



# EXHIBITS

from HEX hearing

CASE #: DC12006-00070

CASE NAME: Win-Del Prado

**Attach a copy of this form to the top of packet of the exhibits & place exhibits in case file.**

**ARE THERE ANY BOARD EXHIBITS?** ☒ YES ☐ NO

**LOCATION OF BOARDS:**

3  
Diana's closet

**If there are any board exhibits, attach another copy of this form to boards for identification purposes.**

## EXHIBITS

### APPLICANT

- #1 Aerial Photo
- #2 Resume of Robert Piers
- #3 Master Concept Plan
- #4 Shoppes of Del Prado X Section
- #5 Resume of Jane Caldera
- #6 Evidence for Duwamish Waiver
- #7 FLUCFES Aerial
- #8 RPI Amendment Discussion
- #9 Resume of Peter Crowell
- #10 \_\_\_\_\_

### OTHER EXHIBITS

#### NAME

- #1 \_\_\_\_\_
- #2 \_\_\_\_\_
- #3 \_\_\_\_\_
- #4 \_\_\_\_\_
- #5 \_\_\_\_\_

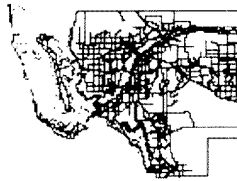
### STAFF

- #1 Aerial
- #2 Composite Aerials (2  $\frac{3}{4}$  - 8  $\frac{1}{2}$  x 11)
- #3 Composite Photos (8)
- #4 Map
- #5 \_\_\_\_\_
- #6 \_\_\_\_\_
- #7 \_\_\_\_\_
- #8 \_\_\_\_\_
- #9 \_\_\_\_\_
- #10 \_\_\_\_\_

#### NAME

- #1 \_\_\_\_\_
- #2 \_\_\_\_\_
- #3 \_\_\_\_\_
- #4 \_\_\_\_\_
- #5 \_\_\_\_\_

Utilities Map  
Win Del Prado CPD  
DCI2006-00070



Legend

- Subject Property  
LC Water  
Ft Myers Utilities



LEE COUNTY  
FLORIDA  
2005 Aerial Photograph  
Created July 2007



# Win Del Prado CPD DCI2006-00070



## Legend

- Zoning
- Parcels
- Subject Property



LIFE COUNTY  
SOUTHERN CALIFORNIA

2005 Aerial Photograph  
Created July 2007





# DCI2006-00070 WIN DEL PRADO CPD



STAFF PHOTOS BY TONY PALERMO, AICP, SENIOR PLANNER.

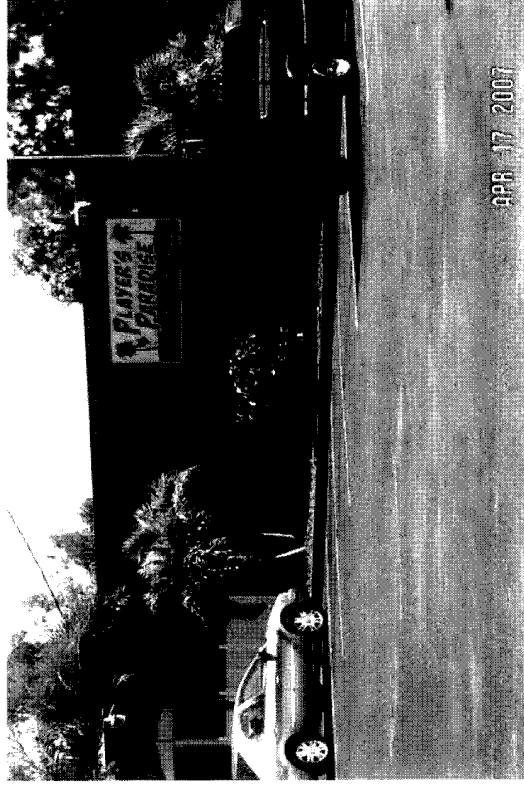
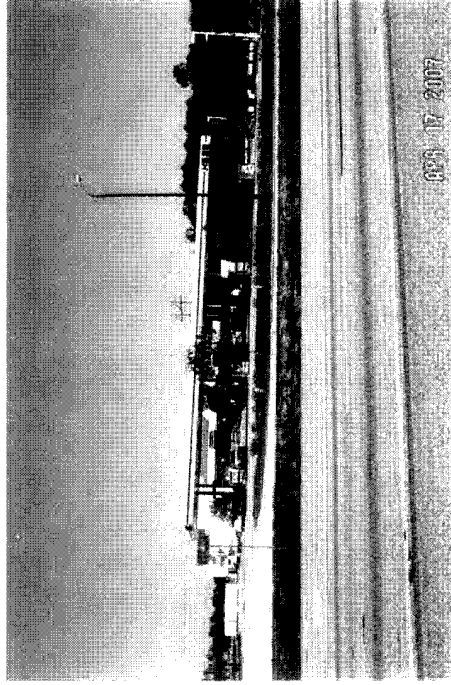
STAFFS EXHIBIT # 3  
Employee 3/1/2007

DCIDCI2006-00070 WIN DEL  
PRADO CPD



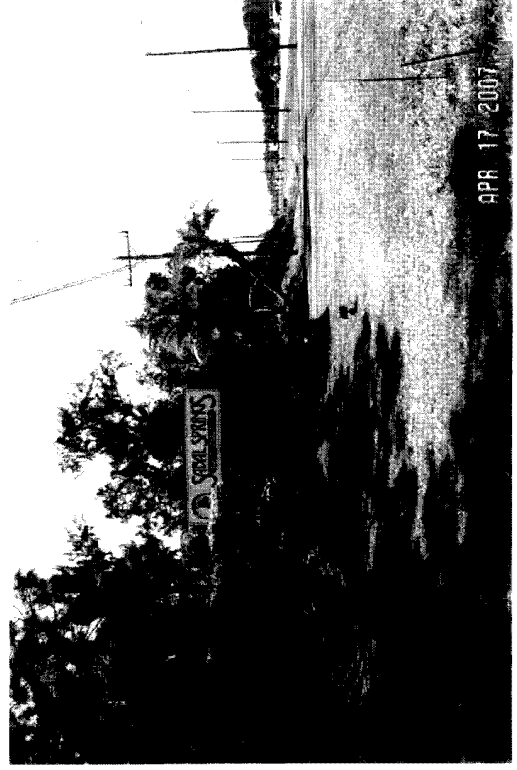
US 41 LOOKING NORTH.

# DCI2006-00070 WIN DEL PRADO CPD



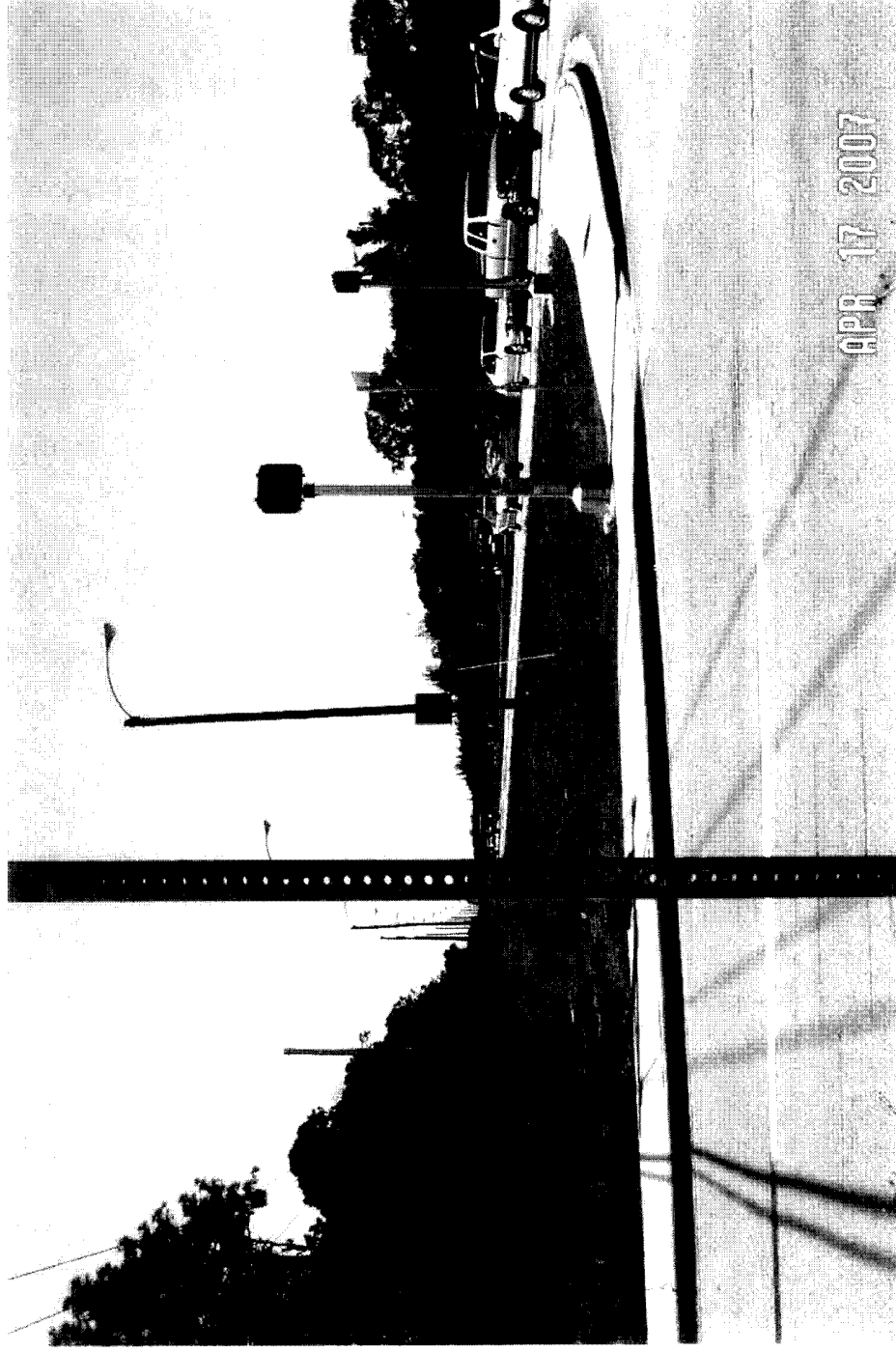
US 41 - COMMERCIAL  
ABOVE

US 41 - SABAL SPRINGS  
ENTRANCE, LEFT.

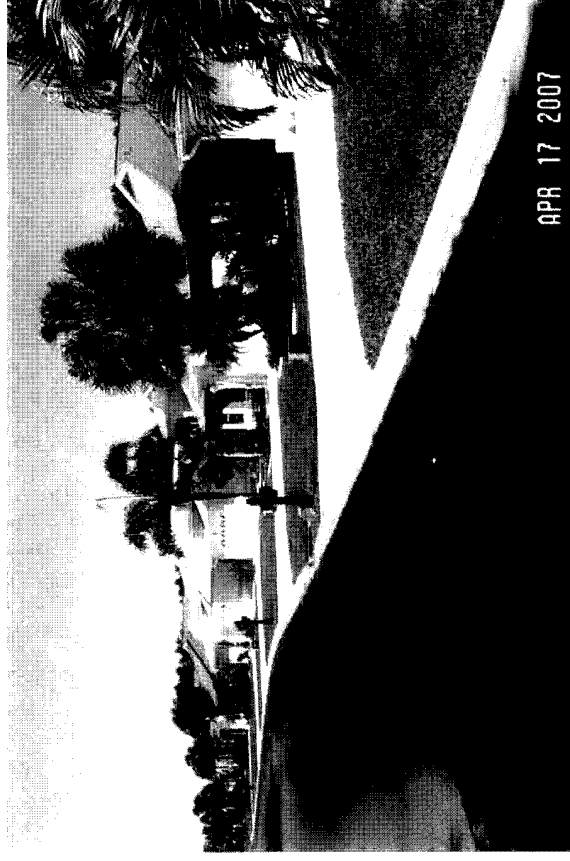
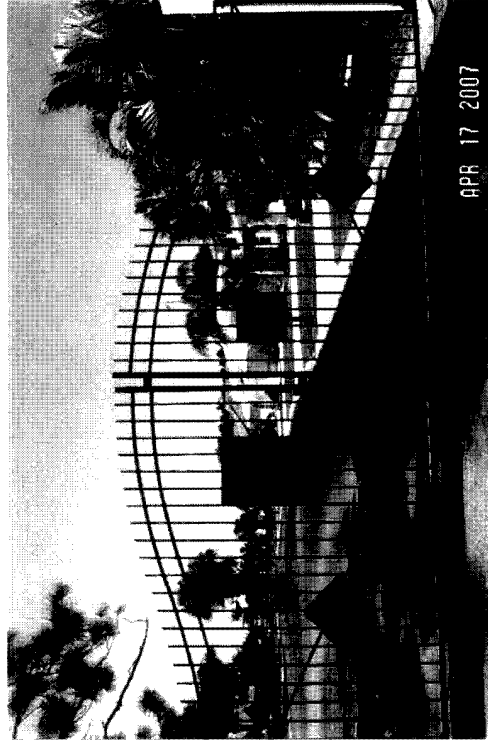


# DCI2006-00070 WIN DEL PRADO CPD

US 41 AND  
DEL  
PRADO



# DCI2006-00070 WIN DEL PRADO CPD



SABAL SPRINGS  
FROM DEL PRADO

August 1, 2014

# 2030 L RTP Highway Element Map

**Legend**

- Financially Feasible 2 Lanes
- Financially Feasible 3 Lanes (One Way)
- Financially Feasible 4 Lanes
- Financially Feasible 6 Lanes
- Financially Feasible 8 Lanes
- Financially Feasible 6 Lanes + 4 Express Lanes
- Financially Feasible Interchange Improvements
- Financially Feasible Open Road Tolling
- I-75/Coconut Rd Interchange Study
- Contingent 2 Lanes
- Contingent 4 Lanes
- Contingent 4 Express Lanes
- Contingent 6 Lanes
- Contingent 8 Lanes
- Contingent 10 Lanes
- Contingent 12 Lanes
- Contingent 4 Lanes + 6 Express Lanes
- Contingent 5 Lanes + 4 Express Lanes
- Contingent 4 Lanes + 4 Express Lanes
- Contingent 6 Lanes + 4 Express Lanes
- Contingent Interchange Improvements
- Financially Feasible & Contingent Interchange Improvements

0 1 2 4 6 8 Miles

Created By: Brian V. Raimondo  
 Source: 2030 L RTP Highway Element  
 July 31, 2007

## Financially Feasible & Contingent Interchange Improvements





SABAL SPRING/CRA NE LANDING  
REZONING HISTORY

- Legend**
- 1986 SABAL SPRINGS
  - 1989 CPD
  - 2004 CRANE LANDING
  - 2007 CPD RPD REZONING

1 inch equals 300 feet

SABAL SPRING/CRA NE LANDING REZONING HISTORY LEE COUNTY		<b>A ID GROUP</b> APPLICANT'S EXHIBIT # 1 PARADISE DEVELOPMENT CORP.	
1. The applicant hereby certifies that the information provided herein is true and correct to the best of their knowledge and belief.	2. The applicant hereby certifies that the information provided herein is true and correct to the best of their knowledge and belief.	3. The applicant hereby certifies that the information provided herein is true and correct to the best of their knowledge and belief.	4. The applicant hereby certifies that the information provided herein is true and correct to the best of their knowledge and belief.

**ROBERT H. PIERRO, PE**  
**ASSOCIATE, SENIOR PROJECT MANAGER**



Mr. Pierro is experienced in site development and management within the State of Florida. His responsibilities have included developing feasibility studies and land use plans, coordinating multi-department preparation of all engineering project processes, preparing construction contract documents, and performing overall project inspection design relative to the development of residential, commercial, municipal and institutional projects. He has represented clients at public hearings and has an extensive background in computer programming and analysis. His particular areas of engineering expertise include stormwater management design with an emphasis on the SWFWMD permitting process, Florida DEP dredge and fill process, Florida DOT standards and US Corps of Army Engineers procedures.

**PROJECT EXPERIENCE**

**Streetscape & Redevelopment of 12th St., 5th Ave. to 6th Ave. (Courthouse Vista). Manatee County Public Works Department:** As Assistant County Engineer for Manatee County; responsibilities included implementation of right-of-way survey, drainage improvements, utility relocation and coordination, and landscape improvements including paver block cross-walk installation design.

**59th Street West, Manatee County Public Works Department:** Project Manager responsible for survey of right-of-way mapping, preliminary engineering, drainage study, and utilities, plan & profile and pavement design for widening 2.5 miles of existing 2 lane to a 4 lane urban divided highway.

**Intersection of Belleair Rd. & Lake Street, Pinellas County Public Works Department:** Project manager for the development of complete construction plans for the improvement of the intersection. Services included a drainage study, utility relocation and improvement, turn lanes, signage and pavement markings, and permitting.

