

RESOLUTION OF THE BOARD OF COUNTY COMMISSIONERS  
OF LEE COUNTY, FLORIDA

WHEREAS, RVi Planning + Landscape Architecture filed an application on behalf of the property owner, LB Raptor Investments, LLC, to rezone a 430± acre parcel from Residential Planned Development and Commercial Planned Development (RPD/CPD) to Mixed Use Planned Development (MPD) in reference to Pelican Landing MPD; and

WHEREAS, a public hearing before the Lee County Zoning Hearing Examiner, Donna Marie Collins, was advertised and held on April 10, 2025. On April 10, 2025, the Hearing Examiner continued the hearing until June 19, 2025. On June 19, 2025, the public hearing was held; and

WHEREAS, the Hearing Examiner gave full consideration to the evidence in the record for Case #DCI2023-00052 and recommended approval of the Request; and

WHEREAS, a third public hearing was advertised and held on August 20, 2025, before the Lee County Board of Commissioners; and,

WHEREAS, the Lee County Board of Commissioners gave full and complete consideration to the recommendations of the staff, the Hearing Examiner, the documents on record and the testimony of all interested persons.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS:

SECTION A. REQUEST

The applicant filed a request to rezone a 430± acre parcel from RPD and CPD to MPD, to allow 729 dwelling units (100 single-family and 629 multi-family), 25,000 square feet of office uses, 27 holes of golf, and 318 hotel rooms with private onsite recreational and accessory uses.

The property is located in the Suburban, Outlying Suburban, and Wetlands Future Land Use Categories and is legally described in attached Exhibit A and the vicinity map of the subject property is attached as Exhibit B. The request is APPROVED, SUBJECT TO the conditions and deviations specified in Sections B and C below.

SECTION B. CONDITIONS

All references to uses are as defined or listed in the Lee County Land Development Code (LDC).

**1. Master Concept Plan/Development Parameters**

Master Concept Plan (MCP). Development must be consistent with the three-page MCP entitled "Pelican Landing MPD," Page One received June 17, 2025, and Pages Two and Three received September 6, 2025, (Exhibit C), except where modified by conditions below.

Lee Plan and Land Development Code (LDC). Development must comply with the Lee Plan and LDC except where deviations have been approved herein. Changes to the MCP, Development Parameters or Permitted Uses will be subject to further development approval(s).

Approved Development Parameters. The Pelican Landing MPD is approved to develop the following:

- 100 single-family dwelling units
- 629 multi-family dwelling units
- 318 hotel rooms
- Private on-site recreation and accessory uses
- 27-hole golf course
- 25,000 square feet commercial office floor area

## **2. Schedule of Permitted Uses and Site Development Regulations**

### **a. Permitted Uses**

#### **MU Tract:**

- Accessory uses, buildings, and structures
- Accessory apartment and Accessory dwelling unit
- Administrative offices
- Automatic Teller Machine
- Banks and Financial Establishments
- Business Services, Group I
- Cleaning and Maintenance Services
- Dwelling Units:
  - Single-family
  - Zero lot line
  - Two-family attached
  - Townhouse
  - Multiple-family buildings
- Clubs: Private, limited to residents and guest only
- Consumption on Premises, associated with the Private on-site club
- Emergency Operations Center
- EMS, Fire or Sheriff's Station
- Entrance Gates and Gatehouses
- Essential Services
- Essential Services Facilities – Group I Only
- Excavation:
  - Water Retention
- Excess Spoil Removal
- Fences, Walls
- Golf Course Maintenance Facility
- Health Care Facilities
- Home Occupation, No Outside Help
- Insurance Companies
- Maintenance Facility (Government)

Mass Transit Depot or Maintenance Facility (government-operated)  
Medical Office  
Models:  
    Display Center/Sales Center  
    Model Home  
    Model Unit  
Parking Lot, Accessory, Park-and-Ride, Temporary  
Place of worship  
Post Office  
Recreation Facilities:  
    Personal  
    Private On-Site  
Religious Facilities  
Research and Development Laboratories, Group II  
Residential Accessory Uses  
Schools, Commercial, Noncommercial  
Signs  
Social Services, Group I  
Storage, Indoor  
Warehousing, hybrid, public, and mini-warehouse (accessory to principal uses within the MPD only)

