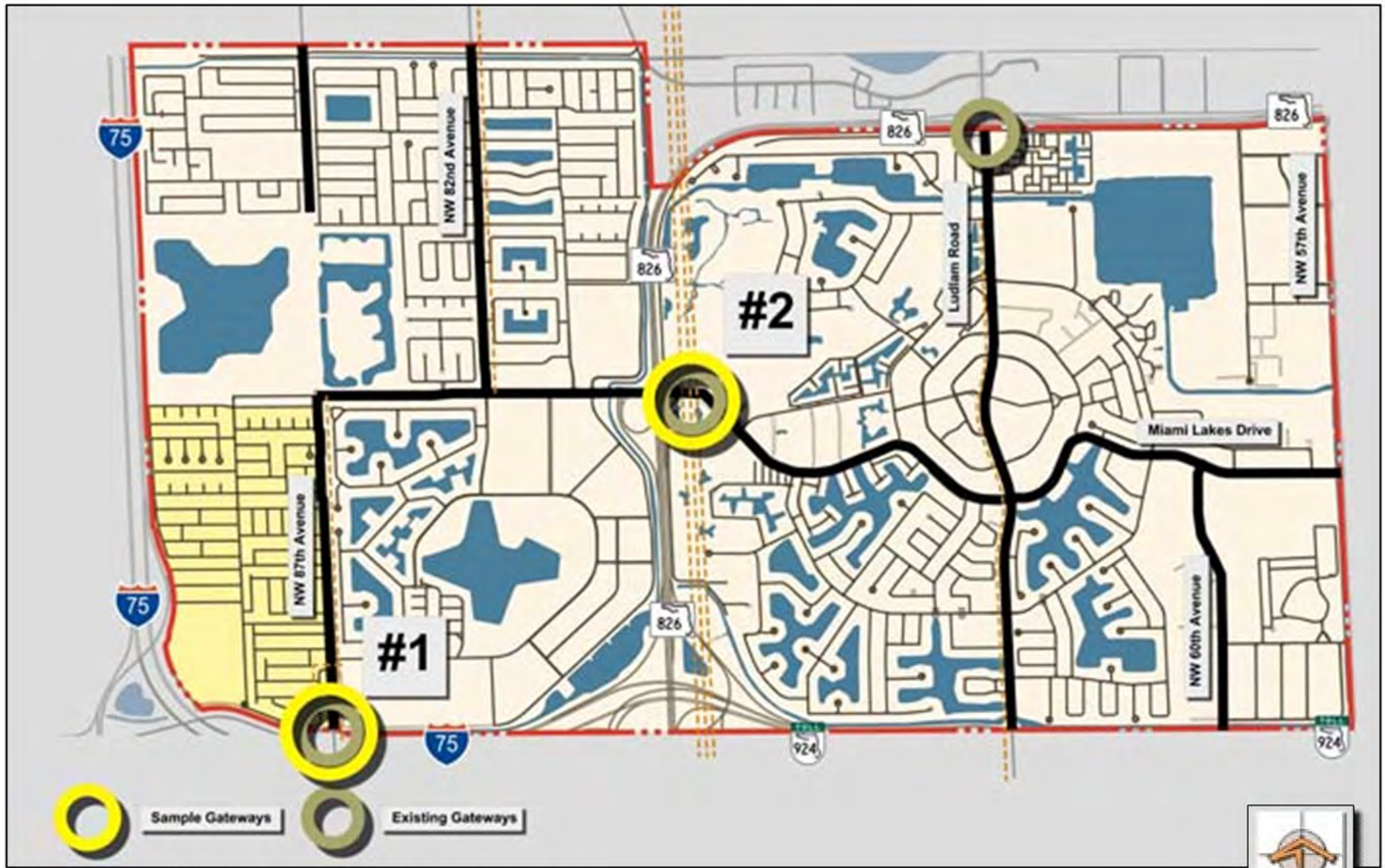
Town has established a gateway monument sign prototype (installed in three locations, shown on Gateway Map above). The new gateway signs provide an opportunity to highlight the area with special landscaping. Future gateway signs should mimic or build upon the positive aspects of the existing vernacular;



Existing View of Gateway on NW 87th Avenue at I-75

# BEAUTIFICATION MASTER PLAN

Town of Miami Lakes



Town-wide map illustrating Sample Gateway and Existing Constructed Gateway locations

**Issue:**

Need to standardize landscaping to create branding “look” and to make installation and maintenance simpler;

**Opportunity:**

Landscaping at gateways should be standardized yet unique to Miami Lakes; create a typical Town gateway landscape look;

**Issue:**

In gateway locations where medians are not feasible due to lack of roadway width, there is a need to create a landscape design that will be recognized as a gateway;

**Opportunity:**

Option to add gateway monument signage and associated typical landscape on roadway right-of-way. Opportunity to add on both sides of the road if possible.

### GATEWAY PROPOSED IMPROVEMENTS

For the selected representative projects, a series of landscape and streetscape design options were prepared and presented to the Town’s residents. The options ranged from a limited and minimal landscaping intervention to options that provided maximum landscape investment including trees or palms on all sides of the street/ intersection. Although the County may prohibit the introduction of specialty paving materials on County roadways in the Gateway locations, this was also illustrated in the improvement options.

### GATEWAY #1 - NW 87TH AVENUE AT I-75

The adjacent photo renderings illustrate the preferred landscape design option generated for the Town’s gateway located on NW 87th Avenue, north of I-75.

This preferred design option illustrates the introduction of tall, matching Sylvester Date Palms both in the center median and along the east and west sides of NW 87th Avenue. As the Sylvester Palm is available in a wide range of heights, by



*Proposed gateway with Sylvester Palms, shrubs, groundcovers and annuals*



*Proposed gateway with Sylvester Palms, shrubs, groundcovers, annuals and specialty paving*

installing 20' clear trunk specimens, there is an opportunity for an immediate visual impact when the palms are first planted. The concept also indicates the introduction of new ground covers and shrubs to compliment the proposed palm canopy. This concept will provide the Town with a defined entry design clearly contrasting the heavier shade canopy found along many of the Town's major roadways.

## **GATEWAY #2 - MIAMI LAKES DRIVE AT PALMETTO EXPRESSWAY**

Serving as one of the most heavily used gateways into the Town, this location has several conditions which must be overcome to enhance the entry experience. A multitude of roadways converging at this point from different directions, overhead utility wires and street signage create both visual clutter and limitations to plant growth as well as an irregular spacing of the Black Olive trees in the center median. These conditions all contribute to the lack of a strong, clear gateway statement. Because of the wide median at this gateway, there is a unique opportunity to



*Option 2A - Proposed gateway with Sylvester Palms, shrubs, groundcovers and annuals*



*Existing Gateway with Black Olives on Miami Lakes Drive at Palmetto Expressway*



*Option 2B - Proposed gateway with Sylvester Palms, shrubs, groundcovers, annuals and specialty paving*

include different landscape treatments. The use of specialty paving to highlight the gateway and calm vehicular traffic should be considered.

The preferred option proposes the removal of the existing Black Olive trees to be replaced with matching Sylvester Date Palms. Ground covers and flowering plants would also be provided in this option in large uniform beds which provide a stronger visual image for motorists passing the gateway. This landscape concept with the addition of the formal palms is a significant change from the present emphasis on street canopy trees within the Town's rights-of-way. Option 2B illustrates the addition of specialty paving to further highlight the gateway area. This concept aims to contrast the gateways to the street planting program and allows them to stand out as unique places in the Town;

This landscape design with the addition of palms, reduces the potential conflict with overhead power lines as the landscape matures.

## ROADWAYS

This category of streetscape is further broken down by Major Roadways where the cross section contains more than one lane in each direction, Neighborhood Roadways where the cross section consists of one lane in each direction, Cul-de-sacs and Underpasses, all identified on the following Town wide plan. The overall objective of the beautification of the roadways is to create or reinforce the canopy covered streets that is consistent with the principals which the Town was designed in the 1950's. A vertical tree-lined roadway works to narrow the visual perception of the roadway width, helping slow down traffic thus creating safer boulevards. The regular rhythm of the tree trunks offers visual stimulation and lowers vehicular travel speeds through the community as do the shade and trunk patterning created along the roadways.

## MAJOR ROADWAY ISSUES AND OPPORTUNITIES

As stated above, the primary objective on the improvement of the major roadways is to create or reinforce the canopy covered streets. In other words, there should be canopy trees in the public right-of-way whenever safely possible.