**Intersection of SR 686 & 49th Street, Pinellas County Public Works Department:** Project Manager for the development of complete construction plans for the improvements of a major arterial intersection. Services included a drainage study, utility relocation within FDOT ROW, turn lanes (8 directions- with urban 4 lane divided highway section E/W and urban 4 lane non-divided section N/S), signage and pavement markings, and permitting.

**EDUCATION**

BS, Civil Engineering,  
University of South Florida,  
1973

**PROFESSIONAL  
REGISTRATION**

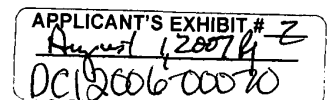
Professional Engineer,  
Florida, #19841, 1978

**PROFESSIONAL  
AFFILIATIONS**

Florida Engineering Society

**LENGTH OF SERVICE**

Entered profession in 1973  
Joined AVID in 1994



**SR 52 - Pasco County, FDOT District 1:** Project Manager responsible for development of complete construction plans for widening 7.0 miles of an existing 2 lane rural section to a 4 lane divided highway. Services included survey & preliminary engineering, maintenance of traffic during construction, signalization and pavement markings, utility relocation and coordination within FDOT ROW.

## **LAND DEVELOPMENT PROJECTS**

Project Manager for Indigo Pond Phase II, a 68 unit single family residential development in Pinellas County including engineering, planning, and surveying.

Project Manager for Brooker Creek Villas, an 80-unit multi family residential development in Pinellas County including engineering, planning, and surveying.

Project Manager for Laguna, a 368-unit condominium development in St. Petersburg including engineering, planning and surveying.

Project Manager for three Vehicle Inspection Stations in Hillsborough County including engineering, planning, construction administration and surveying.

Project Manager for five Vehicle Inspection Stations in Pinellas County including engineering, planning, construction administration and surveying.

Project Manager for a new Kash n' Karry store in the City of St. Petersburg including engineering and construction administration.

Project Manager for a new Special Services Building for Bayfront Medical Center in the City of St. Petersburg including engineering and construction administration.

Project Manager for ten Gasoline Service Stations in Hillsborough, Pinellas, Pasco, Manatee and Sarasota County including engineering, planning, construction administration and surveying.

Project Engineer for Rodney Colson Elementary School a new elementary school in Hillsborough County including engineering and construction administration.

Project Manager for additions to Northwest Elementary School in Pinellas County including engineering and construction administration.

Project Manager for additions to Seminole Elementary School in Pinellas County including engineering and construction administration.

Project Manager for additions to Seminole Middle School in Pinellas County including engineering and construction administration.



Project Manager for additions to Bayshore Elementary School in Manatee County including engineering, surveying and construction administration.

Project Manager for Peridia, a 723 unit mixed residential development in Manatee County including engineering, planning, construction administration and surveying.

Project manager for Garden Lakes a 560 unit condominium development in Manatee County including engineering, planning, construction administration and surveying.

Project Manager for Knights Inn, a 120-unit motel in Punta Gorda including engineering, planning, construction administration and surveying.

Project Manager for Village West a 91 unit single family development in the City of Bradenton, including engineering, planning, construction administration and surveying.

Project Manager for Huntington Woods, a 96 unit multifamily development in Manatee County, including engineering, planning, construction administration and surveying.

Project Manager for Tiki Village, a 145 unit travel trailer park in Polk County, including engineering, planning, construction administration and surveying.

Project Manager for Stone Creek, a 120 unit single family development in Manatee County, including engineering, planning, construction administration and surveying.

Project Manager for Fairfax, a 161 unit single family development in Manatee County, including engineering, planning, construction administration and surveying.

Project Manager for Hidden Acres, a 268-unit apartment development in Manatee County, including engineering, planning, construction administration and surveying.

Project Manager for Woodruff Industrial Park, a 110-acre industrial park in Manatee County, including engineering, planning and surveying.

Project Manager for Manatee River Youth Ranch, a 60-acre youth care facility in Manatee County, including engineering, planning, construction administration and surveying.

Project Manager for River Woods Estates, a 279 unit single family development in Manatee County, including engineering, planning, construction administration and surveying.

Project Manager for Frog Creek, a 131 unit single family development in Manatee County, including engineering, planning and surveying.



Project Manager for Hidden Meadows, a 67 unit single family development in Manatee County, including engineering, planning, construction administration and surveying.

Project Manager for Pleasant Lake, a 347 unit Recreational Vehicle Park in Manatee County, including engineering, planning, construction administration and surveying.

Project Manager for Nottingham Woods, a 296-unit mobile home park in Manatee County, including engineering, planning and surveying.

Project Engineer for Lakeside South a 438 unit multifamily development in the City of Bradenton, including engineering and construction administration.

Project Engineer for Lake County, a 247-unit mobile home park in Manatee County, including engineering and construction administration.

Project Engineer for Vivienda, a 96 unit multifamily development in Manatee County, including engineering and construction administration.

Project Engineer for Woodlawn Lakes, a 100 unit single family development in Manatee County, including engineering and construction administration.

Project Engineer for Horseshoe Cove, a 400 unit travel trailer park in Manatee County, including engineering and construction administration.

Project Engineer for Bay River Pointe, a 48 unit multifamily development in Manatee County.

Project Engineer for Palms of Terra Ceia Bay, a 450 unit multifamily development in the City of Palmetto.

## **TRANSPORTATION PROJECTS**

**Bullard Parkway - Hillsborough County, Hillsborough County:** Project Manager for 1.5 miles of urban four lane divided highway with bridge. Responsible for development of complete construction plans, including preliminary design, survey, permitting, signing & pavement markings, maintenance of traffic, signalization and utility relocation plans.

**SR-52 - Pasco County, FDOT District 1:** Project Manager for 7.0 miles of rural four lane divided highway. Responsible for development of complete construction plans, including preliminary design, survey, permitting, signing & pavement markings, maintenance of traffic, signalization and utility relocation plans.

**Palmer Road - Sarasota County, Sarasota County:** Project Manager for 1.5 miles of 2 lane rural highway. Project Manager for development of complete construction plans, including preliminary design, survey, drainage study, pavement markings, maintenance of traffic, signage and utility relocation plans.



**Intersection of SR-70 & 45th Street East - Manatee County, Private Developer:** Project Manager for development of complete construction plans including preliminary design, survey, drainage, pavement markings, signage and utility relocation plans.

**Intersection of Belleair & Lake - Pinellas County, Pinellas County:** Project Manager for the development of complete construction plans including preliminary design, survey, drainage, pavement markings, signage and utility relocation plans.

**Intersection of SR- 686 & 49th Street - Pinellas County, Pinellas County:** Project Manager for the development of complete construction plans including preliminary design, survey, drainage, pavement markings, signage and utility relocation plans.

**59th Street West - Manatee County, Manatee County:** Project Engineer for 2.5 miles of 4 lane urban divided highway. Responsible for development of complete construction plans including preliminary design, right of way maps, drainage study, and pavement design.

**Canal Road – Manatee County, Manatee County:** Project Engineer for 3.0 miles of 2 lane rural highway. Responsible for development of complete construction plans including preliminary design, right-of-way maps, drainage study, and pavement design.

**Snead Island Road - Manatee County, Private Developer:** Project Engineer for 1.0 mile of rural 2 lane highway. Responsible for development of complete construction plans including preliminary design and pavement design.

**14th Avenue - Manatee County, Manatee County:** Project Engineer for 1.0 mile of rural 2 lane highway. Responsible for development of complete construction plans including preliminary design and pavement design.

**63rd Avenue - Manatee County, Manatee County:** Project Engineer for 0.5 mile of 4 lane urban highway. Responsible for development of complete construction plans including preliminary design, drainage study, right of way maps and pavement design.

**43rd Street West - Manatee County, Manatee County:** Project Engineer for 1.0 mile of 4 lane urban divided highway. Responsible for development of preliminary design, drainage study, right of way maps and pavement design.

**Tallevast Road - Manatee County, Manatee County:** Project Engineer for 1.0 mile of 4 lane urban divided highway. Responsible for development of preliminary design, drainage study and right of way maps.

**Cedar Hammock Parkway - Manatee County, Manatee County:** Project Engineer for 2.0 miles of 4 lane urban divide highway. Responsible for development of preliminary design and right of way maps.



**17th Street - Manatee County, Manatee County:** Project Engineer for 2.0 miles of 4 lane urban divide highway. Responsible for development of preliminary design and right of way maps.

## **TRANSPORTATION STUDIES**

**Harbor Ventures DRI - Manatee County:** Project Engineer for transportation study of a 5,000 unit residential development.

**Spoonbill Bay DRI - Manatee County:** Project Engineer for transportation study of a 2,000 unit residential development.

**Tara DRI - Manatee County:** Project Engineer for transportation study of a 4,500 unit residential development.

**Rivers Edge - Lee County:** Project Engineer for transportation study of a 4,000 unit residential development.

**Lemon Bay Shopping Center - Sarasota County:** Project Engineer for preparation of a traffic study for traffic signal warrants.  
**Bent Tree - Sarasota County:** Project Engineer for transportation study of a 300 unit residential development.

**Brewster Haynsworth DRI - Polk County:** Project Engineer for transportation study of a Phosphate Mine.

**Noranda-Hopewell - Hillsborough County:** Project Engineer for transportation study of a Phosphate Mine.

**IMC New Wales - Polk County:** Project Engineer for transportation study of a Phosphate Mine.

## **DEVELOPMENTS OF REGIONAL IMPACT**

**Cooper Creek - Manatee County:** Project Manager as a consultant for Manatee County to review the project for a substantial deviation of a 605 acre commercial, industrial and residential development.

**Tara - Manatee County:** Project Engineer for preparing the transportation section for a 4500 unit residential development.

**Rivers Edge - Lee County:** Project Engineer for preparing the transportation section for a 4000 unit residential development.

**Harbor Ventures - Manatee County:** Project Engineer for preparing the transportation, drainage, water and waste water section for a 5000 unit residential development.

**Spoonbill Bay - Manatee County:** Project Engineer for preparing the transportation, drainage, water and waste water section for a 2000 unit residential development.





**Brewster Haynsworth Mine - Polk County:** Project Engineer for preparing the transportation section for a Phosphate mine.

## **UTILITY PROJECTS**

**Sub-Aqueous Conduit Crossing - GTE Florida, Inc.:** Project Manager for preparation of construction plans, Dredge & Fill Permits and FDOT Permits for a 2,000 foot conduit crossing at Longboat Pass

**Lift Station Rehabilitation Project - City of Palmetto:** Project Engineer for preparation of construction plans and construction administration of 6 lift station rehabilitations.

**Snead Island Waterline - City of Palmetto:** Project Engineer for preparation of construction plans and construction administration for 2 miles of watermain.

**Nov. 1995-Present Orange Park Waterline - City of Palmetto:** Project Engineer for preparation of construction plans and construction administration of 1.5 miles of watermain.

**Elevated Water Storage Tank - City of Palmetto:** Project Engineer for construction administration for a 400,000 gallon hydropillar storage tank.

**Harbor Ventures DRI - Manatee County:** Project Engineer for design of master water and sewer system of a 5,000 residential unit development project.

**Spoonbill Bay DRI - Manatee County:** Project Engineer for design of master water and sewer system of a 2,000 residential unit development project.

**Lake Country - Manatee County:** Project Engineer for design of a 42,000 GPD sewage treatment plant for a 247 unit mobile home park.

**Tiki Village - Polk County:** Project Engineer for design of a 15,000 GPD sewage treatment plant for a 145 unit RV park.

**Bay River Pointe - Manatee County:** Project Engineer for design of a 10,000 GPD sewage treatment plant for a 48 unit multifamily development.

## **DRAINAGE PROJECTS**

**Villages of Biscay Square - Sarasota County:** Project Engineer for preparation of a Master Drainage Plan and Dredge & Fill permits for a 382 acre residential project.

**Peridia - Manatee County:** Project Manager for preparation of a Master Drainage Plan, Dredge & Fill permits and construction administration for a 200 acre residential project.



**Fairfax - Manatee County:** Project Manager for preparation of a Master Drainage Plan, Dredge & Fill permits and construction administration for a 55 acre residential project.

**55th Street Outfall - Manatee County:** Project Engineer for preparation of construction plans and construction administration for 1,500 feet of 42" RCP.

**Canal Road - Manatee County:** Project Engineer for drainage study to determine the proper size and slope for 3.0 miles of the existing open canal.

**City of Bradenton:** Project Engineer for the preparation of a Master Drainage Plan.

**Inwood Drainage Study - Polk County:** Project Engineer for the preparation of a master drainage plan for 500 acres of existing development.

**Harbor Ventures DRI - Manatee County:** Project Engineer for the preparation of a master drainage plan for 5,000 unit development project.

#### **GRANTS**

Snead Island Waterline - City of Palmetto  
Project Engineer for a grant submitted to FMHA.

Orange Park Waterline - City of Palmetto  
Project Engineer for a grant submitted to FMHA.

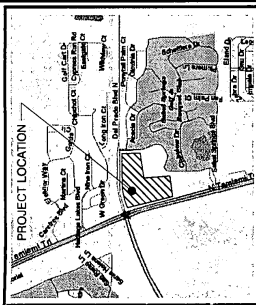
Northwest Water and Sewer - City of Palmetto  
Project Engineer for a grant submitted to FMHA.

Southeast Water and Sewer - City of Palmetto  
Project Engineer for a grant submitted to FMHA.

Riverside Park - City of Palmetto  
Project Engineer for a grant submitted to DNR.



## LOCATION MAP



## SITE DATA TABLE

SECTION, TOWNSHIP/RANGE  
SEC 22, T19S 43, R10 24  
PROPERTY LOCATION:  
SEC US 41 AND DEL PRADO BLVD.  
ZONING: EXISTING: CPD-AQ-2-RPD PROPOSED: CPD  
FUTURE LAND USE:  
SUBURBAN  
EXISTING LAND USE:  
COMMERCIAL (VACANT)  
PROPOSED LAND USE:  
SEE SCHEDULE OF USES  
SITE AREAS:  
31.87 ACRES ±

## GENERAL NOTES

1. NO MASS TRANSIT FACILITIES PROPOSED. NO MASS TRANSIT SERVICE AVAILABLE.
2. ANY WELLS DISCOVERED DURING EXCAVATION, EARTH MOVING OR CONSTRUCTION MUST BE REPORTED TO THE LEE COUNTY HEALTH DEPARTMENT. OWNER TO OBTAIN ALL PERMITS REQUIRED FOR DEMOLITION OF WELLS.
3. ALL POINTS OF ACCESS ARE CONCEPTUAL AND WILL BE FINALIZED AT PRELIMINARY PLAN REVIEW.