**RES Tract:**

Accessory uses, buildings, and structures  
Accessory Apartment and Accessory Dwelling Unit  
Administrative offices  
Clubs:  
    Private, Country, including sale of wine, beer, and liquor for on premises consumption  
Consumption on Premises, in conjunction with Club, private, Club, country, and food and beverage service, limited  
Dwelling Units:  
    Single-family  
    Zero lot line  
    Two-family attached  
    Townhouse  
    Multiple-family buildings  
Entrance Gates and Gatehouses  
Essential Services  
Essential Services Facilities – Group I Only  
Excavation:  
    Water Retention  
Excess Spoil Removal  
Fences, Walls  
Food and Beverage Service, Limited  
Models:  
    Display Center/Sales Center  
    Model Home  
    Model Unit  
Parking Lot, Accessory

Real Estate Sales Office  
Recreation Facilities:  
    Personal  
    Private On-Site  
Residential Accessory Uses  
Signs  
Temporary Uses:  
    Including Temporary Sales Office, Temporary Construction Office,  
    Temporary Construction-Related Storage, Temporary Amenity Structures

**MF Tract:**

Accessory uses, buildings and structures  
Accessory Apartment and Accessory Dwelling Unit  
Administrative offices  
Assisted Living Facility (ALF)  
Care Facilities and Centers  
Clubs:  
    Private, Country, including sale of wine, beer, and liquor for on premises  
    consumption  
Consumption on Premises, including sale of wine, beer, and liquor for on premises  
consumption and for off premises sales in conjunction with a  
hotel/convention center, care facility center, and Club, private, Club,  
country, or Continuing Care Facility (CCF)  
Continuing Care Facilities, including sale of wine, beer, and liquor for on premises  
consumption  
Dwelling Units:  
    Single-family  
    Zero lot line  
    Two-family attached  
    Townhouse  
    Multiple-family buildings  
Entrance Gates and Gatehouses  
Excavation:  
    Water Retention  
Excess Spoil Removal  
Fences, Walls  
Health Care Facilities (accessory only to ALF & CCF uses)  
Hotel/Convention Center  
Independent Living Facilities  
Models:  
    Display Center/Sales Center  
    Model Home  
    Model Unit  
Parking Lot, Accessory  
Recreation Facilities:  
    Personal  
    Private – On-Site  
Residential Accessory Uses  
Signs  
Temporary Uses:

Including Temporary Sales Office, Temporary Construction Office, Temporary Construction-Related Storage, Temporary Amenity Structures

**GC Tract:**

Golf Courses, Golf Course Accessory and Ancillary Uses, including but not limited to:

- Club, private, Club, country
- Maintenance facility
- Pro shop
- Snack bar at the ninth hole or other appropriate location
- Ball washers
- Restrooms and other uses customary and accessory to golf courses
- Consumption on Premises, in conjunction with Club, private, Club, country, snack bar, and golf driving range including sale of wine, beer, and liquor for on premises consumption and for off premises sales as permitted by state law Golf Driving Range

**Preserves:**

Permitted uses in Preserve areas are limited to activities that make the area available for resource-based recreational activities, enjoyment of nature and educational enrichment, including but not limited to:

- Picnic areas, trails, benches, boardwalks, biking/jogging trails, vita course, bird viewing blinds/towers and interpretive facilities, signs, and on-going maintenance and removal of exotic vegetation and compliance with the Raptor Bay Golf Course Renovation Indigenous Preserve and Protected Species Management Plan dated March 2022. (Exhibit D)

**Interface Area:**

Permitted uses in the Interface Area are limited to Golf Courses, developed in accordance with the "Pelican Landing Golf Course Management Plan," and related appurtenances or uses, stormwater management; and created wetland marsh and other created vegetative system or lake system that promotes wildlife diversity, activities that make the Interface Area available for resource-based recreational activities, enjoyment of nature and education enrichment, including but not limited to:

- Picnic areas, trails, benches, boardwalks, biking/jogging trails, vita course, bird viewing blinds/towers and interpretive facilities, signs, access to the southern segmented ridge, and on-going maintenance and removal of invasive exotic vegetation and compliance with the Raptor Bay Golf Course Renovation Indigenous Preserve and Protected Species Management Plan revised December 2022