### Issue:

The presence of Black Olive trees which are a nuisance species identified by Miami-Dade County. There are approximately 3,614 Black Olive trees within the Town and present an extensive mature canopy on existing roadways. Wholesale removal of these trees would be visually catastrophic as it would suddenly and drastically change the character of the Town's landscape;

### Opportunity:

Rationally evaluate the feasibility both from a branding and public perception point, of such tree removal. Also, evaluate the viability and rationality of removing Black Olive trees on a block-by-block basis carried out over a number of years and its impact on community landscape environment and public perception;

### Issue:

The impact of overhead wires on Miami Lakes Drive and Ludlam Road, NW 82nd Avenue and NW 87th Avenue. The existing Black Olive trees are a problem for the maintenance of overhead wires and require continued pruning often leaving the trees in a unsightly condition. Additionally, the trees represent a danger to the power lines and their operation during and after a hurricane event. Black Olive tree roadway planting on Ludlam Road has been done on a symmetrical basis where both sides of the street have trees of the same age and caliper. Removal of trees from the overhead wire side of the road will create a visual imbalance in the planting plan;

### Opportunity:

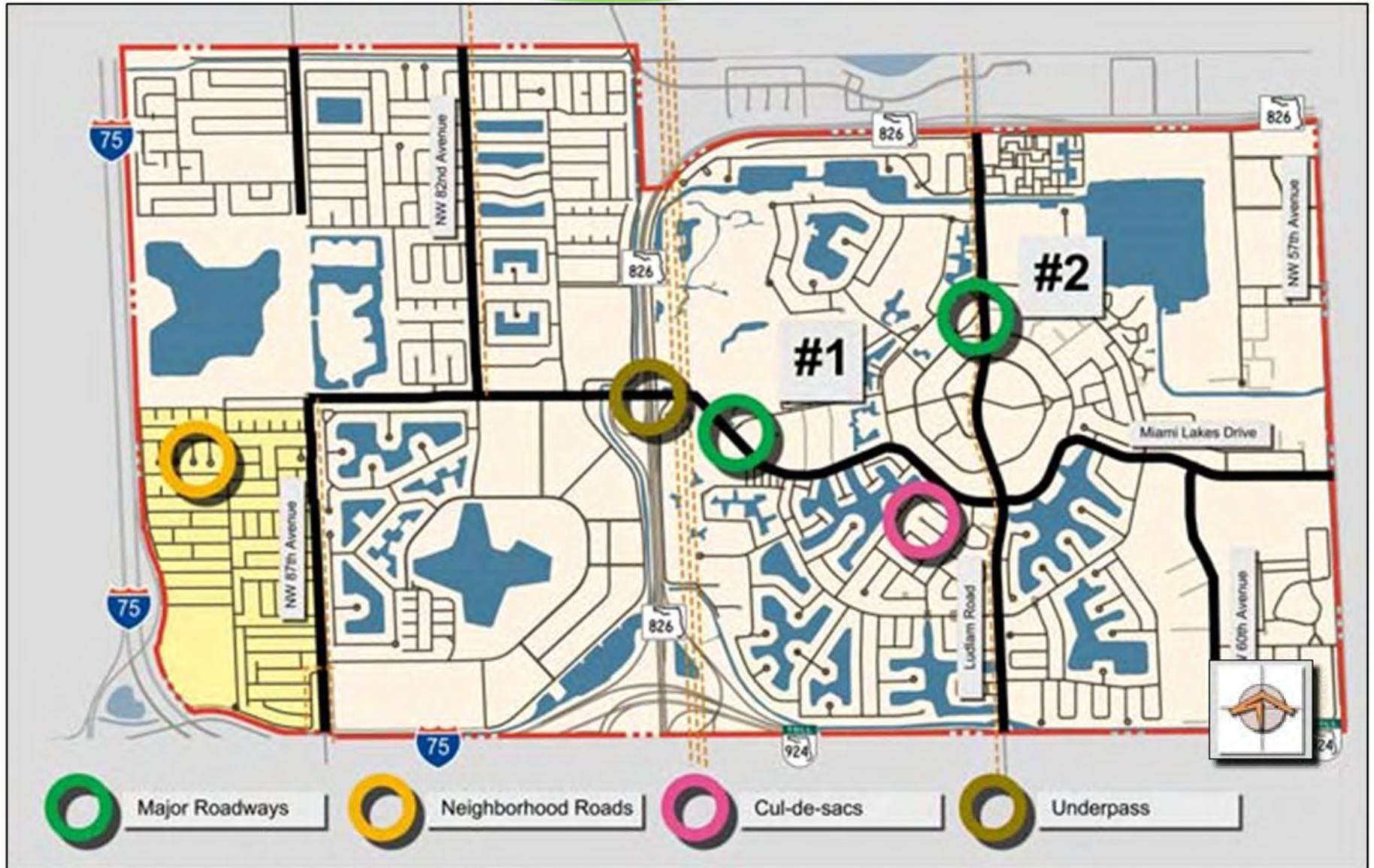
To address this issue, there are a number of options which need to be evaluated in the process of decision making. These options are;

- Continue the practice of planting canopy trees under overhead wires and



# BEAUTIFICATION MASTER PLAN

Town of Miami Lakes



Town-wide map illustrating roadway sample locations for four roadway conditions

continue intense maintenance and accept eventual electric service outage during windstorm events;

- Remove only the Black Olives under overhead wires (occurring mainly on Ludlam Road) and replace with smaller ornamental trees, creating a canopy that is not balanced from one side of the road to the other;
- Remove canopy trees under all overhead wires and those on the opposite side of the street as well and replace with smaller ornamental trees, creating a canopy that is balanced from one side of the road to the other;

**Issue:**

Long stretches of roadway lack canopy trees as well as instances where Sabal palms have been planted to replace Black Olives;

**Opportunity:**

Remove palms from roadways (except where new palm planting occurs at Gateways or intersections) and add shade trees where possible to create the canopy covered streets envisioned in the original Town master plan.

Note: All proposed street tree improvements must meet FDOT Design Standards, in particular Index 546 Sight Distances at Intersections and Index 700 Roadside Offset.

**MAJOR ROADWAY - TYPE 1**

Due to its irregular planting scheme and inconsistency with other major roadway landscaping in the Town, this specific area of Miami Lakes Drive was selected to illustrate landscape improvement concepts. The primary concept is to remove the existing palm trees and shrubs within the median and replace them with Live Oak Trees at 30'-0" on center (Option 1A) and as an additional alternative in specific areas, add low maintenance shrubs under the trees in a linear from down the median. The shrub planting may be extended to the curbs to reduce maintenance or maintained two feet from the curb to allow a turf mowing strip as shown in Option 1B below.



*Existing condition along Miami Lakes Drive (Major Roadway Type 1)*



*Option 1A - Remove palms and shrubs and replace with Oak trees*



*Option 1B - Add shrubs along center median with grass mowing edge*

## MAJOR ROADWAY - TYPE 2

Although the impact of overhead wires on the Town's streets is limited to a small number of roadways, the impact is significant where it does occur. The option indicated in the elevation below, illustrates the community preferred alternative to the three possible solutions to address the overhead wire issue. This rendering is an approximate scaled section of Ludlam Road viewed southward indicating the overhead utility lines extending north and south along the western side of the roadway. The concept illustrates removal of all canopy trees under the overhead wires and replaces them with small shade trees such as Silver Buttonwood. The new trees would need to be narrow and upright so as not to interfere with vehicular traffic along the south bound lanes. The tree planting in the center median and the parkway along the eastern side of the roadway would gradually be transitioned from the Black Olive trees to Live Oak trees. In certain areas, variety could be incorporated into the design by adding an understory planting of Fakahatchee



*Existing view southward on Ludlam Road (Major Roadway Type 2 with overhead wires)*

Grass or other low shrubs and groundcovers in the center median. This planting will need to consider visibility triangles in all directions along the roadway for vehicular safety.

## NEIGHBORHOOD ROADWAYS

The objective in the neighborhoods throughout the Town and more specifically west of NW 87th Avenue is to create a consistent street tree look. A regular rhythm of neighborhood street trees will provide an important shade aspect through the neighborhoods promoting walkability during hot weather and reinforcement of a core philosophy of the original town plan. Street tree 'theming' through residential areas will offer an important mental map and identity element to visitors and residents traveling through the neighborhoods. Street trees become the consistent element that can often hold visually fragmented neighborhoods together.



*Proposed streetscape option along Ludlam Road*

**Issue:**

The Neighborhood West of NW 87th Avenue - Landscape modifications are needed to visually and aesthetically integrate the residential areas that were not part of the original Town Plan into the overall Town of Miami Lakes landscape appearance;

**Opportunity:**

Plant consistent palette of new street trees west of 87th Avenue;

**Issue:**

Black Olive Trees in residential areas should be replaced per the Town's "Black Olive Tree Removal Program"

**Opportunity:**

Develop a plan to replace these trees as they die off or need replacement.