## INDIGENOUS PRESERVE




4.87 ACRES  
10.79 ACRES

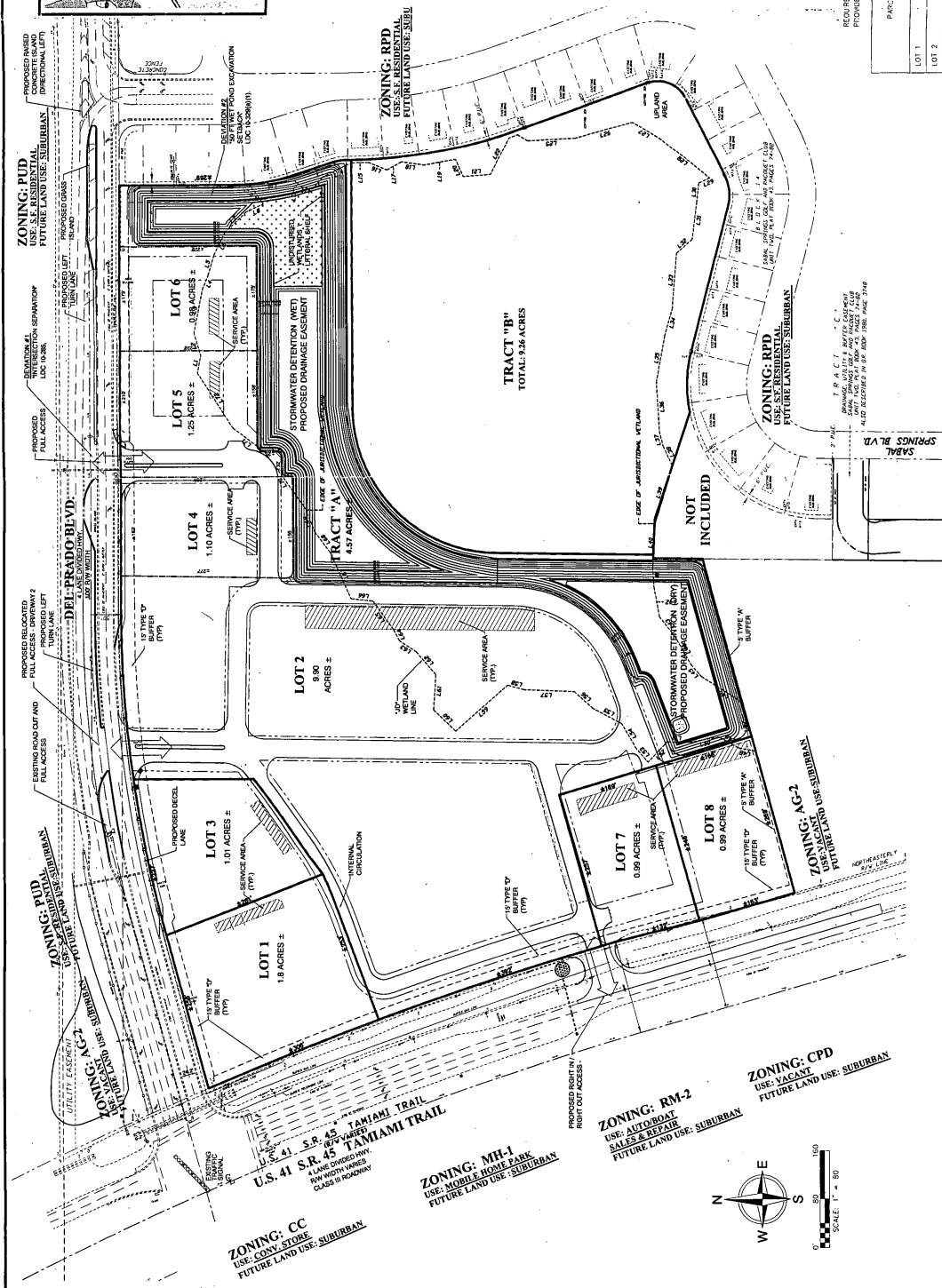
**OPEN SPACE**

REQUIRED OPEN SPACE: 9.56 AC. (30% OF ENTIRE PROJECT)  
PROVIDED OPEN SPACE: 15.63 AC. (49% OF ENTIRE PROJECT)

PANEL #	LOT	OPEN SPACE PROPOSED (ACRES)	OPEN SPACE REQUIRED	OPEN SPACE PROPOSED (ACRES)
LOT 1	1.882	10%		0.180
LOT 2	9.804	10%		0.99
LOT 3	1.014	10%		0.101
LOT 4	1.102	10%		0.110
LOT 5	1.254	10%		0.125
LOT 6	0.984	10%		0.095
LOT 7	0.994	10%		0.099
LOT 8	0.994	10%		0.099
TRACT A	4.574	100%		4.5701
TRACT B	9.264	100%		9.2604
TRACT C	11.824	100%		11.8207

## SITE LEGEND

-  SERVICE AREA LOCATIONS  
 PROPOSED ACCESS POINTS  
 LITTORAL SHELF/WATER GARDEN





**JANE A. CALDERA, PE**  
**DIRECTOR OF TRANSPORTATION SERVICES**



Ms. Caldera has more than 19 years of experience performing technical traffic analyses, traffic design work, and managing transportation projects. She has conducted freeway and arterial simulation studies, site impact studies, and alternative impact fee studies in addition to a wide variety of traffic operations and parking studies. Jane is responsible for managing private sector projects such as the transportation element of DRI's traffic concurrency studies, and comprehensive parking studies. Her public sector management experience includes miscellaneous traffic operation studies, CBD network simulation studies, and the traffic element of interchange preliminary engineering studies.

**PROJECT EXPERIENCE**

**Traffic Engineering Studies**

During Jane's 16-years in Florida she has worked on a wide variety of transportation projects for the Florida Department of Transportation. Her experience includes:

***Districtwide Access Management Support, FDOT District 7:***

Responsible for conducting traffic counts, intersection/median opening evaluations, travel-time delay studies and accident analysis of State roadways with safety or operational problems.

***Districtwide Traffic Operations, FDOT Districts 7, 1, & 5:*** Fieldwork included performing intersection turning movement counts, 24-hour approach counts, and intersection inventories for intersections with safety or operational problems including the collection and reduction of accident reports used in the preparation of collision diagrams. Data was analyzed and evaluated using HCS, PASSER, Transyt 7F, and SOAP software resulting in traffic signal warrant reports, and the optimization of signal phasing and timings to improve efficiency and safety.

***Districtwide Level of Services Analysis, FDOT District 4:*** Responsible for the selection of over 100 typical urban and rural roadway segments to verify the accuracy of FDOT's Art-Plan & Art-Tab analysis methods. Traffic characteristics for each roadway segment were obtained by conducting traffic counts, travel time and delay studies, arrival type studies, and saturation flow studies on the selected roadway segments throughout Broward, Palm Beach, Martin, St. Lucie, and Indian River Counties.

**EDUCATION**

BS, Civil Engineering,  
University of North Carolina-  
Charlotte, 1988

**PROFESSIONAL  
REGISTRATION**

Professional Engineer,  
Florida, 1998, #53116

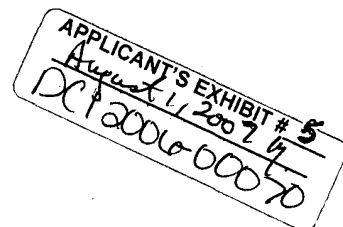
**PROFESSIONAL  
AFFILIATIONS**

Institute of Transportation  
Engineers (ITE)

American Society of Civil  
Engineers (ASCE)

**LENGTH OF SERVICE**

Entered profession in 1988  
Joined AVID in 1996



***Districtwide Access Management Study, FDOT District 4:*** Conducted roadway inventories to obtain design and operational characteristics of all State roadways throughout District 4. Data was analyzed and compiled to produce a comprehensive manual to support and document previously defined Access Management Classifications.

J. Caldera, PE  
Page 2

***Major Generator Trip Rate Study, FDOT District 7:*** Project Engineer involved in the development of specific methodology and a procedural manual for determining the trip characteristics of major generators in District 7. This included procedures for determining site selection, length of survey, independent variables, interview procedures, traffic count criteria and minimum requirements on standard deviations and correlation factors.

### **Freeway and Arterial Simulation Studies**

Manager or lead engineer for large-scale traffic simulation projects. Her traffic simulation experience includes extensive use of FHWA's Traf- Netsim and Fresim microscopic computer models. She has utilized these models to evaluate existing deficiencies and proposed improvement to interchanges and arterial streets including traffic signal timing. She has also applied the techniques of Netsim and Fresim to test alternative maintenance/protection of traffic and detour plans. Simulation project work includes

- Downtown Orlando Network Simulation Study
- Interstate 81/Davis Street Interchange Preliminary Engineering Study, Penn DOT, District 4
- US 98 Preliminary Design and Environmental Study
- US 441 Corridor Study
- McDonald's Sanibel Island Site Access Study
- Preparation of Procedures and Guidelines Manual for Florida DOT Interchange Justification Report
- Immokalee Road Simulation Study

### **Traffic Signal Design**

Responsible for the preparation of Signalization Plans for new construction, upgrading to current FDOT Standards, and modification for new approaches. This includes development of signalization layout, strain pole analyses, pole and foundation details, signal phasing and timing plans and summary of quantities. Signalization projects included the following locations:

- CR46A at Midway – Marion County
- US27 at Home Depot – Polk County
- SR70 at Rosedale – Manatee County
- SR524 at Industry Road – Bevard County
- Venice Avenue at Pinebrook Road – Sarasota County



## **Traffic Impact Studies**

J. Caldera, PE

Page 3

Manager or lead engineer for traffic impact studies including:

- University Shopping Center Site Traffic Analysis in North Carolina
- North Park Shopping Center Traffic Analysis and Englewood Corners Traffic Analysis in Florida
- Boulevard Mall Traffic Expansion Analysis in New York
- Public Supermarket Traffic Analysis in Georgia
- Wegmans Food Markets in eastern Pennsylvania

She has developed specific methodologies in several counties throughout the State of Florida for special Traffic Impact and Trip Generation Studies geared to assist private developers in getting their driveway permits, site plan approvals and County/City acceptance of the site specific trip generation and trip length data for the purpose of determining impact fees. Such studies include:

- Winn Dixie, Kash n' Karry, Publix and Albertsons Grocery Stores in South Carolina.
- Walgreens and Eckerd Drug Stores
- Bayside Center shopping center
- Luby's Cafeterias
- Fosters Hollywood restaurants
- Curlew Crossing shopping center in Pinellas County
- Cypress Meadows residential development
- Rock-L's Drive-thru restaurants in Hillsborough County
- Oak Grove residential in Pasco County
- Mt. Dora shopping center in Lake County
- The Sports Authority Store
- Okee Square shopping center in Palm Beach County.

## **Development of Regional Impact**

Responsible for the preparation of all technical analysis required for the transportation section of large scale developments of regional significance/impact (DRI's). Work includes:

- Downtown/Uptown West Palm Beach Development of Regional Impact Analysis
- Downtown Tampa Development of Regional Impact Analysis
- Robinson Town Centre Mixed-Use Regional Development Analysis (Pennsylvania)
- Northwood Development of Regional Impact

She has managed traffic analyses for the following projects

- Montage Mountain Mixed-Use Traffic Analysis
- Capital Fashion Plaza Regional Traffic Analysis
- North Fayette Comprehensive Traffic Analysis





### **Transportation and Transit Planning**

Manager or lead engineer for:

- Westshore/Ybor City Shuttle Plan in Tampa
- Pasco County Transit Development Plan
- Downtown/Uptown West Palm Beach Transit Ridership Survey
- Plantation Focus Area Long Range Transportation Plan in Raleigh

### **Parking Generation and Design**

Manager or lead engineer for:

- Tucson Mall Parking Design and Layout in Arizona
- Walt Disney World Traffic, Parking and Circulation Plans
- Oglethorpe Mall Parking Plan and Traffic Analysis in Georgia
- SoHo Collection – Hyde Park, Tampa
- Albertsons Grocery – St. Petersburg, Florida

### **Special Generator Studies**

Manager or lead engineer for:

- Florida State Fairgrounds Traffic Operations Study
- Ritz-Carlton Hotel Traffic Analysis
- Gainesville Mixed-Use Traffic Analysis
- Susquehanna Industrial Park (Hazardous Waste Incinerator) Transportation Plan

### **Transportation Research Studies**

Lead Engineer for the FDOT District 7 Major Trip Rate Study in Tampa. She also produced report detailing Transportation Surveys of Hazardous Materials for Union County, Pennsylvania.

### **ITS/Congestion Management Studies**

Lead Engineer for the City of Tampa - Advanced Traffic Management Signing Plan for the downtown area. This project involved designing and implementing a real-time traffic and parking information system to aid motorists to the event centers located in downtown Tampa. The event centers included the Ice Palace, Convention Center, Florida Aquarium, and Cruise Ship Terminal.

### **Miscellaneous Traffic Engineering**

Manager or lead engineer for:

- Miscellaneous Traffic Intersection Improvement Studies for Hillsborough County
- Central Connector Corridor Study in Orlando
- North Fayette Allocation of Benefits Study in Pittsburgh
- Lake Pontchartrain Causeway Safety Study in New Orleans



**WIN DEL PRADO**  
**PUD REZONE # DC12006-00070-PDL**

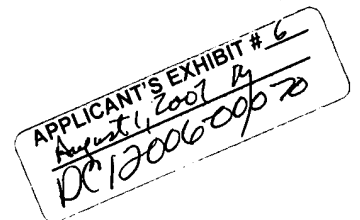
**EVIDENCE FOR DRIVEWAY WAIVER SUPPORT**  
**WAIVER #1**

**LEE COUNTY, FLORIDA**

**PREPARED**  
**FOR:**  
**LEE COUNTY**

**PREPARED**  
**BY:**  
**AVID Group**

**July 31, 2007**



## LIST OF EXHIBITS

### EXHIBIT A - EXCERPTS FROM DEL PRADO EXTENSION CORRIDOR STUDY

### EXHIBIT B – ROADWAY CAPACITY THRESHOLDS

- LEE DOT PEAK HOUR CAPACITY TABLES
- FDOT DAILY CAPACITY TABLES

### EXHIBIT C – FDOT ACCESS MANAGEMENT RULE 1497

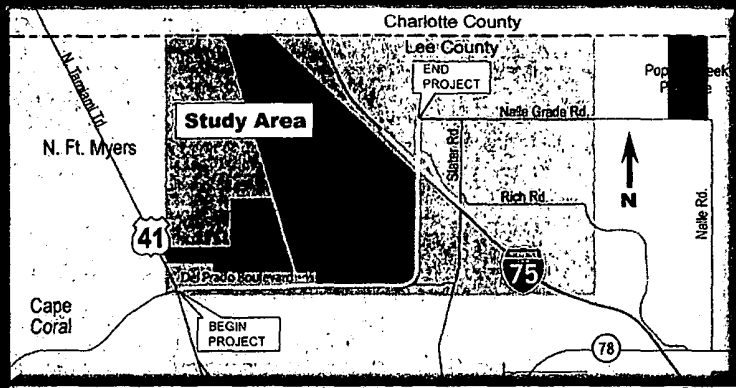
- ACCESS CLASS 3 FACILITY DEFINITION
- FDOT MINIMUM SPACING REQUIREMENTS
- FDOT S.I. 301 CRITERIA
- FDOT – DIRECT HUNT LETTER

### EXHIBIT D – REQUESTED SITE ACCESS PLAN

### EXHIBIT E – OVERALL DEL PRADO CORRIDOR ACCESS EXHIBIT

- US 41 to MELLO
- KISMET ROAD to US 41

### EXHIBIT F – PREVIOUS CORRESPONDENCE SUBMITTED TO COUNTY IN SUPPORT OF DRIVEWAY WAIVER



# Del Prado Extension Corridor Study

*from US 41 to I-75*

CN-04-15



September 2006



## Section 5.0

# TRAFFIC CONSIDERATIONS

### 5.1 Traffic Considerations

The analysis of potential traffic under several broad improvement scenarios was conducted utilizing the Lee County 2020 Cost Feasible Model. Three scenarios were developed. Scenario A is a no-build scenario. Scenario B assumes that Del Prado Boulevard will be widened to four lanes and extended north of I-75, but does not include an interchange with I-75. Scenario C assumes that Del Prado will be widened and extended north of I-75 and includes an interchange with I-75. The analysis of these scenarios was conducted to determine the general impact of different scenarios on both Del Prado Boulevard and the surrounding roadway network.

Under Scenario A, Del Prado Boulevard remains a two-lane undivided roadway between US 41 and Slater Road. The projected volumes of traffic on Del Prado Boulevard within the study limits range from 4,997 Average Annual Daily Traffic (AADT) near Slater Road to 6,137 AADT near US 41. Utilizing the updated Lee-Collier Model, the Lee Plan with the 2030 land use on existing plus committed highway network shows a projection of 10,500 AADT.

Scenario B assumes Del Prado Boulevard will be widened to four lanes and extended north of I-75 but does not include an interchange with I-75. Under this scenario Del Prado Boulevard traffic increases by approximately 20 percent to 7,713 AADT between US 41 and Slater and the extension is projected to carry approximately 6,300 AADT. The impacts to the surrounding roadway network include a 25 percent decrease of traffic on Slater Road as compared to the No-Build Scenario. Table 5-1 shows the anticipated impacts of this scenario on the surrounding roadway network.

Scenario C assumes Del Prado Boulevard will be widened to four lanes and extended north of I-75 and includes an interchange with I-75. Under this scenario Del Prado Boulevard traffic is projected to increase by approximately 25 percent to 8,300 AADT between US 41 and Slater Drive and the extension is projected to carry approximately 10,500 AADT. The impacts to the surrounding roadway network

Corridor Study  
September 10, 2006

Del Prado Boulevard  
Lee County, Florida

8,300-AADT PROJECTION  
35,700 - DAILY CAPACITY AT  
LOS "D"

5-1

$$\Rightarrow v/c = 0.23 = \text{LOS "B" or better}$$

include a 30 percent decrease in traffic on Slater Road between Nalle Grade Road and the Del Prado Extension and a 23 percent increase in traffic on Slater Road between SR 78 and Bayshore Road as compared to the No-Build. Table 5-1 shows the anticipated impacts of this scenario on the surrounding roadway network.

Under all three of these scenarios, Del Prado Boulevard would be expected to have an acceptable level of service.