**b. Property Development Regulations**

**Minimum Lot Area and Dimensions**

	Minimum Lot Size	Width	Depth	Lot Coverage
<b>Single-Family Detached</b>	4,000 SF	40'	100'	60%
<b>Zero Lot Line Units</b>	4,000 SF	40'	100'	65%
<b>Multi-Family</b>	N/A	N/A	N/A	50%
<b>Two-Family Attached and Townhouses</b>	3,000 SF	18'	100'	65%
<b>Non-Residential</b>	10,000 SF	100'	100'	50%

**Minimum Setbacks**

	Street <sup>1</sup>	Side	Rear <sup>3</sup>	Waterbody	Building Separation <sup>5</sup>	
<b>Single-Family Detached</b>	20'	5'	10'	20'	10'	
<b>Zero Lot Line Units</b>	20'	5/0'	10'	20'	10'	
<b>Multi-Family</b>	20'	10 <sup>2</sup> /0 <sup>4</sup>	10 <sup>1</sup> /0 <sup>4</sup>	20'	Buildings 35 feet or less	10'
					Buildings greater than 35 feet	35% of the sum of the building heights (see Deviation 12)
<b>Two-Family Attached and Townhouses</b>	20'	5/0'	10'	20'	10'	
<b>Nonresidential</b>	20' <sup>6</sup>	10'	10'	20'	10' or ½ the building height for buildings over 35'	

<sup>1</sup>15-foot front setback for dwellings with side entry garage and 10-foot front setback for secondary front yards on corner lots.

<sup>2</sup>Zero-foot side setback when the property line is adjacent to other tracts within the MPD, except for Estero Bay (see Deviation 11).

<sup>3</sup>Five-foot rear yard setback for accessory structures

<sup>4</sup>Zero-foot side or rear setbacks when adjacent to GC Tract and GC uses.

<sup>5</sup>When buildings relate to roofed structures, including but not limited to breezeway, parking structure/garage area, foundation/podium, minimum building separations will not apply, and buildings will be treated as one structure.

<sup>6</sup>Minimum 50-foot setback from Coconut Road for warehouse (hybrid, public, mini) uses in the MU tract.

**Building Height**

<b>Tract</b>	<b>Maximum Height</b>
<b>MU Tract</b>	50 FT
<b>RES Tract</b>	110 FT
<b>GC Tract</b>	50 FT
<b>MF Tract</b>	290 FT

**3. Eco-Park**

a. Development order plans for the golf course phase that includes the golf cart path/bridge crossing Eco-Park must include a typical cross-section for the path and bridge indicating the width of the area to be impacted by structures. The width of the cleared area may not exceed 22 feet. The width of the golf cart path/bridge may not exceed 15 feet.

i. A temporary construction access road (“access road”) may be constructed crossing the Eco-Park in the approximate location of the golf cart path/bridge shown in the MCP: Deviation Location Map.

The combined width of the cleared area for the golf cart path and access road may not exceed 50 feet. The width of the access road may not exceed 23 feet.

Developer must restore temporary impacts to preserve vegetation associated with the construction access consistent with the Access Road Cross-Section and Raptor Bay Golf Course Renovation Indigenous Preserve and Protected Species Management Plan. (Exhibits C and D).

The construction access road will cease usage and all restoration must be complete prior to issuance of a Certificate of Compliance for the Skebe Tract golf course development order (DOS2021-00137). The temporary construction access road must be consistent with the typical cross-section for the access road shown in Access Road Cross-Section. (Exhibit C)

b. Permitted Uses in Eco-Park:

Uses permitted in the Eco-Park District are limited to activities that make the Eco-Park available for resource-based recreational activities, enjoyment of nature and educational enrichment, including but not limited to:

Picnic areas, trails, benches, boardwalks, biking/jogging trails, vita course, bird viewing blinds/towers and interpretive facilities, signs, and on-going maintenance and removal of invasive exotic vegetation and compliance with management plan required per Florida Fish and Wildlife Conservation Commission (FFWCC).