*Existing view along typical residential street*



*Option 1A - Remove existing trees and palms within ROW and replace with matching Gumbo Limbo trees*



*Option 1B - Replace existing trees and palms within ROW with Silver Buttonwood trees*

## SW NEIGHBORHOOD ROADWAY OPTIONS

The adjacent illustrations indicate various options to improve the visual appearance of the residential roadways in this area of the Town. The primary concept is based on removing the various larger plant material from within the parkway (area between the valley gutter and the sidewalk) and install large Gumbo Limbo trees in this area on both sides of the roadway where the existing unpaved areas are large enough to accommodate trees. (Option 1A). As an alternate to the Gumbo Limbo trees, planting smaller ornamental trees such as Silver Buttonwood would serve much the same purpose and have less impact on the residential lots. (Option 1B)

## CUL-DE-SACS

Cul-de-sacs are located throughout the Town's residential neighborhoods. They exist in a variety of conditions from full sun to full shade and many conditions in between. As an integral part of the public right-of-way and given their quantity, they must be thoughtfully considered when studying roadway beautification.

## CUL-DE-SAC ISSUES AND OPPORTUNITIES:

Cul-de-sacs in the Town of Miami Lakes need to be better landscaped and made an integral part of the Town's landscape aesthetics.

### Issue:

Unify cul-de-sacs to be more consistent with Town landscape palette;

### Opportunity:

Provide a separate plant and tree planting palette for cul-de-sacs;

### Issue:

Cul-de-sacs are not irrigated and therefore, the varieties of trees, shrubs and groundcover will be limited;



*Existing condition of typical neighborhood cul-de-sac*

**Opportunity:**

Either install irrigation systems on cul-de-sacs or utilize native plant materials which are drought resistant and will only require temporary watering during initial plant establishment;

**CUL-DE-SAC OPTIONS**

Due to the more limited varieties of plant material that will survive in non irrigated areas, the plant palette for the cul-de-sacs is limited to native species such as the Sabal Palms and Silver Buttonwood trees illustrated on the two adjacent photo renderings. (Options 1 and 2). The understory planting in either option can be native grasses such as Fakahatchee grass or a more colorful native groundcover such as Dune Sunflowers. By utilizing both of these options, the Town can create a diversity of design while maintaining a simple consistent theme which is easy to maintain and improves the overall appearance of the neighborhoods.



*Option 1 - Cul-de-sac with the addition of Fakahatchee Grass and Sabal Palms*



*Option 2 - Cul-de-sac with the addition of Fakahatchee Grass and Silver Buttonwood Trees*

## UNDERPASSES

As a community with one of its primary gateways passing through an underpass on NW 154th Street at the Palmetto Expressway, the issue of how to address the unsightly appearance of the underpass is of significant concern to the Town. As a gateway, this area is the first impression of the community for many visitors. The area has poor natural light, excessive areas of asphalt pavement and designed based on strict DOT requirements for safety. As such, the opportunity for planting and landscaping is very limited.

### UNDERPASS ISSUES AND OPPORTUNITIES:

#### Issue:

A wide median in the center is under utilized and unsightly due to excessive paved areas and litter collection behind guard rails;

#### Opportunity:

Remove paved areas not necessary for vehicular access and replace with landscaped planting areas.

#### Issue:

Lack of sufficient sunlight and irrigation create a difficult environment to grow plant materials.

#### Opportunity:

Develop a plant palette suitable for unique growing conditions under the overpass.

#### Issue:

North and South side of roadway consist primarily of concrete structural abutments for bridge support and offer limited opportunities for landscaping;

#### Opportunity:

Develop a beautification program for concrete areas to improve their appearance without interfering with DOT requirements for access and structural inspections.



*Existing median condition under Palmetto Expressway at NW 154th Street*

### UNDERPASS DESIGN CONCEPT

As indicated in the existing view (above) of the underpass on NW 154th Street, the area is visually unpleasant and difficult to maintain. The concept for the proposed landscape design (below) of this area is to remove the paved surfaces in the center median, irrigate the new landscaped areas (if possible) and plant the median area with low to mid size plants that survive low light conditions. The concept also includes painting the bridge center support columns to brighten the dark conditions, provide interest and compliment the lush landscaping. This work would need to be coordinated with the Palmetto Expressway and subject to the Expressway Authority approval.



*Design option: Addition of irrigation, low level plantings, accent plants, and painted columns in center median*

The following photograph illustrates the existing condition on the north side of NW 154th Street below the bridge overpass. The concept to improve the visual appearance of this area (which can be duplicated on the south side) is to paint the concrete surfaces with a quality exterior concrete paint and plant a narrow median strip along the back of the sidewalk with additional drought and shade tolerant plants. (if conditions permit) In addition to painting the sloping concrete embankments, the Town's logo could be painted on the surface areas to reinforce the Town's branding efforts and add additional interest. Due to the pollutants from the heavy vehicular traffic on the overpass, the painted areas would require regular cleaning and maintenance.



*Existing embankment condition under Palmetto Expressway at NW 154th Street*



*Proposed painting of the concrete embankment and application of Town logo along the north side of NW 154th Street*



## INTERSECTIONS

The purpose of selecting intersections as a focus of beautification improvements within the Town is to create visual interest at major roadway intersections through the use of specialty paving and additional landscaping. Intersections treated with a defined pedestrian crossing paving pattern assist in slowing vehicular traffic and promoting clear, safe pedestrian crossing points. Intersections are points of vehicular and pedestrian circulation interaction, the intersections must work to successfully accommodate both systems. Uniquely designed intersections help offer a mental map for visitors of where they are within the larger community, an important aspect of creating memorable places and comfortable spaces. Special paving designs at the intersections are also opportunities to increase identity and branding through the larger community and help create a hierarchy of spaces as visitors navigate through the Town.

## INTERSECTIONS ISSUES AND OPPORTUNITIES

### Issue:

Major intersections lack pavement change at identified crosswalks. Currently crosswalks are typically delineated with paint striping only;

### Opportunity:

Provide specialty paving at cross walks to highlight intersection and promote additional pedestrian safety;

### Issue:

Landscape material in the limited median space could be improved to highlight specific intersections and areas; in many locations the bull nose median is concrete;

### Opportunity:

Provide landscape palette unique to intersections where the plants will fit into the limited space of medians at said location. Ascertain that clear sight visibility cones are maintained; remove concrete and add drought tolerant groundcover and low shrubs where possible;

## INTERSECTION #1: LUDLAM ROAD AND MIAMI LAKES DRIVE

The options for the intersection of Ludlam Road and Miami Lakes Drive provide an example for alternative treatments at a major intersection of two collector roads. While Ludlam Road and Miami Lakes Drive have wide medians running the length of the road, the medians become narrow bullnose paved areas as the turning lanes are introduced at the intersections. The narrow width of the bullnose limits the inclusion of landscaping at the intersection. Additionally, there is a need to keep the sight triangles open at the intersections.



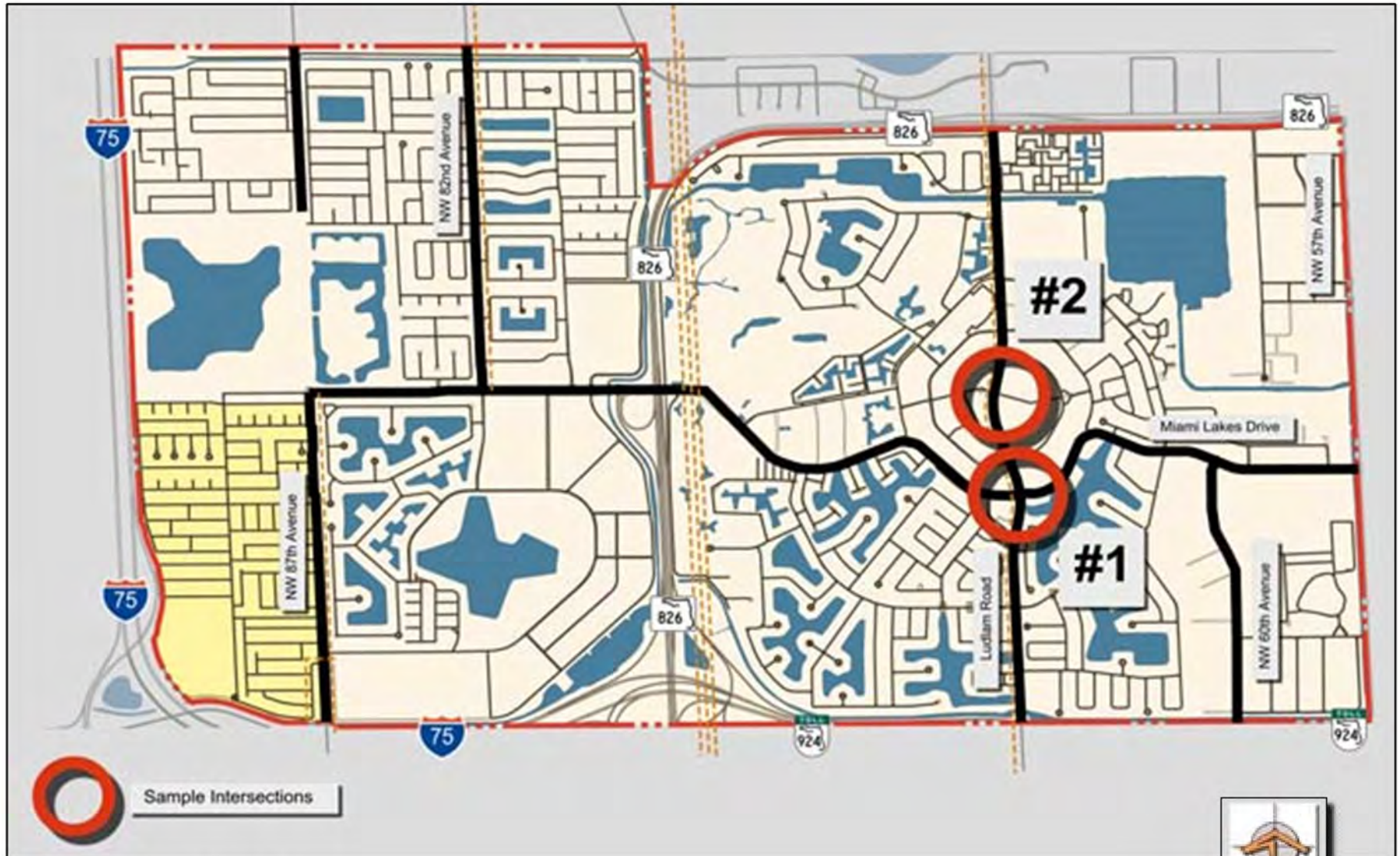
*Intersection #1, existing view at Ludlam and Miami Lakes Drive*