**Table 5-1 – Traffic Analysis**

<b>TRAFFIC ALTERNATIVE COMPARISON</b>							
			<b>Scenario A</b>	<b>Scenario B</b>	<b>Scenario C</b>	<b>B vs A</b>	<b>C vs A</b>
<b>Del Prado</b>	Kismet Parkway	US 41	23,300	23,639	24,739	1%	6%
	US 41	Slater	6,137	7,713	8,250	26%	34%
	Slater	I-75	NA	6,281	10,520	100%	NA
	I-75	CR 31	NA	3,062	3,775	100%	NA
<b>Slater Rd</b>	Nalle Grade	Del Prado	2,563	2,048	1,967	-20%	-23%
	Del Prado	Bayshore	3,884	3,067	5,048	-21%	30%
<b>I-75</b>	N of Interchange	Del Prado	65,403	66,026	65,971	1%	1%
	Del Prado	Bayshore	65,403	66,026	61,401	1%	-6%
<b>US 41</b>	Runway	Del Prado	64,172	63,494	52,206	-1%	-19%
	Del Prado	Alt US 41	41,266	38,200	38,706	-7%	-6%
	Alt US 41	Pine Island Rd	41,266	29,685	27,751	-28%	-33%
<b>Alt 41</b>	Del Prado	Bayshore	31,413	30,119	29,292	-4%	-7%
<b>Bayshore</b>	Del Prado	US 41	28,912	28,677	27,817	-1%	-4%
	US 41	Alt 41	21,526	21,311	20,021	-1%	-7%
	Alt 41	Slater	36,493	29,490	36,574	-19%	0%
	Slater	I-75	36,493	33,036	30,693	-9%	-16%
	I-75	CR 31	14,601	12,114	11,238	-17%	-23%

**c:\input2**

Note: the service volumes for I-75 (freeway) should be from FDOT's most current version of LOS Handbook.



**TABLE 4 - 1**  
**GENERALIZED ANNUAL AVERAGE DAILY VOLUMES FOR FLORIDA'S**  
**URBANIZED AREAS\***

UNINTERRUPTED FLOW HIGHWAYS					
Lanes Divided		Level of Service			
		A	B	C	D E
2	Undivided	2,000	7,000	13,800	19,600 27,000
4	Divided	20,400	33,000	47,800	61,800 70,200
6	Divided	30,500	49,500	71,600	92,700 105,400

STATE TWO-WAY ARTERIALS					
Class I (>0.00 to 1.99 signalized intersections per mile)					
Lanes Divided		Level of Service			
		A	B	C	D E
2	Undivided	**	4,200	13,800	16,400 16,900
4	Divided	4,800	29,300	34,700	45,700 ***
6	Divided	7,300	44,700	52,100	53,500 ***
8	Divided	9,400	58,000	66,100	67,800 ***

Class II (2.00 to 4.50 signalized intersections per mile)					
Lanes Divided		Level of Service			
		A	B	C	D E
2	Undivided	**	1,900	11,200	15,400 16,300
4	Divided	**	4,100	26,000	32,700 34,500
6	Divided	**	6,500	40,300	49,200 51,800
8	Divided	**	8,500	53,300	63,800 67,000

Class III (more than 4.5 signalized intersections per mile and not within primary city central business district of an urbanized area over 750,000)

Lanes Divided		Level of Service			
		A	B	C	D E
2	Undivided	**	**	5,300	12,600 15,500
4	Divided	**	**	12,400	28,900 32,800
6	Divided	**	**	19,500	44,700 49,300
8	Divided	**	**	25,800	58,700 63,800

Class IV (more than 4.5 signalized intersections per mile and within primary city central business district of an urbanized area over 750,000)

Lanes Divided		Level of Service			
		A	B	C	D E
2	Undivided	**	**	5,200	13,700 15,000
4	Divided	**	**	12,300	30,300 31,700
6	Divided	**	**	19,100	45,800 47,600
8	Divided	**	**	25,900	59,900 62,200

NON-STATE ROADWAYS					
Major City/County Roadways					
Lanes Divided		Level of Service			
		A	B	C	D E
2	Undivided	**	**	9,100	14,600 15,600
4	Divided	**	**	21,400	31,100 32,900
6	Divided	**	**	33,400	46,800 49,300

Other Signalized Roadways (signalized intersection analysis)					
Lanes Divided		Level of Service			
		A	B	C	D E
2	Undivided	**	**	4,800	10,000 12,600
4	Divided	**	**	11,100	21,700 25,200

Source: Florida Department of Transportation Systems Planning Office  
605 Suwannee Street, MS 19  
Tallahassee, FL 32399-0450  
<http://www11.myflorida.com/planning/systems/sm/los/default.htm> 02/22/02

FREEWAYS					
Interchange spacing $\geq$ 2 mi. apart					
Lanes		Level of Service			
		A	B	C	D E
4		23,800	39,600	55,200	67,100 74,600
6		36,900	61,100	85,300	103,600 115,300
8		49,900	82,700	115,300	140,200 156,000
10		63,000	104,200	145,500	176,900 196,400
12		75,900	125,800	175,500	213,500 237,100

Interchange spacing < 2 mi. apart					
Lanes		Level of Service			
		A	B	C	D E
4		22,000	36,000	52,000	67,200 76,500
6		34,800	56,500	81,700	105,800 120,200
8		47,500	77,000	111,400	144,300 163,900
10		60,200	97,500	141,200	182,600 207,600
12		72,900	118,100	170,900	221,100 251,200

**BICYCLE MODE**  
(Note: Level of service for the bicycle mode in this table is based on roadway geometrics at 40 mph posted speed and traffic conditions, not number of bicyclists using the facility.) (Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Paved Shoulder/ Bicycle Lane		Level of Service			
		A	B	C	D E
Coverage		**	**	3,200	13,800 >13,800
0-49%		**	2,500	4,100	>4,100 ***
50-84%		3,100	7,200	>7,200	***
85-100%					***

**PEDESTRIAN MODE**  
(Note: Level of service for the pedestrian mode in this table is based on roadway geometrics at 40 mph posted speed and traffic conditions, not number of pedestrians using the facility.) (Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Sidewalk Coverage		Level of Service			
		A	B	C	D E
0-49%		**	**	**	6,400 15,500
50-84%		**	**	**	9,900 19,000
85-100%		**	2,200	11,300	>11,300 ***

**BUS MODE (Scheduled Fixed Route)**  
(Buses per hour)  
(Note: Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow.)

Sidewalk Coverage		Level of Service			
		A	B	C	D E
0-84%		**	>5	$\geq$ 4	$\geq$ 3 $\geq$ 2
85-100%		>6	>4	$\geq$ 3	$\geq$ 2 $\geq$ 1

ARTERIAL/NON-STATE ROADWAY ADJUSTMENTS					
DIVIDED/UNDIVIDED					
(alter corresponding volume by the indicated percent)					
Lanes	Median	Left Turns	Lanes	Adjustment Factors	
2	Divided	Yes		+5%	
2	Undivided	No		-20%	
Multi	Undivided	Yes		-5%	
Multi	Undivided	No		-25%	

**ONE-WAY FACILITIES**  
Decrease corresponding two-directional volumes in this table by 40% to obtain the equivalent one directional volume for one-way facilities.

\*This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Values shown are two-way annual average daily volumes (based on  $K_{100}$  factors) for levels of service and are for the automobile/truck modes unless specifically stated. Level of service letter grade thresholds are probably not comparable across modes and, therefore, cross modal comparisons should be made with caution. Furthermore, combining levels of service of different modes into one overall roadway level of service is not recommended. The table's input value defaults and level of service criteria appear on the following page. Calculations are based on planning applications of the Highway Capacity Manual, Bicycle LOS Model, Pedestrian LOS Model and Transit Capacity and Quality of Service Manual, respectively for the automobile/truck, bicycle, pedestrian and bus modes.

\*\*Cannot be achieved using table input value defaults.

\*\*\*Not applicable for that level of service letter grade. For automobile/truck modes, volumes greater than level of service D become F because intersection capacities have been reached. For bicycle and pedestrian modes, the level of service letter grade (including F) is not achievable, because there is no maximum vehicle volume threshold using table input value defaults.

(2) **Access Class Description and Standards.** The access classification system and standards are shown in Figures 1 and 2.

(a) **Access Class 1, Limited Access Highways.** These highways do not provide direct property connections. Highways in this class provide for efficient and safe high speed and high volume traffic movements, serving interstate, interregional, and intercity, and, to a lesser degree, intracity travel needs. Federal-Aid Interstate highways and Florida's Turnpike are typical of this Class. The interchange spacing standards, based on the Area Type the highway is passing through, are for the through lanes or main line of the facility. Interchanges with limited access collector distributor systems do not have to meet these standards, however such connections shall be approved by the Department and FHWA utilizing the Interchange Justification Report Process. In addition to meeting the spacing standards, new interchanges to the Interstate Highway System shall be to other public roads only and warranted based on an engineering analysis of the operation and safety of the system. An Interchange Justification Report pursuant to Section III, Title 23 USC, must be prepared by the applicant and approved by the Department and FHWA prior to any new connections to the Interstate Highway System being constructed.

1. New interchange requests must be consistent, to the maximum extent feasible, with adopted local government comprehensive plans and MPO transportation plans.

2. For proposed new interchanges on the Interstate Highway System, the applicant must update a Department and FHWA approved master plan (if applicable) if the interchange is not part of the plan or if the Department determines that a major change in the land use or traffic has occurred since approval of the master plan. After approval of the master plan update by the Department and FHWA, the applicant must prepare an Interchange Justification Report for concurrence by the Department and approval by FHWA prior to the new

14-97.003 Access Management  
Classification System  
and Standards

interchange being approved.

3. Based on an engineering study, prepared by the applicant, documenting why existing interchanges cannot be utilized, why alternative transportation system improvements are not economically, environmentally or socially acceptable and an analysis of the impact of the proposed new interchange on the safety and operation of adjacent interchanges and the limited access facility. Interchanges not meeting the spacing standards can be considered, however, such interchanges will only be approved by the Department and the Federal Highway Administration if the need for the interchange is clearly demonstrated, alternative transportation system improvements are determined not to be feasible, the use of existing interchanges including improvements to arterial roads leading to the interchange and necessary interchange improvements are shown as not feasible and the addition of the interchange does not cause an operational or safety problem on the limited access facility.

**(b) Access Classes 2 through 7, General Description.** The Access Management Classifications for controlled access highways (Classes 2 through 7) are arranged from the most restrictive (Class 2) to the least restrictive (Class 7). Generally the highways serving areas without existing extensive development or properties without subdivided frontages will be classified at the top of the range (Classes 2, 3, and 4). Those roadways serving areas with existing moderate to extensive development or subdivided properties will generally be classified in the lower classes of the range (Classes 5, 6, and 7). The standards for each class are further defined where the posted speed limit is greater than 45 MPH or where the posted speed limit is 45 MPH or less.

1. **Access Class 2.** These are highly controlled access facilities distinguished by the ability to serve high speed and high volume traffic over long distances in a safe and

14-97.003 Access Management  
Classification System  
and Standards

efficient manner. These highways are distinguished by a system of existing or planned service roads. This access class is distinguished by a highly controlled limited number of connections, median openings, and infrequent traffic signals. Segments of the State Highway System having this classification usually have the access restrictions supported by local ordinances and agreements with the Department.

**2. Access Class 3.** These facilities are controlled access facilities where direct access to abutting land will be controlled to maximize the operation of the through traffic movement. This class will be used where existing land use and roadway sections have not completely built out to the maximum land use or roadway capacity or where the probability of significant land use change in the near future is high. These highways will be distinguished by existing or planned restrictive medians and maximum distance between traffic signals and driveway connections. Local land use planning, zoning and subdivision regulations should be such to support the restrictive spacings of this designation.

**3. Access Class 4.** These facilities are controlled access highways where direct access to abutting land will be controlled to maximize the operation of the through movement. This class will be used where existing land use and roadway sections have not completely built out to the maximum land use or roadway capacity or where the probability of significant land use change in the near future is high. These highways will be distinguished by existing or planned non-restrictive median treatments.

**4. Access Class 5.** This class will be used where existing land use and roadway sections have been built out to a greater extent than those roadway segments classified as Access Classes 3 and 4 and where the probability of major land use change is not as high as

those roadway segments classified Access Classes 3 and 4. These highways will be distinguished by existing or planned restrictive medians.

**5. Access Class 6.** This class will be used where existing land use and roadway sections have been built out to a greater extent than those roadway segments classified as Access Classes 3 and 4 and where the probability of major land use change is not as high as those roadway segments classified Access Classes 3 and 4. These highways will be distinguished by existing or planned non-restrictive medians or centers.

**6. Access Class 7.** This class shall only be used in urbanized areas where existing land use and roadway sections are built out to the maximum feasible intensity and where significant land use or roadway widening will be limited. This class shall be assigned only to roadway segments where there is little intended purpose of providing for high speed travel. Access needs, though generally high in those roadway segments, will not compromise the public health, welfare, or safety. Exceptions to standards in this access class will be considered if the applicant's design changes substantially reduce the number of connections compared to existing conditions. These highways can have either restrictive or non-restrictive medians.

Specific Authority 334.044(2), 335.188 FS.

Law Implemented 334.044(10)(a), 335.188 FS.

History-New

FIGURE 2

FDOT

CONTROLLED ACCESS FACILITIES

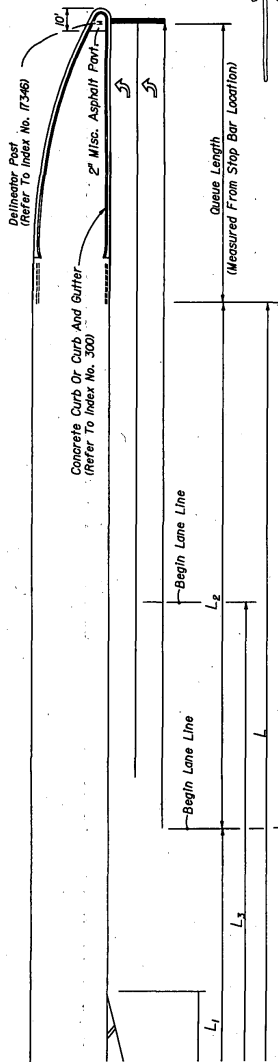
ACCESS CLASS	FACILITY DESIGN FEATURES	MINIMUM CONNECTION SPACING	MINIMUM MEDIAN OPENING SPACING	MINIMUM MEDIAN OPENING SPACING	MINIMUM SIGNAL SPACING
	(MEDIAN TREATMENT AND ACCESS ROADS)	(FEET)	(FEET)	FULL (MILE)	(MILE)
2	Restrictive with Service Roads	1320/660	1320'	0.5	0.5
3	Restrictive	660/440	1320'	0.5	0.5
4	Non- Restrictive	660/440	N/A	N/A	0.5
5	Restrictive	440/245	660'	0.5/0.25	0.5/0.25
6	Non- Restrictive	440/245	N/A	N/A	0.25
7	Both	125	330'	0.125	0.25

(Greater than 45 MPH/ Less than or = 45 MPH)

NOTE: \* Section 14-97.003 and 14-97.004, FAC, contain supplementary and more detailed instructions for the use of these standards.