- c. Developer must locate the golf cart path/bridge to avoid existing large native trees and preserve existing native vegetation to the greatest extent possible. Prior to County issuance of a vegetation removal permit to clear for the installation of the golf cart path/bridge, developer must field locate the proposed path/bridge and identify the limits of the clearing for field verification purposes.
- d. The "Proposed Reconfiguration of the Pelican Landing DRI Eco-Park," prepared by Wilson Miller, Inc., dated September 30,1999, revised March 6,2000, and as further supplemented by the Raptor Bay Golf Course Renovation Indigenous Preserve and Protected Species Management Plan dated March 2022, attached as Exhibit D is hereby adopted with the following condition:  
  
Invasive exotic removal methods other than hand clearing are subject to the Department of Community Development review and approval.
- e. Developer must submit a recorded Conservation Easement, complete with Official Records Book and Page numbers, to the Department of Community Development and the County Attorney's Office, prior to the issuance of a Certificate of Compliance for the Skebe Tract golf course development order (DOS2021-00137).
- f. Bald Eagle Management Plan: The document entitled "Raptor Bay Golf Course Renovation Bald Eagle Management Plan for Bald Eagle Nest LE-28A," prepared by Passarella & Associates, Inc. dated July 2022, is hereby incorporated as a condition of zoning approval and attached as Exhibit E.
- g. Development order plans for the golf course phase that includes the golf cart path/bridge crossing, must include a HEC-2 model (HEC - Hydrologic Engineering Center), demonstrating the proposed Halfway Creek bridge crossing creates no rise to the base flood.

#### 4. Interface Area

- a. Permitted Uses. Uses in the Interface Area are limited to golf courses developed similar to New York Audubon Society Standards and golf course related appurtenances/uses, stormwater management, created wetland marsh and other created vegetative or lake system that promotes wildlife diversity, resource-based recreational activities, enjoyment of nature and educational enrichment, including but not limited to:  
  
Picnic areas, trails, benches, boardwalks, biking/jogging trails, vita course, bird viewing blinds/towers and interpretive facilities, signs, access to southern segmented ridge, on-going maintenance and removal of invasive exotic vegetation in compliance with the wildlife diversity monitoring plan prepared with the Lee County School Board Development of Environmental Education.
- b. Purpose. The Interface Area's western boundary is the jurisdictional mangrove wetland line. The Interface Area is 100 feet in width at the north and south ends of the property. The Interface Area will serve two purposes: (1) As a buffer

area/interface between residential high-rise development areas and jurisdictional mangrove wetlands. The buffer function will extend to some interior wetland and upland systems. Golf course uses within 100 feet of the jurisdictional mangrove system are prohibited, (2) the Interface Area will provide habitat and vegetative corridor enabling wildlife to safely access interior wetland systems.

- c. Removal of Exotic Vegetation. Developer must remove invasive exotic vegetation from the Interface Area. Invasive exotic removal will coincide with construction of a surface water management system within the Interface Area.
- d. Restoration After Exotic Removal. Following removal of invasive exotic vegetation, the Developer will initiate a vegetation restoration program where necessary. The program should commence after removal of the invasive exotics. The program should facilitate diversity in wildlife. Developer must commence revegetation efforts within six months of invasive exotic removal. Vegetation used in restorative plantings should facilitate wildlife diversity.
- e. Kidney Filter Marshes. Where appropriate, and subject to permitting approval, Developer will construct “kidney filter” marshes for additional water quality treatment prior to final outfall. Marshes will most likely be located in areas currently infested with invasive exotic vegetation and will be replanted with plant species such as juncus and spartina grass, cabbage palms and slash pines.
- f. Monitoring. Developer volunteered to monitor the Interface Area to assess wildlife diversity. Information on flora and fauna produced for the DRI will serve as the baseline data for monitoring. The database must be updated through a program of Winter/Summer monitoring. Monitoring will generally consist of reporting evidence of foraging, nesting, scat, and other territorial markings. The monitoring program will continue for a period of five years from commencement of development activity in the Interface Area. Information gathered through the monitoring program must be submitted to the Lee County Division of Natural Resources and the Lee County Schools, Department of Environmental Education.
- g. Stormwater Run-Off. Subject to permitting approval, treated stormwater from the Residential, Multi-Family and Mixed-Use Development Areas will be conveyed across the Interface Area via a series of excavated lakes and created marsh areas that emphasize water management and improvement of wildlife diversity within the Interface Area. Lakes will be designed and located to mimic natural flows and to enhance wildlife values.

## 5. Buffers

- a. West Bay Club Buffer. Development order plans must depict a 30-foot Type-F buffer along the north property line abutting West Bay Club RPD. Where the preserve abuts the north property line, existing indigenous vegetation may serve as the Type-F buffer plantings.
- b. EI Dorado Acres Buffer from Golf Course. Development order plans must depict a 30-foot Type-F buffer between the Golf Course and EI Dorado Acres.