## Option 1A - Ground Cover and Flowering Plants

The option illustrated below proposes the addition of ground covers and flowering plants in the central narrow median and in the swale or parkway areas on all four corners of the intersection.

# BEAUTIFICATION MASTER PLAN

Town of Miami Lakes



Town map illustrating sample intersections



*Option 1A - Addition of low plantings on parkway and in median*



*Option 1B - Addition of low plantings and specialty paving for cross walks*

## **Option 1B - Crosswalk Specialty Paving**

This second option proposes the installation of specialty paving surfaces highlighting the pedestrian crosswalks for improved pedestrian access. The paving patterns and colors should be designed to be unique to Miami Lakes. Due to utilities and site lines, planting additional trees at this location would be very difficult.

## **INTERSECTION #2: LUDLAM ROAD AND MAIN STREET**

The purpose of this design exercise was to create an attractive and inviting roadway environment at the entrance to the heart of the Town's commercial and entertainment district. Main Street intersects with Ludlam Road (NW 67th Avenue) and creates the main entrance to Miami Lake's Town Center. A heavily travelled Miami-Dade County road, the intersection of Main Street and Ludlam Road is a



*Existing view of Intersection #2 viewed from South*

key intersection in the Town. The left turning lanes on Ludlam Road, create narrow landscape bull nose strips from both the north and south allowing for limited landscaping in the center medians. As a County roadway, planting incorporated into these narrow bullnose areas must meet FDOT requirements. Due to the minimum four foot recovery setback and subsequently the need for the use of frangible trees, any trees or palms planted in these areas must meet these requirements.

### Option 2A - Ground Cover and Thatch Palms

This option, shown below, recommends the addition of planting mass ground covers within the median with a significant area of color annuals planted on the tip of the bullnose at the intersection. In addition, a straight line of Thatch palms would be placed in the center medians to give the area a visual break at a higher level. This solution will have a significant impact on the visual quality of the intersection



Option 2A - Addition of low plantings and Thatch palms in median

while having minimal impact on its operational characteristics and will meet the strict requirements of FDOT.

### Option 2B - Date Palms and Specialty Paving

The second option for improvements to the intersection are illustrated below and include the addition of Date Palms within the intersection area on both the east and west sides of Ludlam Road. This concept further defines this area as unique and noticeably different from other streetscape areas within the Town's ROW's. The specialty paving surface treatment added through the intersection will reinforce the unique location of this intersection at the entrance to the Town Center and provide clearly defined pedestrian crossings on Ludlam Road. With any new planting and maintenance of the existing trees, the Town will need to address the issue of conflicts with the overhead wires on the west side of Ludlam Road.



Option 2B - Addition of low plantings, specialty paving, Thatch and Date Palms

## PARKS

Unique to Miami Lakes is the significant number of varying sized parks and open spaces throughout the Town. There are large active recreation parks, a large passive park, a linear park and approximately 85 neighborhood parks. The large parks are all in excess of five acres while nearly all of the neighborhood parks are under a half acre. The parks are well maintained and provide a pleasant experience for residents and visitors. The Town would like suggestions on future improvements and ideas for providing a higher quality experience for both residents and visitors. The town would also like to create a more uniform appearance and look from park to park. The evaluation of the Town's parks and the proposed design options address not only landscape improvements to increase shade for park users but as also buffering through landscape screening of utility installations.

### ISSUES AND OPPORTUNITIES - PARKS:

#### Issue:

Park furniture selection appears to have been on an ad hoc basis. There is a need to standardize park furniture such as benches and trash receptacles in order to brand the Town's parks, provide for easier maintenance and replacement, improve the overall aesthetic environment and create brand recognition. Establish adequate structural support for benches and tables. Place picnic tables on concrete slabs so that they will be well stabilized and create an easy to clean and maintainable surface.

#### Opportunity:

Provide a palette of street furniture to brand the Town's parks and public open spaces;

#### Issue:

Lack of landscape buffer around utilities and maintenance buildings. Electrical equipment and other telecommunication boxes are exposed and not buffered. While well maintained, these utility enclosures detract from the overall aesthetics of the Town's parks.

#### Opportunity:

Develop a planting palette where an appropriate screening method may be incorporated to buffer utility vaults within the Town's parks;

#### Issue:

The landscape palette within parks should consist primarily of canopy trees and turf for ease of maintenance, safety and access to play areas; independent of screening and buffering that will be needed;

#### Opportunity:

Develop planting criteria for Town Parks to address open play areas, canopy trees for shade and maintenance criteria;

### PARK OPTIONS - FURNITURE PALETTE

The selection criteria used for developing the site furnishings list included careful consideration of various aesthetic, functional, cost and maintenance related features. Aesthetically, a traditional design character was selected for the park furniture elements in order to reflect the character of the larger community as well as provide a more tactile friendly condition at the intimate pedestrian scale.

Creating a family of accessories was an important objective in the selection process. We provided elements that were easily perceived to be working together as well as offering a consistent aesthetic tying the different pieces together.

The different park furniture elements were chosen keeping in mind that a number of different conditions in the individual areas of the community would need to be addressed. Benches for example, were selected to work as a stand-alone condition or as a backless version that could be grouped in different formations depending on the future condition requirements; both working together aesthetically and functionally as required.

Suggested Park Furnishing Palette



Bench with Back and Arm Rests



Trash Receptacle



Color Options



Bench - backless



Bike Racks

Park furniture elements have been selected from a group of reputable site furnishing manufacturers and from standard stock material to ensure availability of new units and replacement materials in the future.

The adjacent photo image illustrates the impact of installing new site furniture, additional trees, utility screening, sidewalk repairs and upgraded lighting in a typical neighborhood park. Powder-coated steel for the site furniture was selected as the primary material and finish specification due to its relative cost effectiveness, durability and ease in touch-up for any future required maintenance. Cost consideration was a major driving factor in selection of the park furniture elements with each of the proposed manufactures offering very competitive products that have been time tested throughout various other projects.



*View of Typical Park in Town neighborhoods*



*Park landscape improvements with new furniture, lighting, screening, ground covers and trees*

## **Landscape and Hardscape Materials Lists and Estimated Costs (See Appendix A)**

Illustrated in Appendix A is a complete listing of all the sample projects presented in this report with detailed information provided on each of the concepts such as plant materials, paving surfaces, furniture and associated estimated unit costs. The intent of this report is to provide guidelines or a framework for the development of these areas and that the lists only provide recommendations for the various concepts. As detailed designs are developed, the details may change but the intent should remain the same, the development of a consistent theme throughout the community that highlights the rich landscape flavor and character of Miami Lakes.

## CONCLUSIONS/IMPLEMENTATION STRATEGY

### Project Development and Implementation

This report clearly indicates the many opportunities available to the Town to enhance its physical environment and improve the overall quality of the community. This report has addressed various aspects of the Town's landscape from parks and park furniture to gateways and streetscapes. Several of these programs represent a relatively simple enhancement program such as within the community parks but others will require significant actions which will have a dramatic impact on the visual aesthetic of the Town. Miami Lakes takes great pride in the unique quality of its tree lined streets and removal of the Black Olives particularly as mature as those found throughout the Town, will inevitably be met with resistance and opposition.