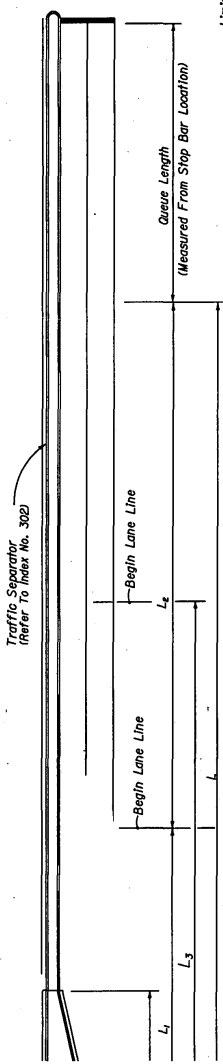
14-97.003 Access Management  
Classification System  
and Standards

TURN LANES CURBED AND UNCURBED MEDIANS									
URBAN CONDITIONS					RURAL CONDITIONS				
Design Speed (mph)	Entry Clearance Distance $L_1$	Brake To Stop Distance $L_2$	Total Decel. Distance $L_3$	Clearance Distance $L_4$	Design Speed (mph)	Entry Clearance Distance $L_1$	Brake To Stop Distance $L_2$	Total Decel. Distance $L_3$	Clearance Distance $L_4$
35	25	70'	145'	110'	40	30	80'	155'	125'
40	30	80'	155'	125'	45	35	85'	165'	135'
50	40/44	105'	135'	160'	55	40/44	105'	135'	160'
60	50	125'	145'	195'	65	50	125'	145'	195'
65	55	145'	170'	230'					



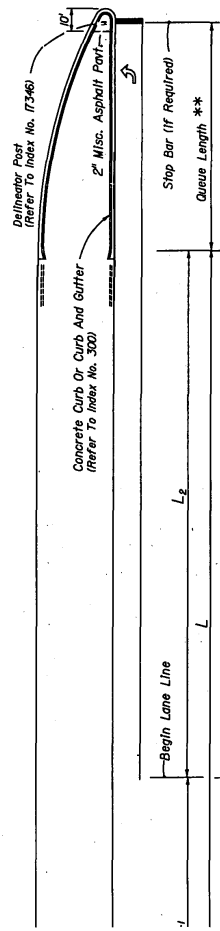
### FLUSH AND/OR CURBED SEPARATION

ing Vehicle Clears Through Lane, v Design Speed For Urban Condition ing Speed For Rural Condition



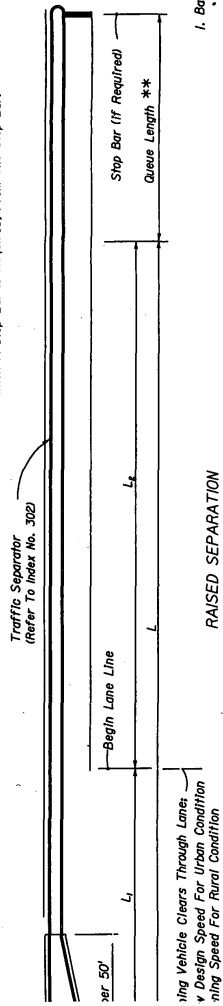
### RAISED SEPARATION DOUBLE LEFT TURNS

ing Vehicle Clears Through Lane, v Design Speed For Urban Condition ing Speed For Rural Condition



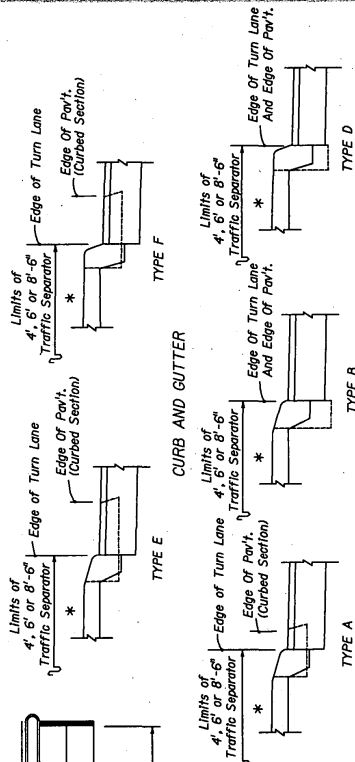
### FLUSH AND/OR CURBED SEPARATION

\*\* Queue Length Is Measured From The Median Nose Radial Point Or, When A Stop Bar Is Required, From The Stop Bar.



### RAISED SEPARATION

ing Vehicle Clears Through Lane, v Design Speed For Urban Condition ing Speed For Rural Condition



For Curb And Gutter Types, See Index No. 300  
\* Option 1 Separators Shown (Refer To Index No. 302)

### MEDIAN CURB AND TRAFFIC SEPARATOR JUNCTURE DETAILS

#### GENERAL NOTES

1. The plan views shown are for turn lane taper shapes and dimensions purposes only they do not prescribe the use of curb, curb and gutter, shoulders nor separators specifically to either rural or urban conditions.
2. Total deceleration distances must not be reduced except where lesser values are imposed by unobstructed control points.
3. Right turn lane tapers and distances identical to left turn lanes under stop control conditions.
4. Right turn lane tapers and/or distances are site specific under free flow or yield conditions.
5. These left turn configurations apply to continuous left turn lanes only where specifically called for in the plans.
6. For pavement markings see Index No. 17346.

#### DESIGN NOTES

1. Basis for turn lane configurations:  
\* Informed Driver.  
\* Stop condition (With Or Without Stop Control).

### TURN LANES

001-039



## Florida Department of Transportation

JEB BUSH  
GOVERNOR

October 13, 2006

DENVER J. STUTLER, JR.  
SECRETARY

Mr. George Alexandris, Project Manager  
The Paradise Group  
2901 Rigsby Lane  
Safety Harbor, FL 34695

OCT 19 2006

Re: Section 12010; SR 45 (US 41) Del Prado Extension (MP 29.927)  
AMRC meeting September 1, 2006  
Paradise Group Development

Dear Mr. Alexandris:

This letter is to follow-up the Access Management Review Meeting on September 1, 2006. First let me apologize for how long it has taken to review your appeal to the Committee. We wanted to research every possible avenue before finalizing the answer. First, our review and research with Lee County and other agencies failed to substantiate the need for an additional connection to US 41.

During the meeting we stated our concerns with a variance; however we did agree to consider an option of providing a right turn only connection if the intersection was provided with dual right turn lanes. We continue to be concerned about the safe operation of such a scenario primarily due to the weaving maneuvers inside the dual right turn lanes by vehicles making last second decisions at the project connection. To further exasperate this concern, the traffic volumes do not generate a need for dual right turns at this approach in the near future.

\* We discussed your request for two full access points to Del Prado with Lee County and they have confirmed both will be allowed. Finally, we cannot accommodate your request for the variance to provide a right-in only connection on US 41 based on the reasons stated above. As stated in the meeting, we are of the opinion adequate and reasonable access to the site is provided without the right in only connection.

We appreciate the opportunity to meet and discuss your concern. We know you share in our concern for a safe and efficient transportation system.

Sincerely,

Deborah L. Hunt

Director of Transportation Operations

DLH:RLH:rlw

cc: Jane Caldera, P.E., Director of Traffic/Transportation, Avid Engineering  
Mike Rippe, Director of Production  
Sharon Hedrick, District Maintenance Administrator  
Bernie Masing, P.E., District Design Engineer  
Scott McCall, Project Manager  
L.K. Nandam, P.E., District Traffic Operations Engineer  
Gary Amig, District Access Management/Safety Program Manager  
Ronnie Hancock, Access Management Manager  
Mark Clark, Access Management Specialist

District One

801 N. Broadway Ave. \* Post Office Box 1249 \* Bartow, FL 33831-1249  
(863) 519-2201 \* (863) 534-7265 (Fax) \* MS 1-1

www.dot.state.fl.us

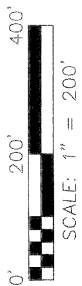
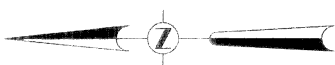




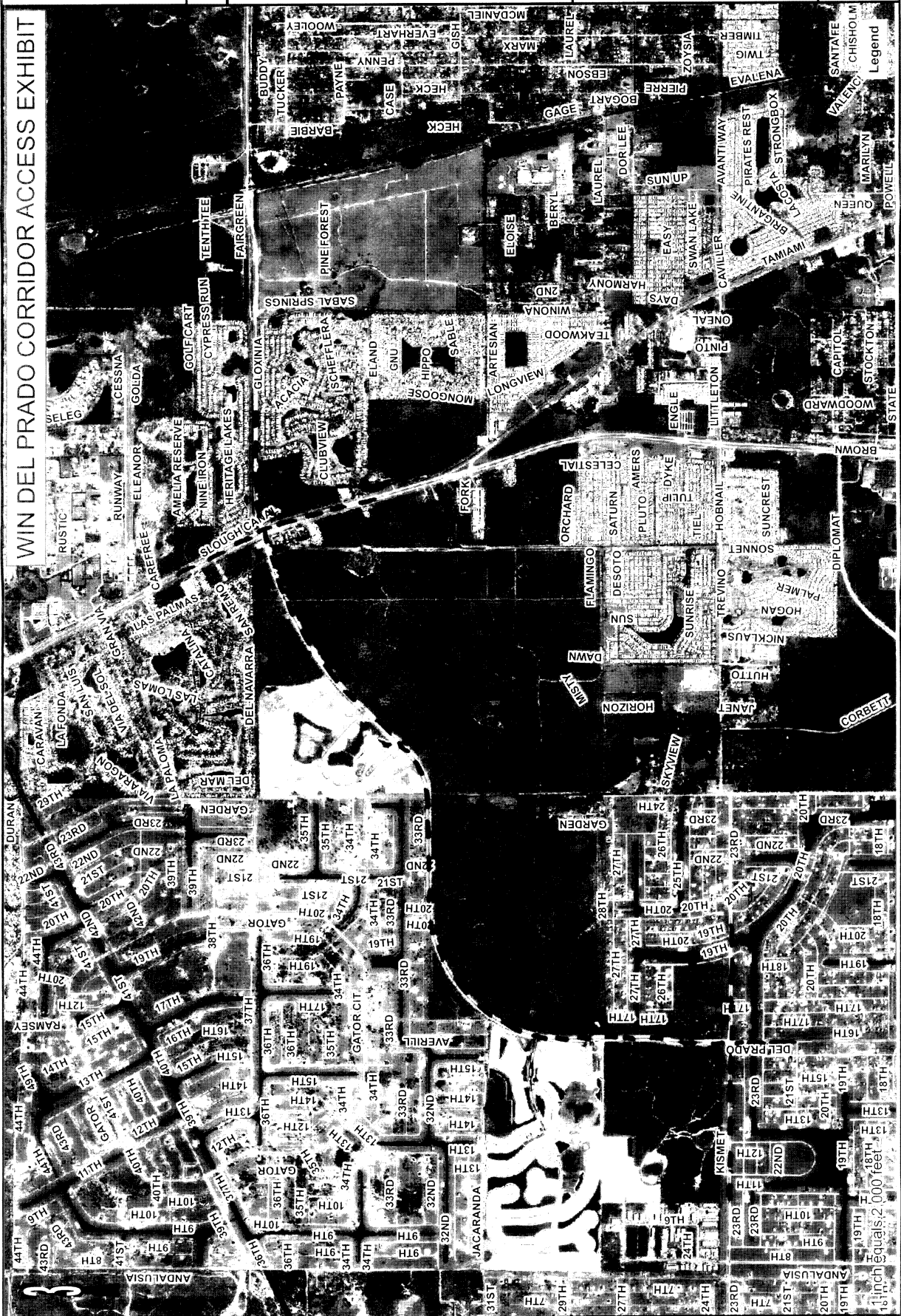
CIVIL ENGINEERING  
2300 CUREW ROAD, STE 100  
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LAND PLANNING  
TRAFFIC/TRANSPORTATION  
LANDSCAPE ARCHITECTURE  
ENVIRONMENTAL SCIENCES  
PHONE (727) 789-9500  
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GIS  
AVISO GROUP.COM

**TRAFFIC EXHIBIT**  
**PARADISE SHOPPES @ DEL PRADO**  
**LEE CO., FLORIDA**

SCALE: 1" = 200'  
DATE: 7-31-07  
JOB NO.: 001-040  
SHEET NO.: 1 of 1

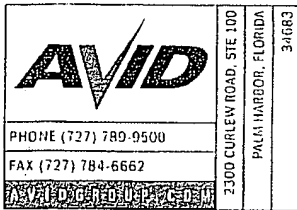


## WIN DEL PRADO CORRIDOR ACCESS EXHIBIT



GOVERNMENT OF THE DISTRICT OF COLUMBIA  
OFFICE OF THE ATTORNEY GENERAL  
1000 PENNSYLVANIA AVENUE, N.W.  
WASHINGTON, D.C. 20540  
TEL: (202) 725-6000  
FAX: (202) 725-6000





June 14, 2007

Andrew Getch, P.E.  
Engineering Manager I  
Lee County DOT  
1500 Monroe Street, 3<sup>rd</sup> Floor  
Fort Myers, Florida 33901

**Re: Project Name: Win-Del Prado CPD**  
**Petition No.: DC12006-00070-PDL Application (Major PD)**  
**Response to Deviation #1 Findings - (LDC Section 10-285(a) Connection Separation)**

Dear Andy,

We have reviewed the internal memorandum that you sent to Mr. Tony Palermo (dated May 18, 2007) regarding Win-Del Prado CPD Deviation Request # 1. In your absence last week, I spoke by telephone with Harry Campbell to express our strong concern with the LCDOT staff recommendation of DENIAL of Deviation #1 (LDC Section 10-285(a) Connection Separation). Based on the past 3 meetings that we have had with the LCDOT staff, 2 of which I personally attend, we were under the impression that we had staff level support of the deviation request. Based on my recent discussions with Mr. Campbell it has come to our attention that the Director of Planning & Programming and the Director of Design do not support the deviation request.

We would like the opportunity to respond to the comments in your May 18, 2007 Memorandum and present alternative(s) that will make the county staff comfortable with supporting the deviation request. The following is a brief response to some of comments/concerns presented in your memorandum:

*County Comment: Map 3b of the Lee Plan depicts Del Prado Boulevard with a future functional classification as an arterial.*

**Response:** We acknowledge the future functional classification this section of Del Prado as an "arterial", and that the LDC requires a connection separation of 660 feet, or the approval of a deviation to LDC 10-285(a), arterial connection separation. The need to have a deviation approved to have 2 driveway connections to Del Prado Boulevard was discussed at our first access review meeting with you and Mr. Campbell on 6/27/06.

*County Comment: The Official Trafficways Map identifies an east-west arterial along what is now Del Prado Boulevard east of U.S. 41. The Interstate 75 Master Plan identifies Del Prado Boulevard as a future interchange with I-75. The Metropolitan Planning Organization 2030 Highway Plan identifies the Del Prado extension as a contingent project to be evaluated with tolls. The project is in the area of the Del Prado Extension Corridor Study to evaluate alignments for an extension to a new interchange with I-75 and a widening of Del Prado Boulevard to four lanes. The alignment alternatives do not identify right-of-way needs from the subject property.*

**Response:** We are willing to work with the county to develop an alternative that meets the intent of the county and MPO plans for the future east-west corridor. However, since this section Del Prado Boulevard that we are requesting access to is on the very end of the potential new corridor, is already 4 lanes, and

has a major at grade intersection in close proximity (US 41); the likelihood of having a limited access/toll facility is low.

Based on your review of the Del Prado Extension Corridor Study, dated September 2006, (prepared by Inwood Consulting Engineers) the estimated AADT on this section of Del Prado Boulevard range from 6,137 vpd to 8,250 vpd for Scenarios A, B and C. The corridor study does not identify or recommend new access management criteria.

*County Comment: The Lee County Land Development Code Section 10-285 requires connection separation to be based on the future functional classification of a roadway. The future functional classification of Del Prado east of U.S. 41 is an arterial. Per LDC 10-285(a), arterial connection separation is a minimum of 660 feet. The Master Concept Plan indicates a proposed connection separation of approximately 750 feet from proposed western entrance to the intersection of Del Prado Boulevard and U.S. 41, Deviation #1 for 473 feet between the proposed two project entrances, and approximately 620 feet between the proposed eastern entrance and Sabal Springs Boulevard. The project does not have sufficient frontage to meet the minimum arterial connection separation for two access points to Del Prado Boulevard. LCDOT staff recommends DENIAL of Deviation #1.*

**Response:** We have been aware of the need to have a deviation approved to have 2 driveway connections to Del Prado Boulevard since our first access review meeting with you and Mr. Campbell on 6/27/06; hence we prepared additional technical information and a conceptual design to county staff in effort to gain support for the 2 driveways. During our 1/24/07 meeting with county staff we again reviewed the access plan for Del Prado Boulevard and felt we received full support from LCDOT staff. Based on the direct that we received from staff at the 6/27/07 and 1/23/07 meetings, Paradise/AVID has proceeded with submittal of DO 2007-00070 & DO 2007-00071. These DO drawings are currently being reviewed by county staff for the second time.

*County Comment: The Master Concept Plan indicates proposed median openings and alterations for the project. A determination regarding median openings is made consistent with AC-11-3 at the time of local development order review. LCDOT recommends removal of the notes and linework depicting median openings and alteration from the Master Concept Plan.*

**Response:** Acknowledged, you did inform us during our 6/27/06 meeting we could apply for a deviation to get the proposed/requested driveways locations approved with the zoning, but that the specifics related to design and operations (i.e. approval of median openings, permitted left turn movements, etc) can not be reviewed and approved until the time of the local development order stage. We can remove the line work from the Master Concept Plan attached to the zoning approval, but we felt the details of how the median on Del Prado Boulevard would be potentially modified was necessary to support the location of the driveway connections and the requested deviation.

#### Alternative Access Plan

In consideration of the county's concern to protect this corridor based on potential future plans, Paradise/AVID would agree to modify the site access plan and the Del Prado median to have the eastern driveway operate as a right in/out driveway. This could be accomplished by extending the existing landscape median from its current termination point, approximately 200 feet east. The landscape median would physically prohibit left turn movements at the driveway and thereby, reducing the site traffic estimated to use the driveway from 84 vph to 22 vph, which is a 73 percent reduction.





Win Del-Prado CPD  
June 11, 2007  
Response to Deviation #1 Findings

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For comparison purposes, if you support our proposed alternative to approve the 2<sup>nd</sup> driveway to Del Prado as a "right in/out" you would be in compliance with FDOT Access Management Standards for FDOT's most restrictive Access Class, Classification of "3". The FDOT spacing requirement for Class "3" roadways is 440 feet, for right in/out driveway connections on arterials with a posted speeds less than or equal to 45 mph.