- c. El Dorado Acres and Bayview II Buffer from MU Tract. Development order plans must depict a modified 10-foot Type B buffer between the MU Tract and El Dorado Acres and Bayview II CPD.

## 6. Environmental

- a. Open Space. Open Space will be provided as follows:  
Multi-family (MF) and Residential (RES) Tracts must provide 40 percent open space, Mixed-Use Tract (MU) must provide 30 percent open space, Non-Residential (GC) must provide 30 percent open space, and Lakes must provide 5.46 acres of open space.
- b. Indigenous Open Space. Development order plans must depict 204.19 acre of indigenous open space.
- c. Development within 750 Feet of Bald Eagle Nest. If development is proposed within 750 feet of an eagle's nest, the plan must be submitted to the Lee County Eagle Technical Advisory Committee (ETAC) for review. ETAC will review the plan and forward recommendations to the FFWCC and USFWS.
- d. County and FFWCC Review. As a condition of approval, the County and FFWCC shall review and approve the results of all studies and surveys required for implementation of a Final Management Plan required by the preliminary management plan approved as part of Local Development Order 90-10-003.00D. Approvals must be obtained prior to Certificate of Compliance for Local Development Order #90-10-003.00D, or new/amended local development orders on the beach park.
- e. Eco-Park. An area identified on the MCP as Pelican Landing Eco-Park will be set aside as a 78+ acre Preserve area of xeric scrub and pine flatwoods to mitigate impacts to gopher tortoise habitat.
- f. Gopher Tortoises. Developer must obtain an Incidental Take Permit prior to development within gopher tortoise habitat areas. Gopher tortoises addressed by the Incidental Take Permit must be relocated as identified in the Raptor Bay Golf Course Renovation Indigenous Preserve and Protected Species Management Plan, attached as Exhibit D.
- g. Plant Relocation. Developer must use best efforts to relocate orchids, wild pine air plants, Florida Coontie, Catesby's lilies, leather ferns, royal ferns, or cabbage palms with golden polypody and shoestring ferns that are found within development areas, to open space and landscaped areas.
- h. Preserves. Areas designated Preserve on the MCP and DRI Map H must remain undeveloped and owned, maintained, and managed by a Uniform Community Improvement District or similar legal entity. Lot lines within Preserve areas are prohibited. The following uses are permitted within Preserves: habitat management activities, hiking and nature study, outdoor education, recreational fishing, gates and fencing, and boardwalks. Mangrove trimming for visual access to Estero Bay is prohibited.

- i. Boardwalk. Boardwalk location and alignment within “Preserve Areas” must be submitted for review/approval by the Division of Natural Resources prior to construction. The maximum width is limited to that which is adequate for pedestrian and handicap access. Except for wheelchairs, motorized vehicle use is prohibited.
- j. Exotic Removal Plan. Development order submittals must include an invasive exotic removal plan. The removal plan must identify species to be removed, method of removal, and delineate completion dates for exotic removal by section. Developer may submit the exotic removal plan prior to local development order review to expedite the removal process.
- k. Big Cypress Fox Squirrels. Developer must survey areas within GC and Preserve Tracts where nest-like structures were observed for presence of Big Cypress fox squirrels prior to local development order approval on that tract. Developer must observe nest-like areas for five days during early morning and evening hours to confirm squirrel activity. Upon confirmation of active nests or utilization of the site, Developer must submit a protected species management plan for review and approval by County Staff prior to local development order approval.
- l. Golf Course Design. Golf course design must:
  - i. Preserve native vegetation between fairways where possible. This condition will not be interpreted in a manner that hinders good golf course design; and
  - ii. Include filter marshes within the surface water management system.
- m. Native Vegetation. Developer must design the golf course and conduct maintenance, including fertilization and irrigation, in a manner which is sensitive to the water and nutrient needs of native xeric vegetation in and around the golf course. This condition will not be interpreted in a manner that causes Developer to jeopardize the health and viability of the golf course.
- n. Management Practices. Developer must employ management practices to prevent pesticide/chemical pollution of groundwater and surface water receiving areas. Ground and surface water receiving areas include Estero Bay, mangrove fringe and transition zone wetlands of Estero Bay.
- o. Pollution Contingency Plan. If ground or surface water pollution as defined by governing regulations/rules is caused by fertilizers, herbicides or pesticides applied to the golf course adjacent to the mangrove wetlands, then application of the pollutant must cease until there is a revised management plan for application of the pollutant. A determination that fertilizers, herbicides or pesticides are the cause/source of pollution must be based on competent and substantial evidence. If mitigation is necessary to address the pollution, the golf course operator must implement a mitigation plan approved by FDA. The mitigation plan must be based on governing rules/regulations.