It will be important that any beautification project is well advertised and the public have an opportunity to provide input and be assured the improvements will make life in Miami Lakes better for both residents and visitors.

Although project cost estimates were not prepared as part of this study, it will be critical for the Town to begin establishing a funding source for the improvements over the next 10-15 years. Some of these programs are single project efforts such as the individual gateways and others will be a long term development process such as changing the palette of furniture throughout the community's parks. Once the town has established an annual budget to carry out the implementation of these projects, designs can be further developed with accurate quantities, layouts and cost estimates to determine when each can occur.

The following is a list of the next steps in the process to develop a Town Wide Beautification Plan:

Preliminary Prioritized Improvements List - Decide which improvements are most important and should be completed first. On the following pages are maps of the various sample project types which illustrate where the concepts can be

applied within the Town. This includes gateways, major roadways, neighborhood roadways and intersections. Since the cul-de-sacs are so numerous and distributed throughout the community, a separate map was not prepared for this improvement model. Also, the underpass sample only occurs in one place so that too has not been mapped. The process of selecting projects can be based on community input and perceived needs;

Develop Preliminary Cost Opinions – For the Preliminary Prioritized Improvements List there needs to be a preliminary order of magnitude cost opinion developed for each. Cost is a huge factor when considering improvement priorities so it is important to have an early idea of the overall costs of each project

Develop a Budget and Funding Plan – Based on the Priority Improvements List, develop a funding plan to address implementation of the proposed improvements;

Outreach to the Community at Large – It is important to develop community support for any beautification program. Care should be taken to identify the stages at which community input will be solicited;

Contract Required Site Investigation Items – Where not available, contract site surveys for specific improvement areas based on the Priority Improvements List. Use judgment in evaluation of the required site analyses;

Specific Project Detailed Designs to Construction Documents - Have Detailed Project Designs prepared for the proposed improvements. The contract scopes should address Design Development, Construction Documents, Detailed Costs Opinions, and Construction Engineering and Inspection.

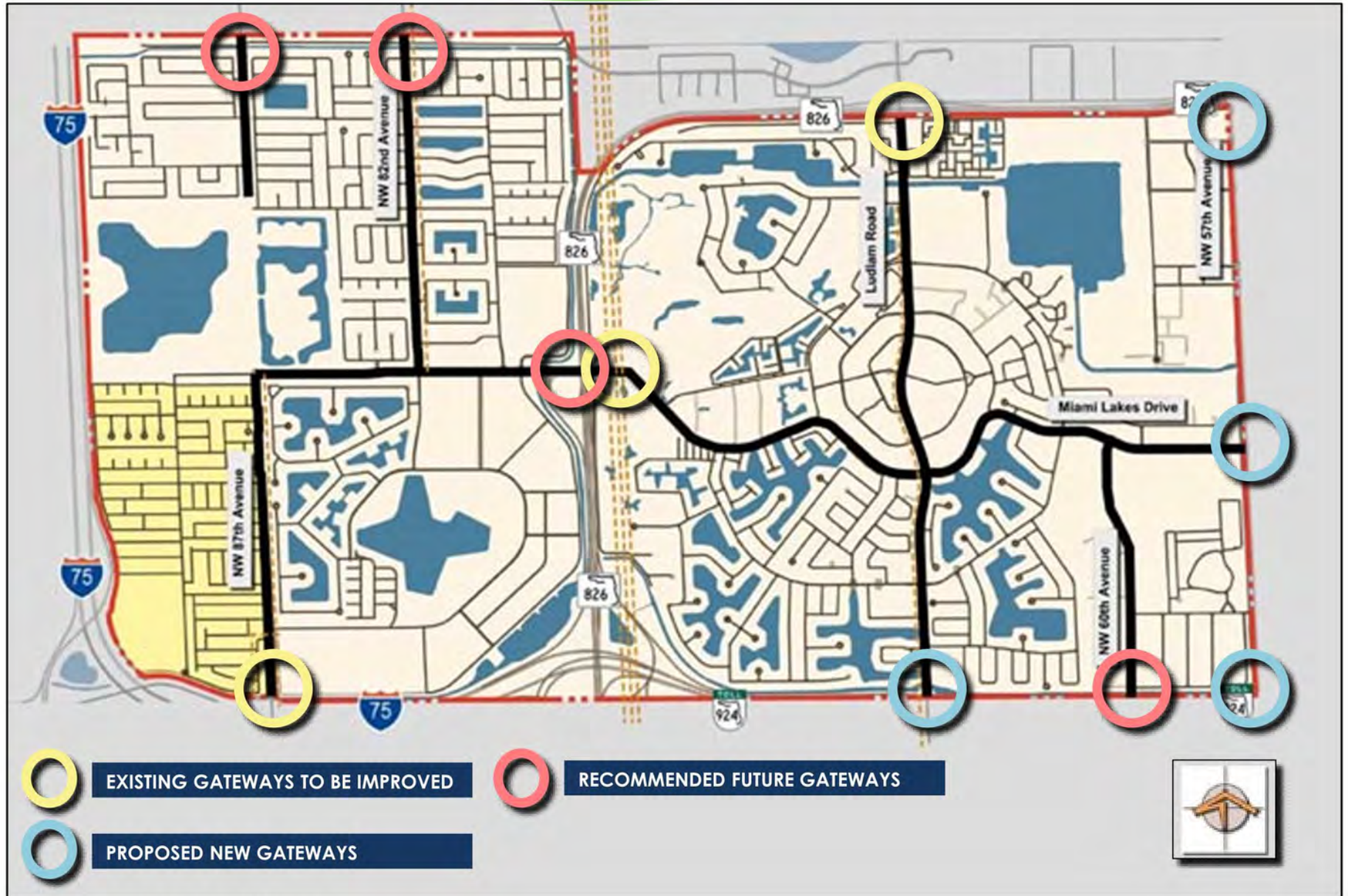
Ribbon Cutting and Grand Opening – Provide an event to announce each accomplished improvement.

Get the community **excited** about the “future” look of the Town....