In summary, we would you to reconsider our deviation request based the alternative plan we have proposed in the paragraph above. If a meeting if necessary is obtain staff support this alternative access plan and approval of the deviation request, we have set up a meeting with Dave Loveland for June 29, 2007 at 10 am.

Please contact me at your earliest convenience to discuss this matter further.

Sincerely,  
**AVID Group**



Jane A. Caldera, PE  
Director of Transportation Services

Cc: Harry Campbell, P.E. - DOT Chief Traffic Engineer  
Tony Palermo - Senior Planner  
Matthew D. Uhle - Knott, Consoer, Ebelini, Hart & Swett, P.A.  
George P. Alexandris - The Paradise Group  
Aimee Boulet, P.E. - AVID Group  
Peter Cowell - AVID Group

**Jane Caldera**

---

**From:** Jane Caldera  
**Sent:** Monday, July 02, 2007 5:27 PM  
**To:** Dave Loveland (loveladm@leegov.com); Andrew Getch (getchaj@leegov.com)  
**Cc:** George Alexandris; Bob Brett; Aimee Boulet; Heather Mevers; 001039  
**Subject:** Win Del Prado: Petition No. DC12006-00070-PDL Application (Major PD)  
**Attachments:** Alternative 2\_7-2-07.pdf; Post Devel\_7-2-07.pdf; TMCs\_7-2-07.pdf

Dave/Andy,

Thank you for meeting with us last week to further review our requested site access plan to Del Prado Boulevard.

Attached please find the alternative site access plan that we discussed with you at our meeting last week. I will refer to this alternative plan as Alt. # 2. As we discussed at the meet we would agree to have 2<sup>nd</sup> driveway connection to Del Prado (eastern most) be constructed as a right in/out driveway. We feel the following points/facts support a staff level approval of the 2<sup>nd</sup> driveway request to Del Prado Boulevard.

- Approval of 2<sup>nd</sup> driveway to Del Prado as a "right in/out" is in compliance with FDOT Access Management Standards for FDOT's most restrictive Access Class, Classification of "3". The FDOT spacing requirement for Class "3" roadways is 440 feet, for right in/out driveway connections on arterials with a posted speeds less than or equal to 45 mph.
- A full length right turn deceleration (per DOT standards) can be constructed to this driveway to safely remove the site related right turn movements from eastbound through lanes, thereby minimizing any potential impact to the carrying capacity of Del Prado.
- Based on the traffic information contained in the Prado Extension Corridor Study, dated September 2006, (prepared by Inwood Consulting Engineers) the estimated AADT on this section of Del Prado Boulevard ranges from 6,137 vpd to 8,250 vpd for Scenarios A, B and C. Assuming the highest AADT estimate of 8,250 vpd this section of Del Prado (with a new interchange to I-75) is projected to operate at LOS "B" or better (based on FDOT LOS "B" capacity threshold of 29,300 vpd) for Class I Arterials; the addition of a right in/out driveway connection to a roadway facility projected to operate LOS "B" or better would not be expected to negatively impact traffic operations or capacity of an arterial facility.
- The approval of a second driveway to Del Prado Boulevard for the proposed shopping center development will allow approximately 28 % or 110 vph of the total traffic volumes projected to arrive and depart the site via Del Prado Blvd. to be shifted to the requested 2<sup>nd</sup> access driveway and in turn providing a more even distribution of site traffic and reducing potential traffic congestion if only one driveway to Del Prado is permitted.

As we discussed at our meeting last week the traffic volumes using this entrance to the Sable Springs residential development are very low and in AVID's professional opinion a right in/out driveway connection as proposed in Alt # 2, would not be expected to negatively impact traffic operations or capacity this facility.

Also attached for your review are copies of the traffic counts at Del Prado and Sable Springs and the Post Development Traffic Projections along this section of Del Prado Boulevard for the one versus two

driveway scenario. FYI: the counts conducted at the Sable Springs entrance driveway were increase by 22% to reflect peak season conditions

We feel that we have provided the county with an access plan alternative for Del Prado Boulevard that support/justifies our deviation request.

We look forward to your comments.

Regards,  
Jane

**Jane A. Caldera, P.E.**

Principal

Director of Traffic/Transportation Services

**AVID Group**

2300 Curlew Road, Suite 100

Palm Harbor, Florida 34683

Tel: (727) 789-9500

Fax: (727) 784-6662

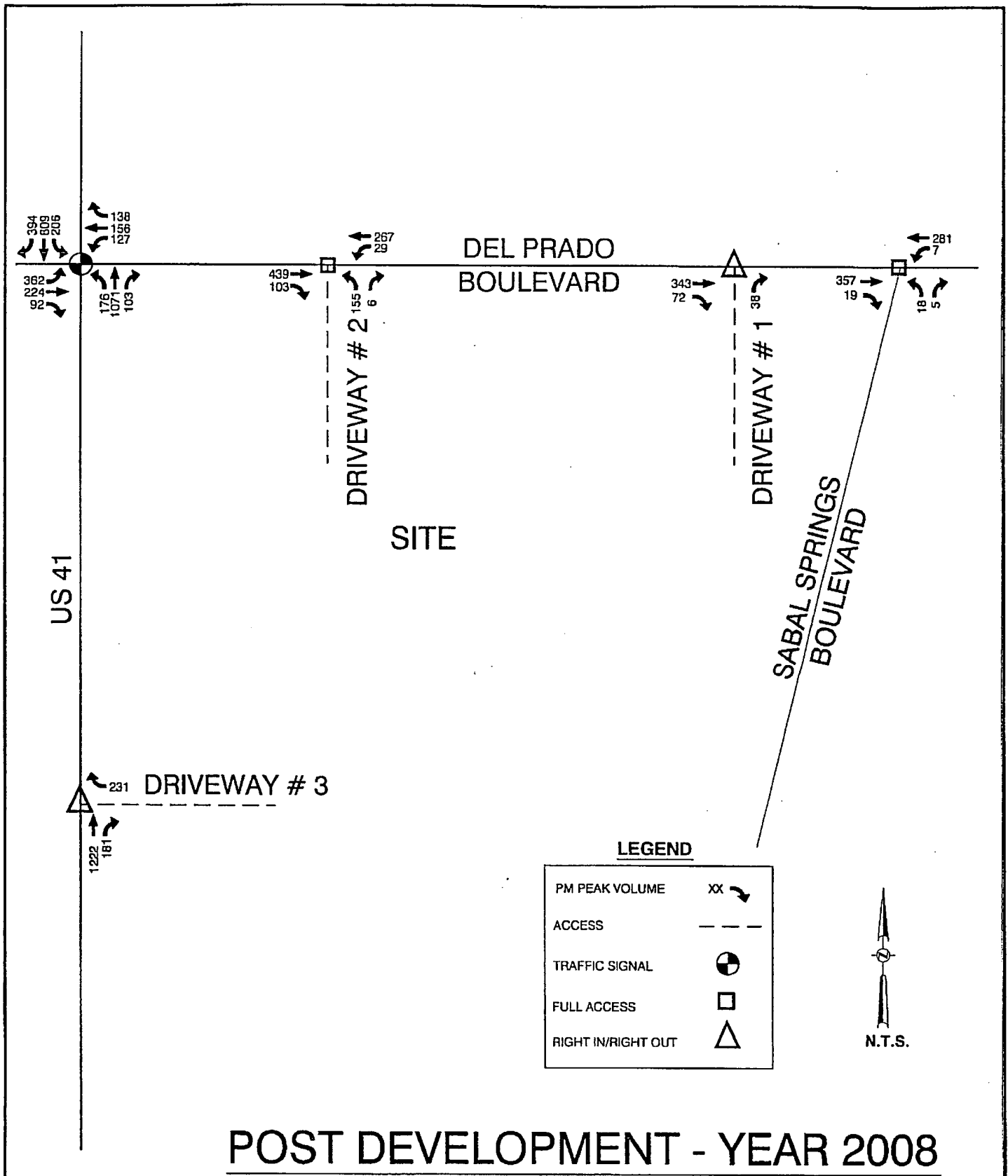
Mobile Tel: (727) 647-0346

[jane.caldera@avidgroup.com](mailto:jane.caldera@avidgroup.com)

<http://www.avidgroup.com>

7/3/2007





(REVISED 7/2/07)



Civil Engineers Planners Traffic Engineers  
Landscape Architects Environmental Engineers

2300 Curlew Road, Suite 100  
Palm Harbor, Florida 34683  
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www.avideng.com

Our company name stands for itself...

PROJECT: SABLE SPRINGS COMMERCIAL CENTER

APPLICANT: PARADISE DEVELOPMENT

LOCATION: LEE COUNTY

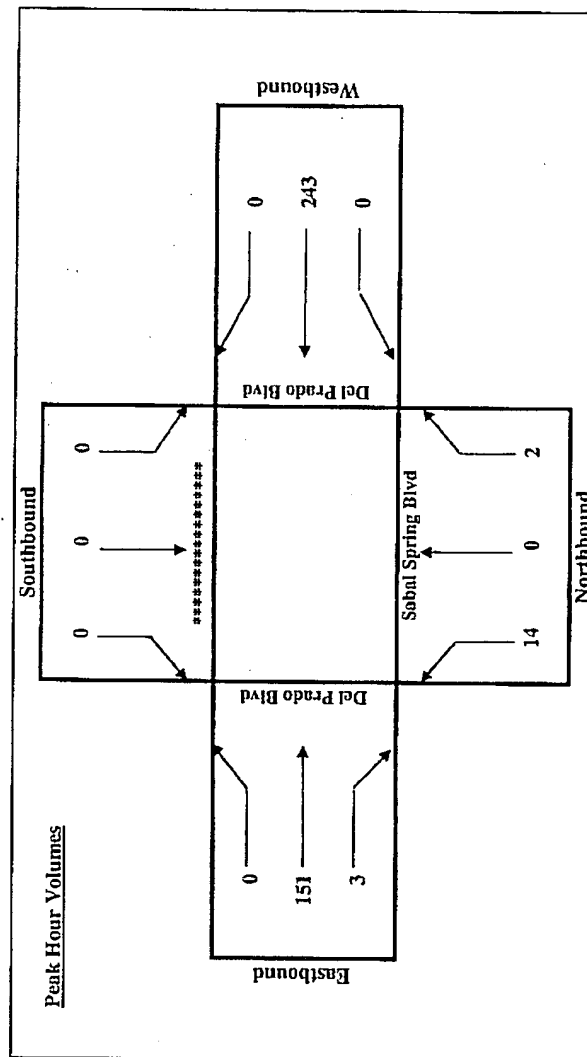
FIGURE: 5

# TURNING MOVEMENT COUNT ANALYSIS

## AUTOS & TRUCKS

Intersection (N/S): Sabal Spring Blvd  
 Intersection (E/W): Del Prado Blvd  
 Date: 7/18/2006

Sabal Spring Blvd				*****				Del Prado Blvd				Del Prado Blvd			
Start		End		NB		SB		EB		WB		L		T	
R	T	R	T	R	T	R	T	R	T	R	T	R	T	R	T
0	0	0	0	0	0	0	0	0	29	0	69	0	0	0	0
1	0	1	0	0	0	0	0	1	46	0	60	0	0	0	0
1	0	1	0	0	0	0	0	1	42	0	60	0	0	0	0
0	0	0	0	0	0	0	0	1	34	0	54	0	0	0	0
1	0	1	0	0	0	0	0	0	28	0	39	0	0	0	0
0	0	0	0	0	0	0	0	0	42	0	44	0	0	0	0
1	0	1	0	0	0	0	0	1	31	0	31	0	0	0	0
1	0	1	0	0	0	0	0	2	32	0	46	0	0	1	0
Total for: 7:00 AM 8:00 AM				2	0	0	0	0	151	0	243	0	0	0	413
Total for: 8:00 AM 9:00 AM				3	0	0	0	3	133	0	160	0	0	1	323
Total Peak Hour: 7:00 AM 8:00 AM				2	0	0	0	3	151	0	243	0	0	0	413
Overall PHF: 0.930															

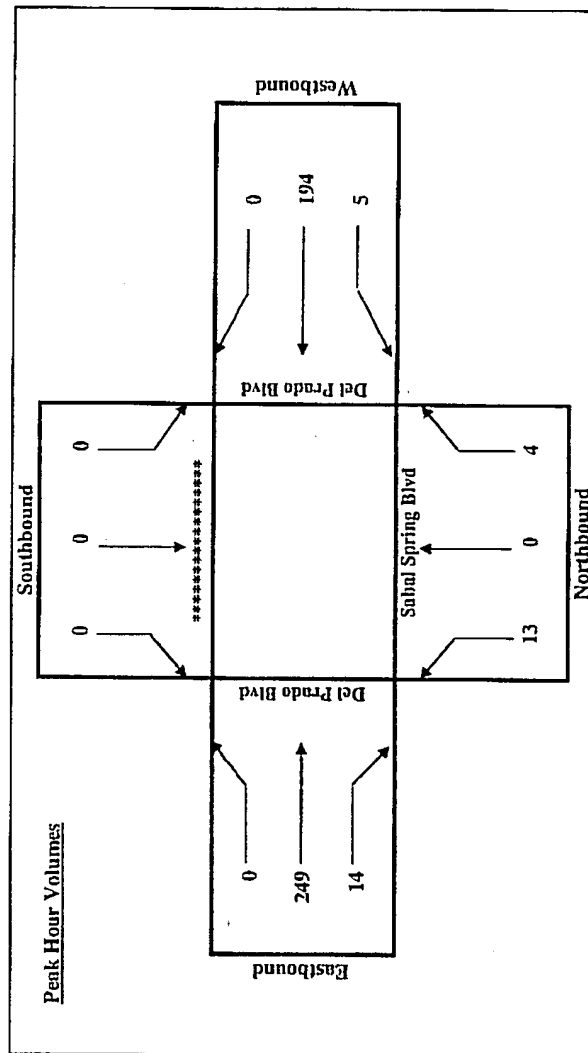


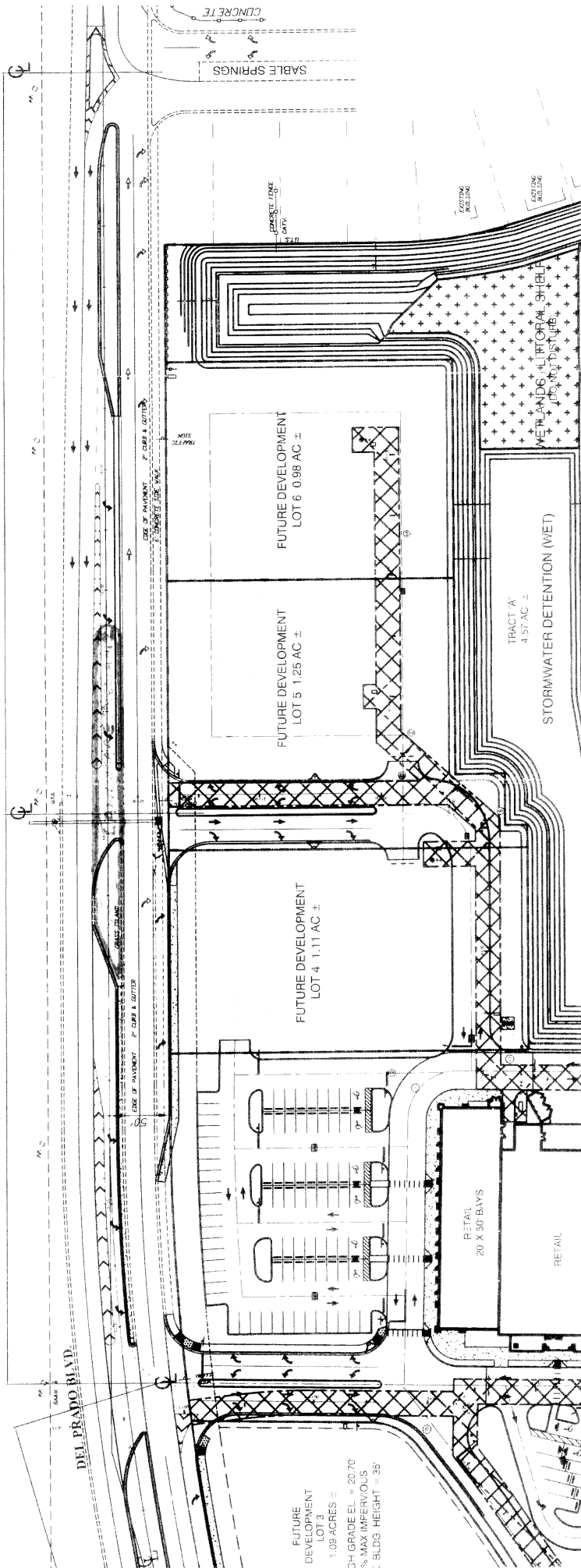
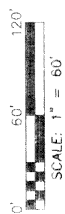
# TURNING MOVEMENT COUNT ANALYSIS