- p. Slash Pines. The design for golf course and residential areas must incorporate the retention of large slash pines as perch trees for bald eagles. This requirement will not be interpreted in a manner that impairs good design.
- q. Wetland Impacts. No more than five acres of wetlands may be filled in conjunction with the project. The five acres is part of the 19.23± acres of wetland impacts allowed for the Pelican landing DRI. Mitigation for wetland impacts will be determined at the time of final permitting. Mitigation should include removal of invasive exotic vegetation, restoration of historic hydroperiods, and not more than 10 acres of littoral zone plantings.
- r. Mangrove Setbacks. The mangrove line is off set 50 feet to over 250 feet west of the wetland jurisdictional line delineated along the entire western (Estero Bay) side of the property. Impacts to wetlands on the western (Estero Bay) side of the property are prohibited in order to maintain existing natural mangrove setbacks. The prohibition includes saltwater and freshwater wetlands within the boundary of the wetland jurisdictional line. Golf course fairways, tees, and greens must be set back a minimum of 25 feet from the wetland jurisdictional line, except where wetland impacts are permitted by the South Florida Water Management District (SFWMD) and Army Corps of Engineers (ACOE). Water management facilities permitted by the SFWMD and the removal of exotic vegetation, subject to Lee County regulations, are allowed within all wetlands.

## 7. Golf Course

Golf course management practices must include:

- a. Fertilizers. Use of slow release fertilizers and/or carefully managed fertilizer applications timed to ensure maximum root uptake and minimal surface water run-off or leaching to the groundwater.
- b. Integrated Pest Management (IPM). The golf course must implement IPM in the control of pests, including weeds, insects, and nematodes. Pesticide application will involve only purposeful and minimal application of pesticides, aimed at targeted species. Regular widespread application of broad-spectrum pesticides is prohibited. The IPM program will minimize, to the extent possible, use of pesticides, and will include use of the USDA-SCS (United States Department of Agriculture-Soil Conservation Service) Soil Pesticide Interaction Guide to select pesticides for uses with minimum potential for leaching or loss due to run-off depending on site-specific soil conditions. Pesticide application within 100 feet of jurisdictional mangrove systems is prohibited.
- c. Coordinated Application. Pesticide application must be coordinated with irrigation practices (the timing and application rates of irrigation water) to reduce run-off and leaching of applied pesticides and nutrients.
- d. Golf Course Management. Utilization of a golf course manager licensed by the state to use restricted pesticides and experienced in IPM principles. The golf course manager will be responsible for ensuring golf course fertilizers are selected and applied to minimize fertilizer run-off into the surface water and leaching of fertilizers into the groundwater.

- e. Handling of Fertilizers and Pesticides. Storage, mixing, and loading of fertilizer and pesticides will be designed to prevent/minimize pollution of the natural environment.

**8. Signs**

Developer and its successors must demonstrate clear line of sight distances for signs that are setback zero feet from the right-of-way within the Multi-Family (MF), Residential (RES), and Mixed Use (MU) Tracts.

**9. Pedestrian and Bicycle Access to School Bus**

Development Order plans must include safe pedestrian and bicycle access to school bus stops. The site plan must depict locations for school buses to stop, load, and unload students in residential development tracts. Plans must also include a dedicated area for students to wait for the school bus. These waiting areas must be outside road rights-of-way and coordinated with Lee County School District.

**10. State and Federal Permits**

Generally. County development permits do not create rights to obtain permits from state or federal agencies and do not create liability on the part of the County if applicant fails to obtain requisite approvals or fulfill obligations imposed by state/federal agencies or if applicant undertakes actions resulting in a violation of state or federal law. Applicant must obtain applicable state/federal permits prior to commencing development.

State Wetland Permits. Developer may not commence construction on development impacting wetlands until issuance of required state permits. Development activity must comply with state wetland permits and applicable local development permits.