# BEAUTIFICATION MASTER PLAN

Town of Miami Lakes



Town-wide implementation strategy for Gateways

# BEAUTIFICATION MASTER PLAN

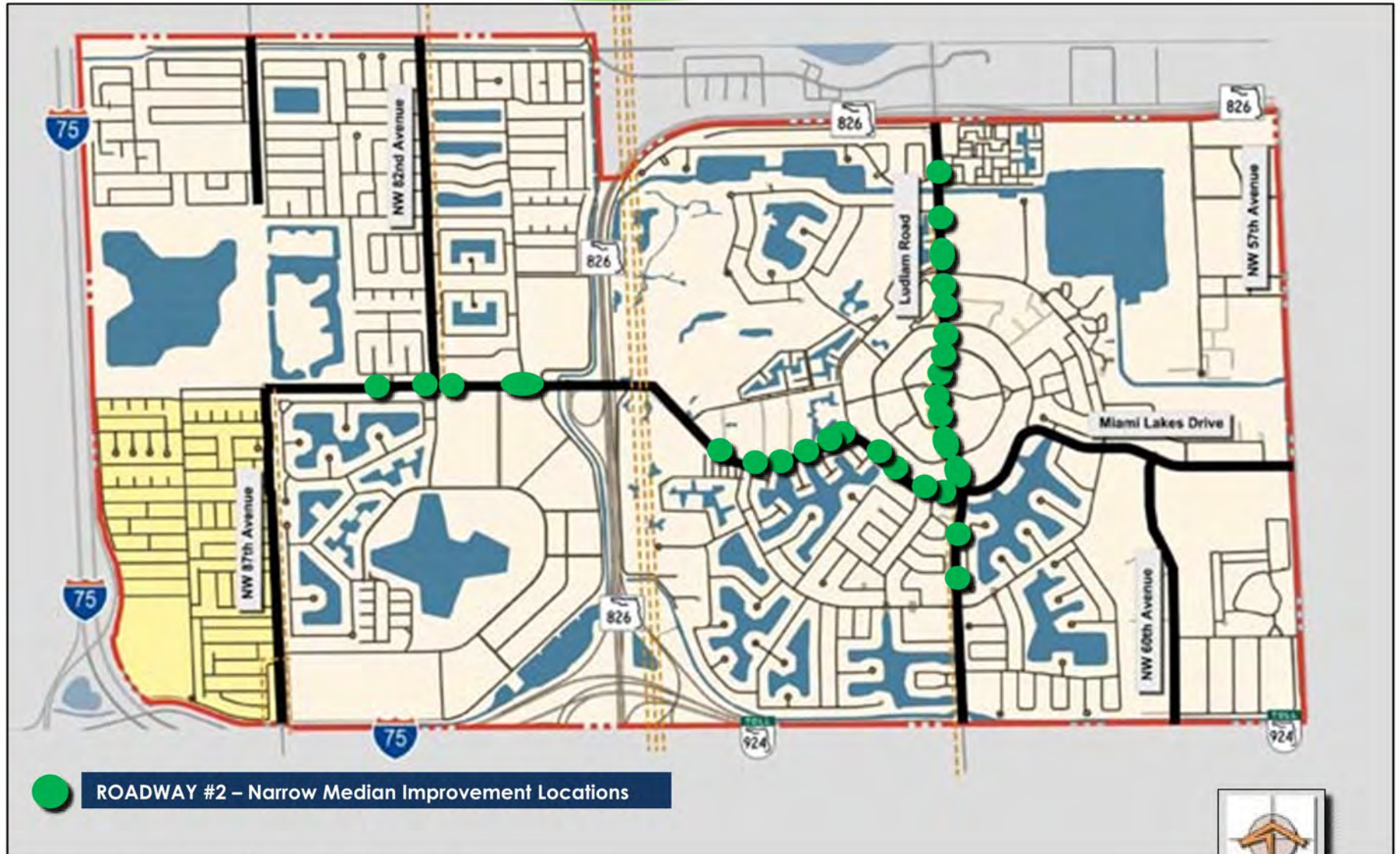
Town of Miami Lakes



*Town-wide implementation strategy for Wide Median Improvements*

# BEAUTIFICATION MASTER PLAN

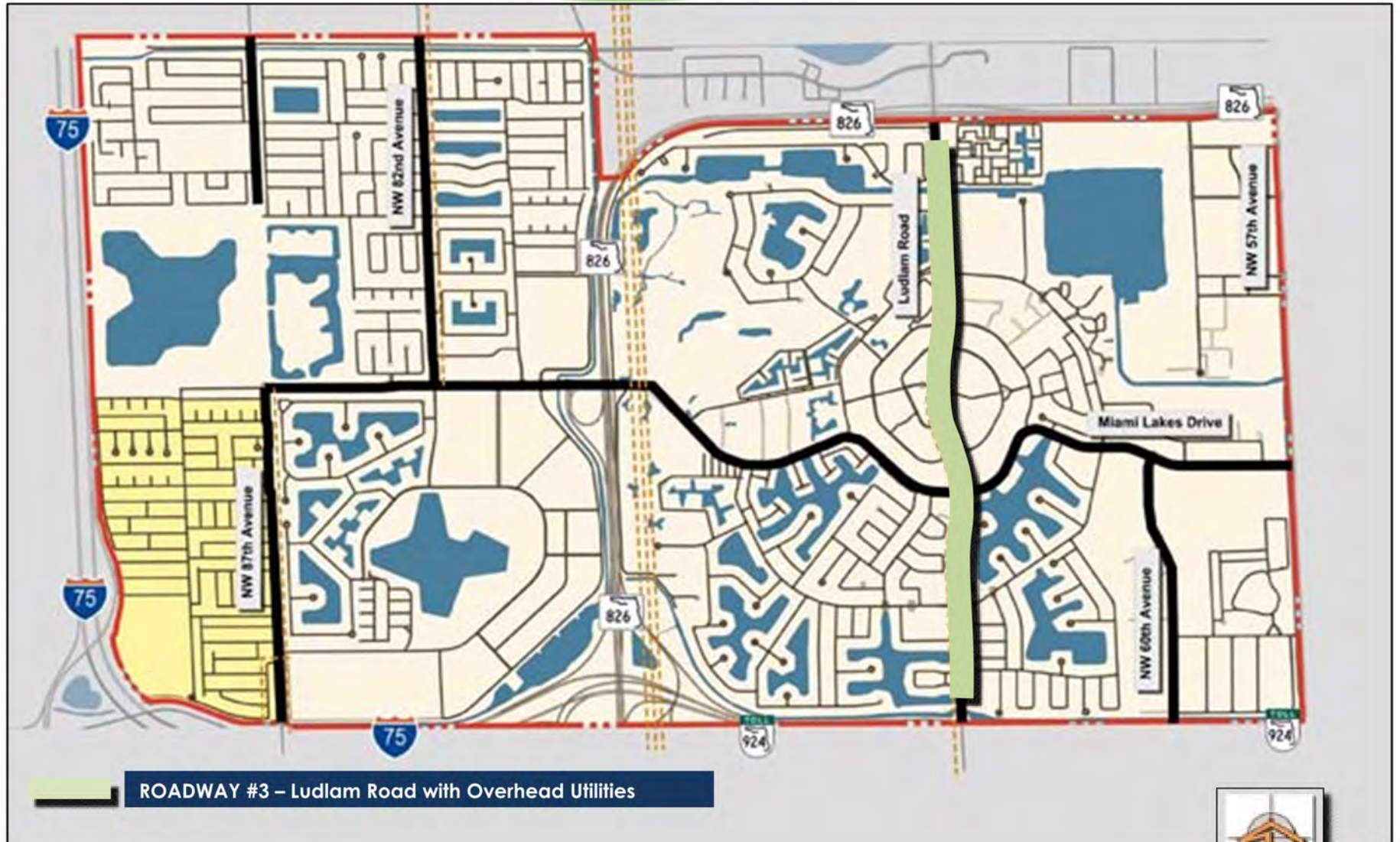
Town of Miami Lakes



Town-wide implementation strategy for Narrow Median Improvements

# BEAUTIFICATION MASTER PLAN

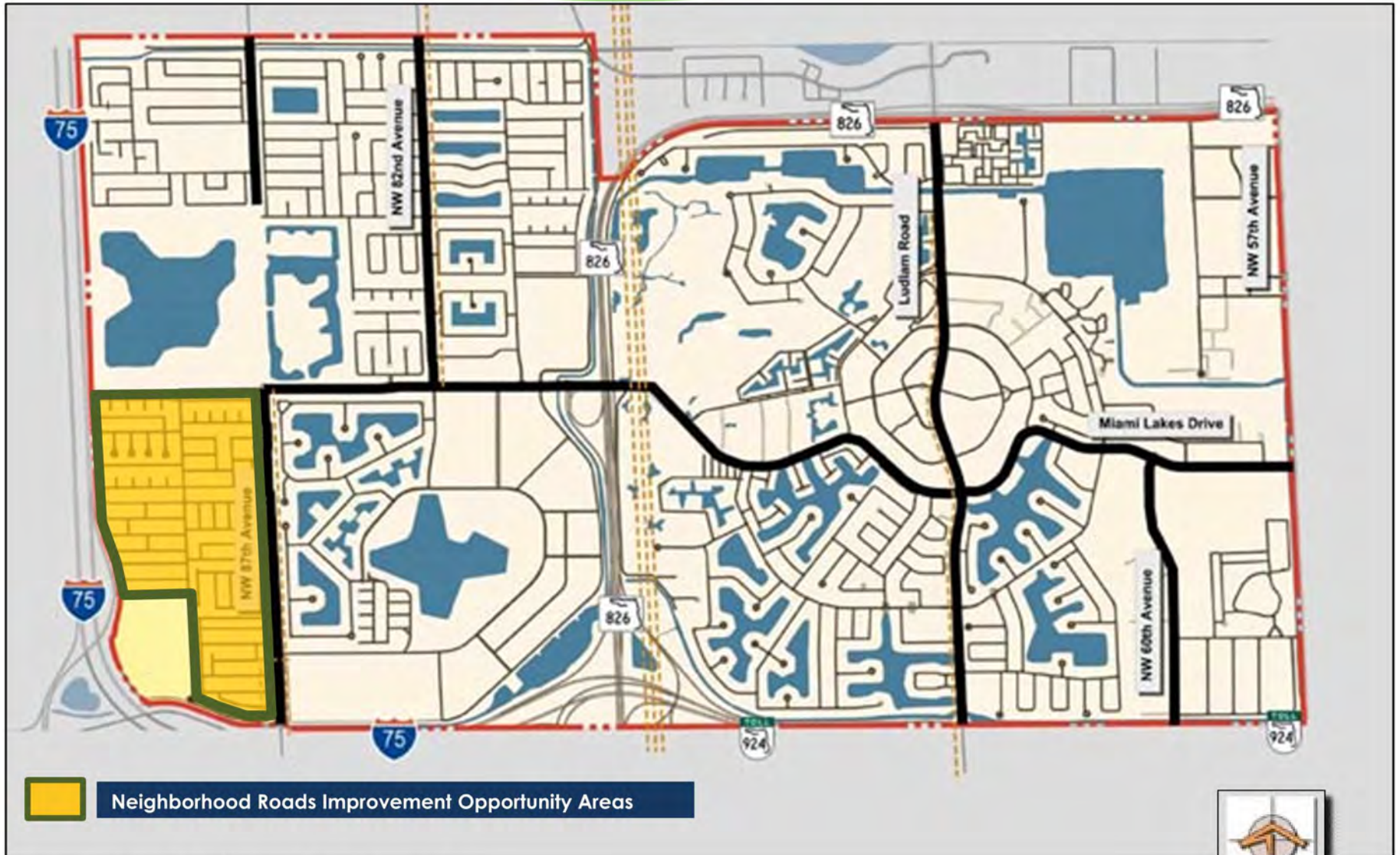
Town of Miami Lakes



Implementation strategy for Overhead Utilities

# BEAUTIFICATION MASTER PLAN

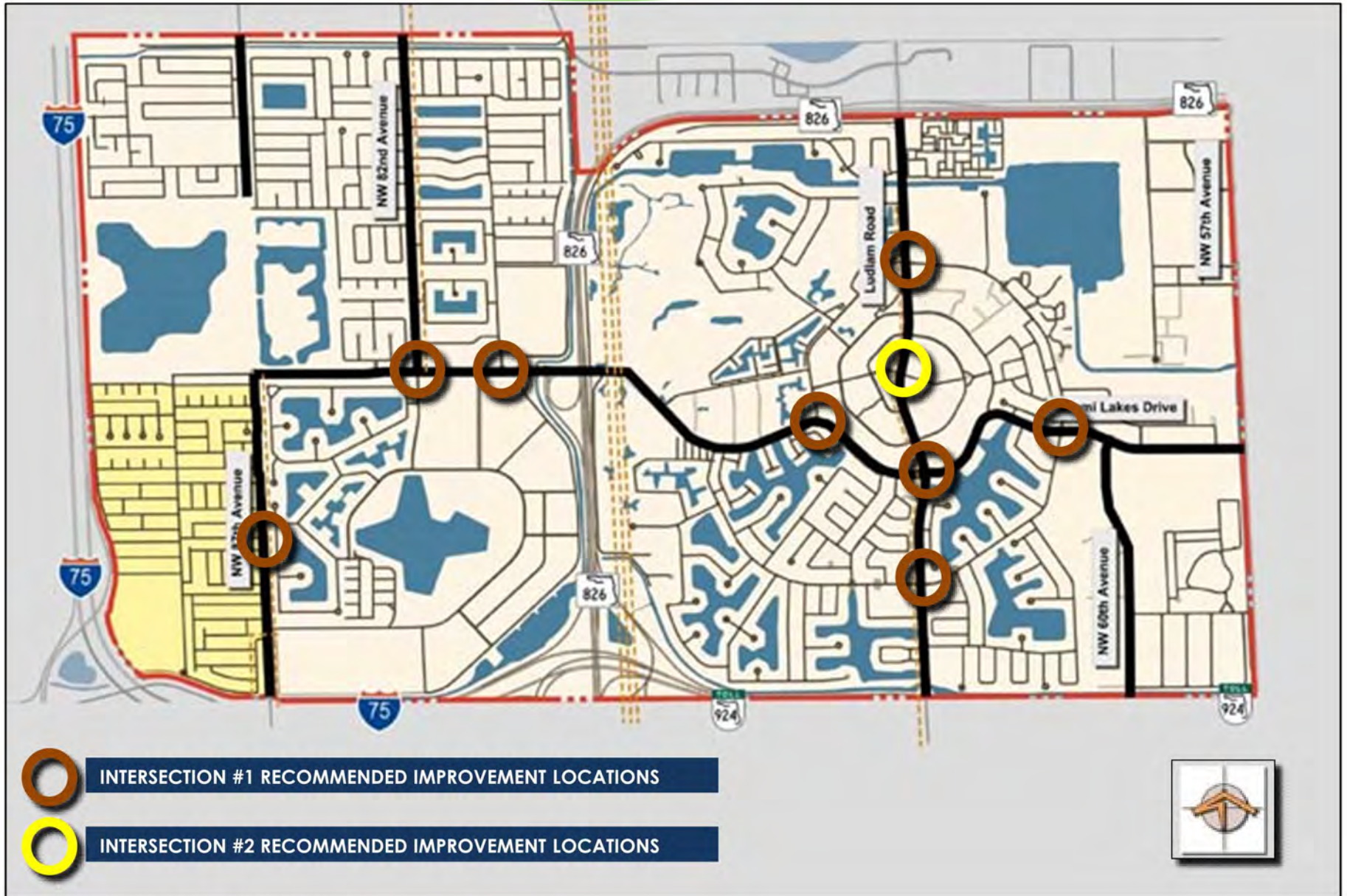
Town of Miami Lakes



Implementation strategy for Neighborhood Roadway Improvements

# BEAUTIFICATION MASTER PLAN

Town of Miami Lakes



Town-wide implementation strategy for Intersections

**APPENDIX A**  
Landscape and Hardscape Materials Lists and Estimated Costs

### Gateway Materials List

LANDSCAPE MATERIALS							
	Shade Tree	Ornamental Tree	Large Palm No. 1	Shrub No. 1	Shrub No. 2	Seasonal Color	Groundcover
<b>Common Name</b>	Live Oak	Silver Buttonwood	Silver Bismarck	Fakahatchee Grass	Green Island Ficus	Seasonal	St. Augustine Sod
<b>Botanical Name</b>	<i>Quercus virginiana</i>	<i>Conocarpus erectus</i> var. <i>sericeus</i>	<i>Bismarckia nobilis</i> "Silver Select"	<i>Tripsacum dactyloides</i>	<i>Ficus microcarpa</i>	Seasonal Annuals	<i>Stenotaphrum secundatum</i>
<b>Specification</b>	25' tall X 12' wide; 6" caliper	15' tall X 15' wide; 3" caliper	25' overall height	3 gal ; 24" tall X 12" wide	3 gal ; 18" tall X 18" wide	4" pots ; 12" on-center	Solid Sod