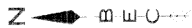
## AUTOS & TRUCKS

Intersection (N/S): Sabal Spring Blvd  
 Intersection (E/W): Del Prado Blvd  
 Date: 7/17/2006

Sabal Spring Blvd					Del Prado Blvd										Del Prado Blvd				
					*****														
Start      End		NB			SB			EB			WB			TOTAL					
		R	T	L	R	T	L	R	T	L	R	T	L						
4:00 PM	4:15 PM	0	0	2	0	0	0	8	50	0	0	42	2	104					
4:15 PM	4:30 PM	0	0	5	0	0	0	2	63	0	0	33	0	103					
4:30 PM	4:45 PM	1	0	9	0	0	0	5	46	0	0	36	0	97					
4:45 PM	5:00 PM	2	0	3	0	0	0	2	63	0	0	36	1	107					
5:00 PM	5:15 PM	2	0	3	0	0	0	7	62	0	0	45	1	120					
5:15 PM	5:30 PM	0	0	6	0	0	0	2	48	0	0	63	3	122					
5:30 PM	5:45 PM	0	0	1	0	0	0	3	72	0	0	47	0	123					
5:45 PM	6:00 PM	2	0	3	0	0	0	2	67	0	0	39	1	114					
Total for: 4:00 PM		3	0	19	0	0	0	17	222	0	0	147	3	411					
Total for: 5:00 PM		4	0	13	0	0	0	14	249	0	0	194	5	479					
Total Peak Hour: 5:00 PM		4	0	13	0	0	0	14	249	0	0	194	5	479					
Overall PHF:		0.974																	







Scale: 1" = 200'



FLUCFCS LEGEND		ACREAGE
191	Undeveloped Land Within Urban Areas	0.51
411	Pine Flatwoods	10.53
4119	Disturbed Pine Flatwoods	3.94
424	Melaleuca	1.91
618	Willow Wetlands	9.72
619	Melaleuca Wetlands	3.91
643	Wet Prairie	0.40
740	Disturbed Areas	0.95
		+/- 31.87



**Boylan  
Environmental  
Consultants, Inc.**  
Wetland & Wildlife Surveys, Environmental Permitting,  
Regulatory Assistance

Drawn By	Date	Category
AML	3-1-2007	FLUCFCS
Job Number		State
2005-217		11 = 200
STP		County
22-43S 24		Lee

Revisions	Date	Page
APPLICANT'S EXHIBIT # 2		
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## WIN DEL PRADO CPD FLUCFCS AERIAL

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**WIN DEL PRADO**  
**RPD AMMENDMENT DISCUSSION**

**May 24, 2007**

*Revised May 31, 2007*

*Revised June 11, 2007*

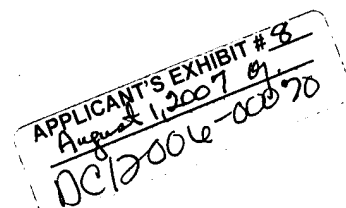
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The zoning resolution (Z-86-193) for Sable Springs in 1986 indicated that four wetlands totaling 15.74 acres existed on the property and would be preserved. There is no recorded information as to the acreages of each individual wetland area. In 1986 Lee County regulated development within wetlands and these areas were to be preserved as wetlands. Lee County did not have an open space or indigenous preservation requirement. Wetlands are now regulated by SFWMD. The 2004 zoning resolution for Sable Springs (Z-04-019) did not include the wetland on the Win-Del Prado site. The total preservation requirement in the 2004 resolution cited 5.66 acres of preserves. Based upon these two resolutions it was determined that the wetland area within the RPD portion of the Win-Del Prado site was 10.08 acres ( $15.74 - 5.66 = 10.08$  acres). The remainder of this discussion deals with the 10.08 acre wetland.

**The Do Nothing Scenario**

This scenario assumes that the wetland will remain and commercial development will occur around the perimeter of the wetland. The wetland is currently invaded with exotics and it is anticipated that the exotic infestation will increase over time. During the 1986 zoning resolution the county did not require that exotics be removed from the wetland. In addition to the heavy exotic infestation, the adjacent neighbors have encroached into the perimeter of the wetland. As a result, the remnants of the upland buffers have been impacted by illegal clearing and encroachment activities. This trend is expected to continue and there is no conservation easement over the wetland to afford additional protection measures.

The anticipated future commercial development around this wetland would not be able to incorporate the wetland into their water management system, since there would be no common ownership or zoning. Furthermore there would be no reason to request a change in the zoning for the wetland RPD area if activities are not allowed within this area. Without amending the 1986 zoning resolution, providing proper maintenance of an adequate hydroperiod and exotic removal would not be possible. Under the current situation the quality of this wetland is expected to continue to decline over time. Outlined below are the results of a Uniform Mitigation Assessment Methodology that reviews the wetland function in the anticipated future condition with no management, maintenance or appropriate hydrological regime.



**Table 1: Future Wetland Functional Assessment (without management activities)**

Wetland Type	Acreage*	UMAM Score	Assessment Value (Acreage x UMAM Score)
618 Willow	5.65	0.27	$5.65 \times 0.27 = 1.53$
619 Melaleuca	4.43	0.20	$4.43 \times 0.20 = 0.89$
643 Wet Prairie**	--	0.23	--
<b>TOTAL</b>	10.08 ac.		2.42

\* If the willow portion of the wetland continues to be infested by melaleuca at the same rate of infestation that occurred over the last 20 years than in ten years the melaleuca portion of the wetland will be 4.20 acres.

\*\* It is anticipated that the wet prairie area will be taken over by melaleuca resulting in 4.43 acres of melaleuca wetlands and 5.65 acres of willow wetlands.

### **Proposed Scenario**

This scenario assumes that the RPD parcel will be incorporated into the CPD application. An extensive exotic removal and maintenance program will be implemented. The project's discharges will be routed to the wetland to insure adequate hydroperiod is maintained in the wetland in the future. The remnant upland buffer areas will be enhanced and restored through exotic removal and the exotic dominated portion will be replanted. The preserve area has been situated adjacent to the existing neighbors so that there will be minimal impact upon them. A minimum of 4'tall fencing will be installed around the perimeter of the wetland/property boundary to further buffer the Sabal Springs residences and to prevent future encroachments into the wetland preserve area. The following is a summary of the wetland enhancement and restoration activities proposed for the project:

Wetland Preservation	5.77 acres
Wetland Restoration	2.69 acres
Creation of Water Gardens	1.19 acres
Preservation and Enhancement of Upland Buffers	1.14 acres

The proposed plan calls for the preservation and restoration of 8.46 acres of wetlands, the creation of 1.19 acres of water gardens and the preservation and enhancement of 1.14 acres of uplands. This totals approximately 10.79 acres of wetland and upland habitat that will be maintained on the site in perpetuity. This plan adequately offsets the wetland impacts that are necessary in order to maintain a viable project. There will be no net loss of wetland function as a result of the project. There will in fact be a gain in function, as outlined below. Approval of this amendment from RPD to CPD insures the continued function and overall quality of the wetland system to be preserved as part of the overall CPD.

**Table 1: Future Wetland Functional Assessment (with management activities)**

Wetland Type	Acreage	UMAM Score	Assessment Value (Acreage x UMAM Score)
618 Willow	5.77 ac.	0.60	$5.77 \times 0.60 = 3.47$
*619 Melaleuca	2.40	0.53	$2.40 \times 0.53 = 1.27$
*643 Wet Prairie	0.29	0.50	$0.29 \times 0.50 = 0.15$
<b>TOTAL</b>	8.46 ac.		4.89

\* 2.40 acres of the melaleuca area will be restored into a hydric pine flatwoods community. The remained of the melaleuca area (0.29 acres) will be restored into wet prairie. The existing wet prairie is being impacted by the development in its entirety.

Future Functional Value of wetlands in 10 years (without management) – 2.42

Future Functional Value of the wetlands in 10 years (with management) – 4.89

Please see the attached UMAMS for the wetland assessments.

This assessment shows that the management activities will allow for an increase in functional value despite the minimal encroachments into the wetland. By approving the amendment to the zoning resolution and allowing the Win Del Prado project to incorporate the RPD zoned wetland into their CPD the overall functional value of the wetlands will increase. This will occur because the maintenance and management of these wetlands will help to improve the hydrology on the property in addition removing and treating the exotics allowing native desirable species to dominate these areas.



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**PRELIMINARY LEE COUNTY INDIGENOUS PRESERVATION/ENHANCEMENT PLAN  
PARADISE CPD**

Boylan Environmental Consultants, Inc.

January 12, 2007

Revised May 24, 2007

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Per LDC Section 10-415(C)(1) large commercial development must preserve 30% of the property as open space. 50% of the open space requirement must be met through the preservation of native communities.

The Paradise CPD project is 31.87 acres and would be required to preserve 9.47 acres of open space with 4.74 acres of that being preservation of existing native communities.

$31.87 \text{ acres} \times 30\% = 9.47 \text{ acres}$

$9.47 \text{ acres} \times 50\% = 4.74 \text{ acres}$

The Paradise CPD project proposes to meet the indigenous preservation requirement through a combination of preserve areas utilizing enhancement, creation and restoration activities.

**Indigenous Upland Preservation (0.46 ac)**

Within Area A the 0.46 acres of remaining pine flatwoods will be preserved. These areas will remain intact with periodic treatment for exotic vegetation as needed.

**Indigenous Upland Restoration/Supplemental Planting (0.68 ac)**

Within Area A, the remaining disturbed upland areas will be subject to supplemental plantings. These are areas where existing clumps of native vegetation are interspersed with mowed areas. Mowing of these areas will cease upon approval of this plan. Trees, shrubs and ground cover will be then be planted in these areas. The size of the material will be a minimum of 3 gallon. If species utilized are not available in 3-gallon containers, then 3, 1-gallon size plants will be substituted. A temporary irrigation plan will be implemented. The plants will be installed in a random manner to reflect a natural system. An 80 percent survival rate of the planted material will be guaranteed for five years.

**Indigenous Wetland Restoration/ Planting (2.69 ac)**

Within Area A, the wetland areas dominated by exotics will be subject to exotic removal and supplemental plantings. These areas consist of monocultures of exotic species and are no longer indigenous communities. By replanting these areas, the wetland vegetation will be restored to a native vegetation community. Trees, shrubs and ground cover will be then be planted in these areas. The size of the material will be a minimum of 3-gallon. If species utilized are not available in 3 gallon containers, then 3 1-gallon size plants will be substituted. A temporary irrigation plan will be implemented. The plants will be installed in a random manner to reflect a natural system. An 80 percent survival rate of the planted material will be guaranteed for five years.

**Wetland Enhancement (5.77 ac)**

Exotic removal will take place within the existing county preserve. The preserve will be walked and all non-native and nuisance or invasive plant species shall be removed from the preserve. These plants will be killed in a manner consistent with current exotic and nuisance plant removal practices while ensuring that neighboring plants are left unharmed and the soil left as undisturbed as possible.

All Category I Exotics shall be removed from all preserves. All exotic within the first 75 feet of the outer edge of every preserve shall be physically removed, or the tree cut down to grade and the stump treated. When prohibited exotic vegetation is removed, but the base of the vegetation remains, the base shall be treated with an U.S. Environmental Protection Agency approved herbicide and a visual tracer dye shall be applied.

**Replanting Retention Area (1.19 ac)**

Portion of the retention areas will be replanted with native species to create a marsh system and meet the indigenous requirement.

**Indigenous Monitoring**

In order to maintain and improve the effectiveness of the Management Plan, the preserve will be monitored for changes in vegetation composition, and wildlife usage. An annual monitoring report will be provided to Lee County for 5 years documenting the exotic maintenance and the will also contain the following:

- Panoramic Photographs
- Percent coverage of exotic and nuisance plant species
- Survival of planted material
- Wildlife observations

A report including pictures, documenting the conditions prior to management plan activities will be provided showing initial conditions prior to DO approval. Following management activities in the preserve a baseline report documenting the changes will be submitted prior to CC approval. The report will describe ecological restoration activities.

**Indigenous Plan Summary**

The indigenous plan includes preservation, enhancement through exotic removal and enhancement through replanting in select areas. Total acreage proposed with this plan:

$$0.46 + 0.68 + 2.69 + 5.77 + 1.19 = 10.79$$

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**WIN DEL PRADO**  
**Preliminary Planting Plan- Preserve Areas**  
**Boylan Environmental Consultants**  
**June 8, 2007**

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The Win Del Prado project is proposing to enhance 5.77 acres of willow wetlands, restore 0.50 acres of wet prairie, restore 0.12 acres of willow wetlands, restore/create 2.07 acres of hydric pine flatwoods and restore 0.68 acres of pine flatwoods.

**WET PRARIE**

The 0.50 acre community will be mechanically cleared, graded and herbaceous species will be planted on 3' centers. This area may be planted with, however is not limited to include: beak rush, little blue maidencane, red root, St. John's Wort, saw grass, various sedges, stink weed, tickseed and yellow eyed grass.

**Table 1: Wet Prairie Restoration/Creation Area**

<b>Species</b>	<b>Spacing</b>	<b>Size</b>	<b>Quantity</b>
<b>Herbaceous</b>	<b>3' centers</b>	<b>2" linear</b>	<b>2,420</b>
Beak rush			
Little Blue Maidencane			
Red Root			
St. John's Wort			
Saw Grass			
Various Sedges			
Stink Weed			
Tick Seed			
Yellow Eyed Grass			

**WILLOW RESTORATION/CREATION**

The 0.12 acre area will be mechanically cleared and graded to match the existing willow area. This community will then be planted with shrub on 8' centers. Shrubs may include, however are not limited to include: Carolina willow and button bush. If natural recruitment of herbaceous vegetation does not achieve 80% coverage within two years than groundcover will be planted.

**Table 2: Willow Restoration/Creation Area**

<b>Species</b>	<b>Spacing</b>	<b>Size</b>	<b>Quantity</b>
<b>Shrubs</b>	<b>8' centers</b>	<b>Min. 3 gallon in size</b>	<b>82</b>
Button Bush			
Carolina Willow			
<b>Herbaceous</b>	<b>3' centers</b>	<b>Min. 2" liner or bare root</b>	<b>--</b>
Arrowhead			
Pickereel Weed			
Saw Grass			
Swamp Fern			
** If natural regeneration does not provide 80% ground cover within two years then herbaceous vegetation will be planted.			

### **HYDRIC PINE FLATWOODS RESTORATION/CREATION**

This 2.07 acre wetland area will be mechanically cleared, graded and planted with trees and shrubs. Trees will be planted on 10' centers and may include, however are not limited to include: slash pine, dahoon holly and cabbage palms. 80% of the tree plantings will be slash pine. Since hydric pine flatwoods contain a relatively open mid canopy, shrubs will be planted on 20' centers. Shrubs to be planted may include, however are not limited to include: wax myrtle and salt bush. If natural recruitment of herbaceous vegetation does not achieve 80% coverage within two years than groundcover will be planted.

**Table 3: Hydric Pine Flatwoods Restoration/Creation**

<b>Species</b>	<b>Spacing</b>	<b>Size</b>	<b>Quantity</b>
<b>Trees</b>	<b>10' centers</b>	<b>Min. 7 gallon in size</b>	<b>902 Total</b>
Slash Pine			720
Dahoon Holly			
Cabbage Palm			
<b>Shrubs</b>	<b>20' center</b>	<b>Min. 3 gallon in size</b>	<b>225</b>
Salt Bush			
Wax Myrtle			
<b>Herbaceous</b>	<b>3' centers</b>	<b>Min. 2" liner or bare root</b>	<b>--</b>
Blue Eyed Grass			
Hat pins			
Marsh Pink			
Red Root			
Stink Weed			
Tick Seed			
** If natural regeneration does not provide 80% ground cover within two years then herbaceous vegetation will be planted.			

## **PINE FLATWOODS RESTORATION**

The 0.68 acre disturbed area will be planted with trees and shrubs. Trees will be planted on 10' centers and may include however is not limited to include slash pine, live oak and cabbage palm. Shrubs will be planted on 8' centers and may include, however are not limited to include: beauty berry, myrsine, saw palmetto, tar flower and wax myrtle. If natural recruitment of herbaceous vegetation does not achieve 80% coverage within two years than groundcover will be planted.