If the State does not approve wetland impacts or if State wetland permits are not consistent with proposed wetland impacts reflected in County development permits, then Developer must amend County development permit approvals to be consistent with state wetland permits and applicable Lee Plan and LDC regulations regarding development within wetlands. This may affect permissible density on the property.

**SECTION C. DEVIATIONS**

1. Street Design. Deviation (1) seeks relief from the LDC § 10-296, which requires local private roadways to provide a five foot minimum bike lane width and a minimum sidewalk width of six feet on both sides of the right-of-way, to allow five-foot sidewalks along one side of internal roadways throughout the MPD. This deviation is APPROVED.
2. Parking Lot Design. Deviation (2) seeks relief from the LDC § 34-2013(a), which requires parking lot design to permit vehicles exiting the parking lot to enter the street right-of-way/easement in a forward motion, to allow individual parking spaces to back onto right-of-way easements in the RES, MF and MU Tracts. This deviation was previously APPROVED by Resolutions Z-94-014 (Deviation 2) and Z-98-066 (Deviation 1).

3. Setback from Development Perimeter. Deviation (3) seeks relief from the LDC § 34-935(b)(2), which requires internal roads/drives to be no closer than 25 feet to the development perimeter, to allow a zero-foot minimum separation for internal parcels and a 15-foot separation for external parcels within the MF, RES, and MU Tracts. This deviation was previously APPROVED by Resolution Z-98-066.
4. Signs. Deviation (4) seeks relief from the LDC § 30-152, which requires identification signs to be set back a minimum of 15 feet from right-of-way easements, to allow a setback of zero feet within the MF, RES, and MU Tracts. This deviation was approved in Resolution Z-98-066 (Deviation 5), subject to the condition that applicant must demonstrate compliance with LDC sight distance requirements. This deviation is APPROVED, SUBJECT TO Condition 9.
5. Recreation Center Setback. Deviation (5) seeks relief from the LDC § 34-2474(b)(6) which requires recreation centers and ancillary facilities be located at least 40 feet from residential dwelling units, to allow a minimum 20 feet of separation within internal development parcels. This deviation does not apply to parcels adjacent to or external to the property. This deviation was APPROVED by Resolution Z-98-066.
6. Excavation Bank Slope. Deviation (6) seeks relief from the LDC § 10-329(d)(4), which requires lake bank slopes to be sloped at a 6:1 ratio from top of bank to a water depth of two feet below the dry season water table, to allow a minimum ratio of 4:1 slope on all lake banks. This deviation was APPROVED by ADD2021-00190A.
7. Parking. Deviation (7) seeks relief from the LDC § 34-2020(b) which requires six parking spaces per hole for golf courses, to allow a five percent reduction in required parking spaces at the golf clubhouse only. This deviation was APPROVED by ADD2021-00191.
8. Building Height. Deviation (8) seeks relief from the LDC § 34-935(f)(1)(e) which limits building heights in the planned development zoning category to 45 feet in the Outlying Suburban land use category, to allow a maximum height of 290 feet above minimum flood elevation in the MF tract, 110 feet within the RES tract, and 50 feet within the MU and GC tracts. This deviation is APPROVED.
9. Buffering Adjacent Property. Deviation (9) seeks relief from the LDC § 10-416(d), which requires a Type C/F buffer where multi-family residential uses and commercial uses abut, to allow no internal buffers in all tracts. This deviation is APPROVED.
10. Parking. Deviation (10) seeks relief from the LDC § 34-2020, which requires parking for Recreation Facilities, Indoor, at four spaces per 1,000 square feet of floor area, to allow parking spaces for that use to be calculated at one space per 1,000 square feet of floor area where the facilities are private and limited to residents only and integrated with the mid- and high-rise buildings within the MF, MU, and RES tracts. This deviation is APPROVED.
11. Building Setback from Development Perimeter. Deviation (11) seeks relief from the LDC § 34-935(b)(1), which requires buildings and structures to be set back from the development perimeter a distance equal to the greater of one-half the height of the building/structure, to allow setbacks from the development perimeter within all development tracts to be a minimum of 0 feet for: (a) buildings within Pelican Landing MPD, (b) outside the Pelican Landing MPD if within the Pelican Landing RPD/CPD or Bayview CPD, and (c) to Estero

Bay, and a minimum of 50 feet from the north property boundary. This deviation is APPROVED, except for the requested 0-foot building setback from Estero Bay.