<b>Estimated Unit Cost Per Plant</b>	\$1,800.00	\$675.00	\$2,000.00	\$14.00	\$12.00	\$2.50	\$.55 per square foot
HARDSCAPE MATERIALS							
	Specialty Paving Type 1	Specialty Paving Type 2	Specialty Paving Type 3				
<b>Manufacturer</b>	Atlantic Paving (305)-513-8632						
<b>Type</b>	Stamped Asphalt (Streetprint) or approved equal	DuraTherm Inlaid Thermoplastic or approved equal	Decorative LogoTherm or approved equal				
<b>Estimated Unit Price</b>	\$20 / Square Yard	\$18 / Square Yard	\$25 / Square Yard				

### Major Roadway Materials List, Type 1

LANDSCAPE MATERIALS							
	Shade Tree	Ornamental Tree	Small Palm	Shrub No. 1	Shrub No. 2	Accent Plant	Groundcover
<b>Common Name</b>	Live Oak	N/A	Thatch Palm	Green Island Ficus	Fakahatchee Grass	Orange Bromeliad	St. Augustine Sod
<b>Botanical Name</b>	<i>Quercus virginiana</i>	N/A	<i>Thrinax radiata</i>	<i>Ficus microcarpa</i>	<i>Tripsacum dactyloides</i>	<i>Aechmea blanchettiana</i>	<i>Stenotaphrum secundatum</i>
<b>Specification</b>	25' tall X 12' wide; 6" caliper	N/A	10' overall height	3 gal ; 18" tall X 18" wide	3 gal ; 24" tall X 12" wide	5 gal ; 24" tall X 24" wide	Solid Sod
<b>Estimated Unit Cost Per Plant</b>	\$1,800.00	N/A	\$550.00	\$12.00	\$14.00	\$25.00	\$.55 per square foot

**Note:** Prices listed are estimates only for materials, freight and installation at the time this document was prepared. Prices may vary depending on quantity and product specifications.