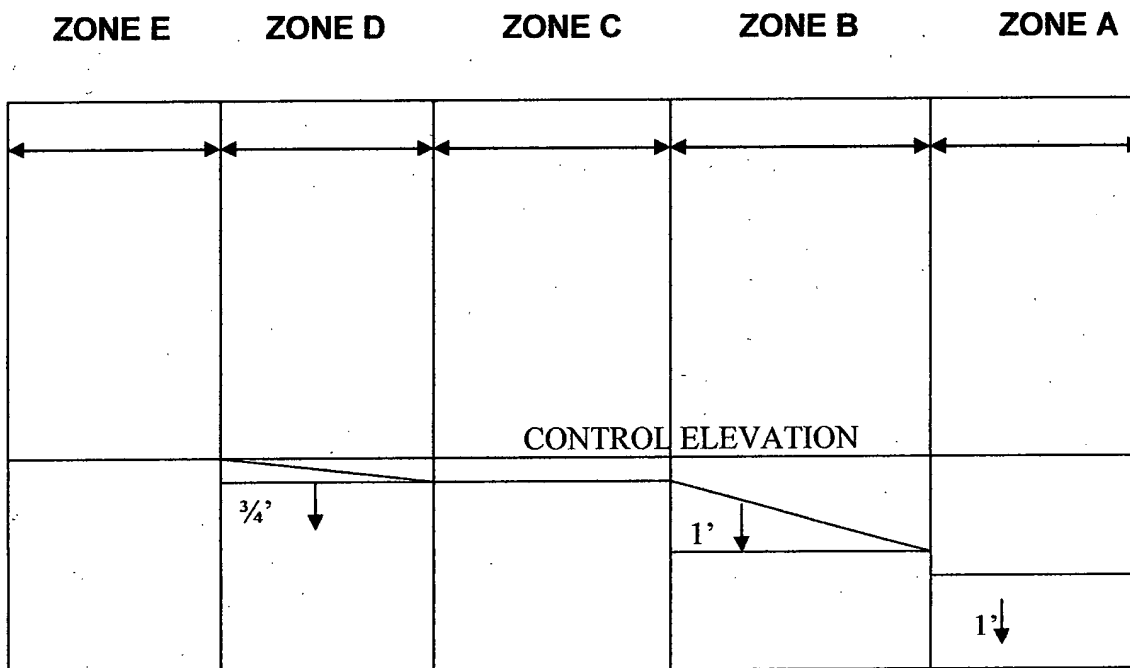
**Table 4: Pine Flatwoods Plantings**

<b>Species</b>	<b>Spacing</b>	<b>Size</b>	<b>Quantity</b>
<b>Trees</b>	<b>10' centers</b>	<b>Min. 7 gallon in size</b>	<b>296</b>
Cabbage Palm			
Live Oak			
Slash Pine			
<b>Shrubs</b>	<b>8' centers</b>	<b>Min. 3 gallon in size</b>	<b>463</b>
Beauty berry			
Myrsine			
Saw Palmetto			
Tar flower			
Wax Myrtle			
<b>Herbaceous</b>	<b>3' centers</b>	<b>Min. 2" liner or bare root</b>	<b>--</b>
Blue eyed grass			
Broom sedge			
Coontie			
Dwarf Fakahatchee grass			
Spartina			
Wire grass			
** If natural regeneration does not provide 80% ground cover within two years then herbaceous vegetation will be planted.			

**NOTE: Final plant species will be based on availability and subject to SFWMD approval.**

**WIN DEL PRADO**  
**PRELIMINARY PLANTINGS FOR WET & DRY DETENTION**  
**AREAS**

Boylan Environmental Consultants  
 June 7, 2007



**Table 1: Plant Types per Zone**

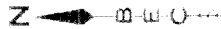
P L A N T S	ZONE E	ZONE D	ZONE C	ZONE B	ZONE A
	Bald Cypress	Pop Ash	Arrowhead	Arrowhead	Pond Lily
	Cabbage Palm	Blue Flag Iris	Pickerei Weed	Alligator Flag	Water Lily
	Laurel Oak	Golden Canna	Various Rushes	Bulrush	
	Red Maple	Spider Lily		Flat Sedge	
	Sweet Bay	Swamp Lily		Pickerei Weed	
	Button Bush	Water Hyssop		Saw Grass	
	Wax Myrtle			Spike Rush	
	Cord Grass				
	Fakahatchee Grass				

**Table 2: Water Depths per Zone**

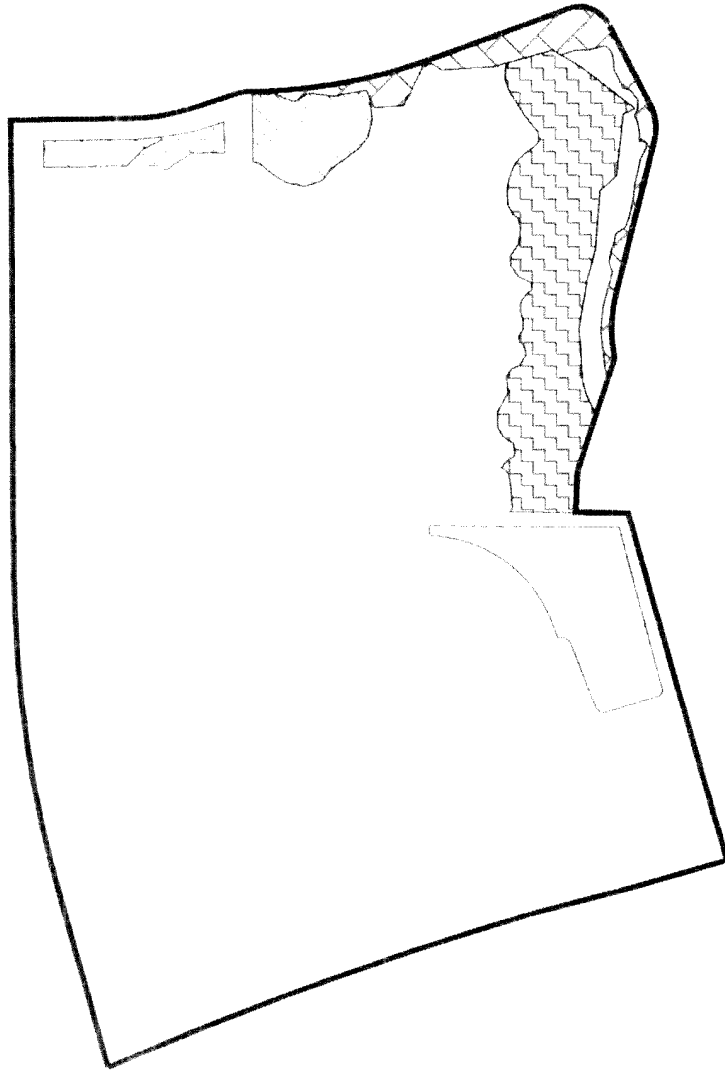
ZONE	WATER DEPTHS
Zone E	0 feet to 1 foot
Zone D	0.75 feet to 1.75 feet
Zone C	0.75 feet to 1.75 feet
Zone B	1.75 feet to 2.75 feet
Zone A	2.75 feet to 3.75 feet

**NOTE:** It is anticipated that during the wet season water could stage 1 foot above the control elevation.

The widths of these zones will vary according to the look the client is trying to achieve, plant availability/costs, and shape (this way a feasible zone width is available for the design). In order for this to work there will be a gradual reduction in the zone widths, and deeper zones may be eliminated in some areas. The dry detention will only include Zone E plantings. A detailed landscaping plan of the detention areas will be created before development order approval.



Scale: 1" = 500'



Dry Detention Plantings (1.04 ac)

Wet Detention Plantings (0.15 ac)

Willow Restoration/Creation (0.12 ac)

Wet Prairie Restoration/Creation (0.50 ac)

Hydric Pine Flatwoods Restoration/Creation (2.07 ac)

Pine Flatwoods Restoration (0.68 ac)



Table 1: Dry Detention Plant List

Species**	Spacing	Size	Quantity
Trees	10' Centers	Min. 7 gal.	43
Bald Cypress			
Cabbage Palm			
Live Oak			
Red Maple			
Sweet Bay			
Shrubs	8' Centers	Min. 3 gal.	708
Burton Bush			
Wax Myrtle			
Herbaceous	3' Centers	2" linear bare root	--
Cord Grass			
Fakahatchee Grass			

Table 3: Willow Restoration: Creation Plant List

Species**	Spacing	Size	Quantity
Shrubs	8' Centers	Min. 3 gal.	82
Burton Bush			
Carolina Willow			
Herbaceous	3' Centers	2" linear bare root	--
Arrowleaf			
Picketed Weed			
Saw Grass			
Swamp Fern			

Table 5: Hydric Pine Flatwoods Restoration/Creation Plant List

Species**	Spacing	Size	Quantity
Trees	10' Centers	Min. 7 gal.	902 Total
Slash Pine			20
Dabney Holly			
Cabbage Palm			
Shrubs	20' Centers	Min. 3 gal.	225
Salt Bush			
Wax Myrtle			
Herbaceous	3' Centers	2" linear bare root	--
Blue Eyed Grass			
Fla Pins			
Marsh Pink			
Red Root			
Sunk Weed			
Tick Seed			

Table 2: Wet Detention Planting Area Plant List

Species**	Spacing	Size	Quantity
Trees	10' Centers	Min. 7 gal.	TBA
Bald Cypress			
Cabbage Palm			
Live Oak			
Pop Ash			
Red Maple			
Sweet Bay			
Shrubs	8' Centers	Min. 3 gal.	TBA
Burton Bush			
Wax Myrtle			
Herbaceous	3' Centers	2" linear bare root	TBA
Arrowhead			
Wingnut Flagg			
Blue Flag Iris			
Bulrush			
Cord Grass			
Fakahatchee Grass			
Fla Sedge			
Golden Canna			
Picketed Weed			
Pond Lily			
Saw Grass			
Spider Lily			
Spike Rush			
Swamp Lily			
Various Sedges			
Water Hyacinth			
Water Lily			

Quantity dependant upon area of each zone.

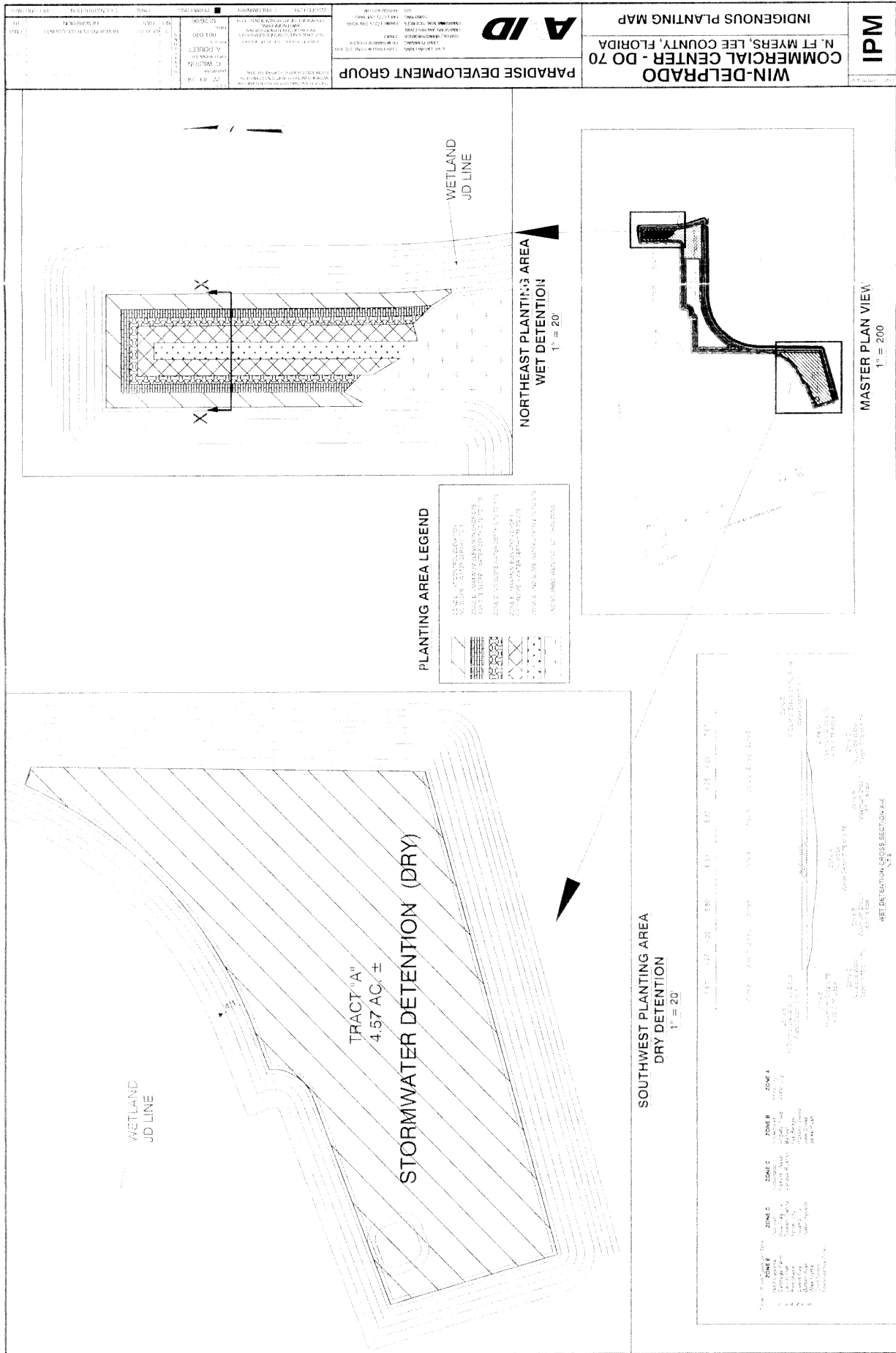
Table 4: Wet Prairie Restoration: Creation Plant List

Species**	Spacing	Size	Quantity
Herbaceous	3' Centers	2" linear	2,420
Beak Rush			
Little Blue Maidencane			
Red Root			
St. John's Wort			
Various Sedges			
Sunk Weed			
Tick Seed			
Yellow Eyed Grass			

Table 6: Pine Flatwoods Restoration Plant List

Species**	Spacing	Size	Quantity
Trees	10' Centers	Min. 7 gal.	296
Cabbage Palm			
Live Oak			
Slash Pine			
Shrubs	8' Centers	Min. 3 gal.	463
Bessey Berry			
Myrsine			
Saw Palmetto			
Tar Flower			
Wax Myrtle			
Herbaceous	3' Centers	2" linear bare root	--
Blue Eyed Grass			
Broom Sedge			
Cocotte			
Dwarf Fakahatchee Grass			
Spurria			
Wire Grass			

Note: If natural regeneration does not provide 80% ground cover in two years herbaceous vegetation will be planted.  
 \*\* Final plant selection will be based on availability



**PETER L. COWELL  
PLANNER**



Mr. Cowell has over twenty-seven years of experience in government sectors including the areas of urban planning, land development, zoning, transportation and technology management. He is skilled with developing, organizing and managing government and private sector organizations providing services to both such as consulting, operations, growth management, procurement, land planning and policy development. He has managed extensive public programs systems in Florida and has provided consulting assistance to governments throughout the state.

**PROFESSIONAL EXPERIENCE**

**Principal Planner, Taita, Incorporated – Tampa, FL, 2003-2005**

Application of planning principals to land design planning. Analyzing raw data; applying information to new developments, and formulating recommendations in the areas of eminent domain, rezoning and permitting.

**Urban Planner II, City of Tampa – Tampa, FL, 1986-2005**

Reviewed and interpreted blueprints, technical drawings and diagrams. Evaluated rezoning, special use and variance requests and made recommendations to City Council. Prepared statistical data for public use, and administrated over developmental review bodies; presented to large and small public bodies, commissions and councils. Drafted recommendations for regulatory changes to zoning, preservation and alcohol related of the city codes. Maintained files, minutes, records relating to motions, resolutions and ordinances for both board and council actions.

**Urban Planner II, Government of Citrus Co., – Citrus County, FL, 1986**

Researched and supervised long range planning activities related to rezoning and addressing, developed policies for preservation of documentation of existing rezoning and addressing conditions. Coordinated both governmental and non-governmental agencies. Maintained a unified taskforce facilitating an on-going awareness of working relationship with emergency preparedness programs.

**City Planner, City of Winter Springs – Winter Springs, FL, 1984-2006**

Responsible for all areas of municipal planning and zoning; analyzed both long and short range community needs. Wrote and implemented the cities first comprehensive land use plan, and revised zoning regulations to ensure compliance with state law, formulated department budgets, and drafted first tree and landscape ordinance in the city.

**Senior Housing Planner, Metropolitan Orlando Urban League – Orlando, FL, 1980-1984**

Wrote, and was granted, Community Development Block Grants for four consecutive years. Surveyed housing needs within the Central Florida area, and prepared housing assessment reports for the Orange County Commission and the Orlando City Council, as well as oversaw contract administration of infrastructure projects with outside minority contractors.

**EDUCATION**

B.A., University of Central  
Florida, 1980

**PROFESSIONAL  
AFFILIATIONS**

American Planning  
Association (APA)

**LENGTH OF SERVICE**

Entered profession in 1980  
Joined AVID in 2005