### Major Roadway Materials List, Type 2

LANDSCAPE MATERIALS							
	Shade Tree	Ornamental Tree	Small Palm	Shrub No. 1	Shrub No. 2	Accent Plant	Groundcover
Common Name	Live Oak	Silver Buttonwood	N/A	Fakahatchee Grass	N/A	N/A	St. Augustine Sod
Botanical Name	<i>Quercus virginiana</i>	<i>Conocarpus erectus var. sericeus</i>	N/A	<i>Tripsacum dactyloides</i>	N/A	N/A	<i>Stenotaphrum secundatum</i>
Specification	25' tall X 12' wide; 6" caliper	15' tall X 15' wide 3" caliper	N/A	3 gal ; 24" tall X 12" wide	N/A	N/A	Solid Sod
Estimated Unit Cost Per Plant	\$1,800.00	\$675.00	N/A	\$14.00	N/A	N/A	\$.55 per square foot

### Neighborhood Roadways Materials List

LANDSCAPE MATERIALS							
	Shade Tree	Ornamental Tree	Large Palm	Small Palm	Accent Plant	Shrub	Groundcover
Common Name	Gumbo Limbo	Silver Buttonwood	N/A	N/A	N/A	N/A	St. Augustine Sod
Botanical Name	<i>Bursera simaruba</i>	<i>Conocarpus erectus var. sericeus</i>	N/A	N/A	N/A	N/A	<i>Stenotaphrum secundatum</i>
Specification	18' -20' Overall Height	15' tall X 15' wide 3" caliper	N/A	N/A	N/A	N/A	Solid Sod
Estimated Unit Cost Per Plant	\$1,200.00	\$675.00	N/A	N/A	N/A	N/A	\$.55 per square foot

### Cul-de-sac Materials List

LANDSCAPE MATERIALS							
	Shade Tree	Ornamental Tree	Palm	Shrub No. 1	Shrub No. 2	Shrub No. 3	Groundcover
Common Name	N/A	Silver Buttonwood	Cabbage Palm	Fakahatchee Grass	Green Island Ficus	Red Tip Cocoplum	St. Augustine Sod
Botanical Name	N/A	<i>Conocarpus erectus var. sericeus</i>	<i>Sabal palmetto</i>	<i>Tripsacum dactyloides</i>	<i>Ficus microcarpa</i>	<i>Chrysobalanus icaco 'Red Tip'</i>	<i>Stenotaphrum secundatum</i>
Specification	N/A	15' tall X 15' wide 3" caliper	14' overall height	3 gal ; 24" tall X 12" wide	3 gal ; 18" tall X 18" wide	3 gal ; 18" tall X 12" wide	Solid Sod
Estimated Unit Cost Per Plant	N/A	\$675.00	\$250.00	\$12.00	\$12.00	\$12.00	\$.55 per square foot

Note: Prices listed are estimates only for materials, freight and installation at the time this document was prepared. Prices may vary depending on quantity and product specifications.

## Underpass Materials List

LANDSCAPE MATERIALS							
	Shade Tree	Ornamental Tree	Small Palm	Accent Plant	Groundcover No. 1	Groundcover No. 2	Groundcover
<b>Common Name</b>	N/A	N/A	N/A	Green Elephant Ear	Black Cardinal Philodendron	Macho Fern	St. Augustine Sod
<b>Botanical Name</b>	N/A	N/A	N/A	<i>Colocasia esculenta</i>	<i>Philodendron 'Black Cardinal'</i>	<i>Nephepolis falcata</i>	<i>Stenotaphrum secundatum</i>
<b>Specification</b>	N/A	N/A	N/A	3 gal ; 36" tall X 36" wide	3 gal ; 18" tall X 18" wide	3 gal ; 18" tall X 18" wide	Solid Sod
<b>Estimated Unit Cost Per Plant</b>	N/A	N/A	N/A	\$24.00	\$14.00	\$20.00	\$.55 per square foot.

## Intersection Type 1 Materials List

LANDSCAPE MATERIALS							
	Shade Tree	Large Palm	Small Palm	Shrub No. 1	Shrub No. 2	Shrub No. 3	Groundcover
<b>Common Name</b>	Live Oak	Sylvester Palm	Thatch Palm	Fakahatchee Grass	Green Island Ficus	Gold Capella	St. Augustine Sod
<b>Botanical Name</b>	<i>Quercus virginiana</i>	<i>Phoenix sylvestris</i>	<i>Thrinax radiata</i>	<i>Tripsacum dactyloides</i>	<i>Ficus microcarpa</i>	<i>Schefflera arboricola</i>	<i>Stenotaphrum secundatum</i>
<b>Specification</b>	25' tall, X 12' wide: 6" caliper	14' GW	10' overall height	3 gal ; 24" tall X 12" wide	3 gal ; 18" tall X 18" wide	3 gal ; 18" tall X 12" wide	Solid Sod
<b>Estimated Unit Cost Per Plant</b>	\$1,800.00	\$2,200.00	\$550.00	\$14.00	\$12.00	\$12.00	\$.55 per square foot

HARDSCAPE MATERIALS			
	Specialty Paving Type 1	Specialty Paving Type 2	Specialty Paving Type 3
<b>Manufacturer</b>	Atlantic Paving (305)- 513- 8632		
<b>Type</b>	Stamped Asphalt (Streetprint) or approved equal	DuraTherm Inlaid Thermoplastic or approved equal	Decorative LogoTherm or approved equal
<b>Estimated Unit Price</b>	\$20 / Square Yard	\$18 / Square Yard	\$25 / Square Yard

**Note:** Prices listed are estimates only for materials, freight and installation at the time this document was prepared. Prices may vary depending on quantity and product specifications.

## Intersection Type 2 Materials List

LANDSCAPE MATERIALS							
	Shade Trees	Large Palm No. 1	Large Palm No. 2	Small Palm	Shrub No. 2	Seasonal Color	Groundcover
<b>Common Name</b>	Live Oak	Sylvester Palm	Medjool Date Palm	Thatch Palm	Green Island Ficus	Seasonal	St. Augustine Sod
<b>Botanical Name</b>	<i>Quercus virginiana</i>	<i>Phoenix sylvestris</i>	<i>Phoenix dactylifera 'Medjool'</i>	<i>Thrinax radiata</i>	<i>Ficus microcarpa</i>	Seasonal Annuals	<i>Stenotaphrum secundatum</i>
<b>Specification</b>	25' tall X 12' wide; 6" caliper	14' GW	30' overall height	10' overall height	3 gal ; 18" tall X 18" wide	4" pots ; 12" on-center	Solid Sod
<b>Estimated Unit Cost Per Plant</b>	\$1,800.00	\$3,000.00	\$8,500.00	\$550.00	\$12.00	\$2.50	\$.55 per square foot
HARDSCAPE MATERIALS							
	Specialty Paving Type 1	Specialty Paving Type 2	Specialty Paving Type 3				
<b>Manufacturer</b>	Atlantic Paving (305)- 513- 8632						
<b>Type</b>	Stamped Asphalt (Streetprint) or approved equal	DuraTherm Inlaid Thermoplastic or approved equal	Decorative LogoTherm or approved equal				
<b>Estimated Unit Price</b>	\$20.00 / Square Yard	\$18.00 / Square Yard	\$25.00 / Square Yard				

**Note:** Prices listed are estimates only for materials, freight and installation at the time this document was prepared. Prices may vary depending on quantity and product specifications.

### Park Planting and Hardscape Materials List

LANDSCAPE MATERIALS							
	Shade Tree	Ornamental Tree	Large Palm No. 3	Palm	Shrub No. 1	Shrub No. 2	Shrub No. 3
<b>Common Name</b>	Live Oak	Silver Buttonwood	Royal Palm	Cabbage Palm	Gold Capella	Green Island Ficus	Fakahatchee Grass
<b>Botanical Name</b>	<i>Quercus virginiana</i>	<i>Conocarpus erectus</i> var. <i>sericeus</i>	<i>Roystonea regia</i>	<i>Sabal palmetto</i>	<i>Schefflera arboricola</i>	<i>Ficus microcarpa</i> 'Green Island'	<i>Tripsacum dactyloides</i>
<b>Specification</b>	25' tall, X 12' wide; 6" caliper	15' tall X 15' wide 3" caliper	15' overall height	14' overall height	3 gal ; 18" tall X 12" wide	3 gal ; 16" tall X 10" wide	3 gal ; 24" tall X 12" wide
<b>Estimated Unit Cost Per Plant</b>	\$1,800.00	\$675.00	\$850.00	\$250.00	\$12.00	\$12.00	\$14.00
HARDSCAPE MATERIALS							
	Bench with back	Bench no back	Trash Receptacle	Bike Rack	Table	Drinking Fountain	Bollard
<b>Manufacturer</b>	DuMor	DuMor	DuMor	Forms+Surfaces	DuMor	Murdock Fountains	DuMor
<b>Size</b>	6' long, 2 supports, including center armrest	6' long, 2 supports	32-gal, all steel with optional steel shield	35.6" tall	6', all steel	39" tall with dual height bowls, classic series	36" high round bollard
<b>Part No.</b>	58-60	92-60	102-32SH	SKOLY	443-60	M-C76-28-Black; classic series	451-36
<b>Color</b>	Powdercoat: Black	Powdercoat: Black	Powdercoat: Black	Powdercoat: Black Texture	Powdercoat: Black	Powder coated black & polished brass	Powdercoat: Black
<b>Estimated Unit Cost</b>	\$1,065.00	\$825.00	\$1,485.00	\$375.00 + \$200.00 per order	\$1,880.00	\$5,000.00	\$860.00
<b>Concrete Slab</b>	3' X 7' Slab	3' X 7' Slab	3' X 3' Slab	12' X 12' Slab	15' X 15' Slab	6' X 6' Slab	N/A

**Note:** Prices listed are estimates only for materials, freight and Installation at the time this document was prepared. Prices may vary depending on quantity and product specifications.



Bermello Ajamil & Partners, Inc.