12. Building Separation. Deviation (12) seeks relief from the LDC § 34-935(e)(4), which requires a minimum building separation of one-half of the sum of their heights where there are two or more principal buildings on a development tract, to allow a minimum building separation of 35 percent of the sum of the building heights for buildings greater than 35 feet in height within the MU, MF, and RES tracts. This deviation is APPROVED, SUBJECT TO a letter of no objection from the Estero Fire District.
13. Perimeter Buffers. Deviation (13) seeks relief from the LDC § 10-416(d)(1), which requires a buffer area along the perimeter of the development whenever the development abuts a different use, to allow no perimeter buffers where onsite preserve areas are adjacent to the project perimeter or where adjacent to property owned by the applicant or adjacent to the Pelican Landing RPD/CPD or Bayview CPD in the City of Bonita Springs. This deviation is APPROVED, SUBJECT TO Condition 5.
14. Connection Separation. Deviation (14) seeks relief from the LDC § 10-285, which requires a connection separation of 330 feet on major collector roads in Future Non-Urban Areas, to allow a connection separation of 215 feet on Coconut Road. This deviation is APPROVED.

#### SECTION D. EXHIBITS

The following exhibits are attached to this resolution and incorporated by reference:

- Exhibit A: Legal description of the property
- Exhibit B: Zoning Map (with the subject parcel indicated)
- Exhibit C: The Master Concept Plan
- Exhibit D: Raptor Bay Golf Course Renovation Indigenous Preserve and Protected Species Management Plan
- Exhibit E: Raptor Bay Golf Course Renovation Bald Eagle Management Plan for Bald Eagle Net LE-28A
- Exhibit F: Seventeenth Development Order Amendment for Pelican Landing, a Development of Regional Impact

#### SECTION E. FINDINGS AND CONCLUSIONS

Based upon its review, the Board of County Commissioners adopts the recommendation of the Hearing Examiner, including the following findings and conclusions:

1. The requested MPD is consistent with the Lee Plan. Lee Plan Goals 2, 4, 5, 6, 11, 59, 60, 61, 64, 66, 70, 72, 73, 77, 95, 101, 123, 124, 125, 135, 158, 161; Objectives 1.5, 2.1, 2.2, 2.6, 4.1, 5.1, 6.1, 60.4, 61.2, 68.1, 72.2, 77.1, 77.2, 77.3, 95.1, 101.1, 101.3, 126.2, 135.1, 158.2, 158.3, 161.1, 161.3, and Policies 1.1.5, 1.1.6, 1.5.1, 2.2.1, 2.2.2, 5.1.1, 5.1.3, 5.1.5, 5.1.7, 5.1.10, 6.1.1, 6.1.3, 6.1.4, 6.1.5, 6.1.6, 39.2.2, 39.3.2, 60.4.5, 61.3.11, 67.3.7, 68.3.7, 72.1.6, 72.2.1, 73.2.2, 77.3.1, 101.1.1, 101.1.2, 101.3.2, 101.3.5, 123.1.7, 123.2.8, 123.3.3, 124.1.1, 126.2.1, 135.1.9, 135.9.5, 135.9.6, 160.1.3, 161.2.2, 161.3.1, Lee Plan Maps 1-A, 1-B, Tables 1(a), 1(b).

2. As conditioned, the MPD zoning district:
  - a. Is consistent with the Land Development Code or qualifies for deviations. LDC Chapters 2, 10, and 34.
  - b. Is compatible with existing or planned uses in the surrounding area. Lee Plan Objectives 2.1, 2.2, 161.1, and Policies 2.1.1, 5.1.5, 6.1.4, 135.9.5, 135.9.6, 160.1.3, 161.2.2, 161.3.1; LDC §§ 34-411, 34-413.
  - c. Provides sufficient road access to support proposed development intensity. Lee Plan Objective 161.4, Policies 6.1.1, 6.1.5, 39.2.2, 161.1.2, 161.4.3.
  - d. Expected impacts on transportation facilities will be addressed by County regulations and conditions of approval. Lee Plan Objective 39.1, Policies 38.1.1, 38.1.5, 39.1.1; LDC §§ 2-261 *et seq.*, 34-411(d) and (e).
  - e. Will not adversely affect environmentally sensitive areas or natural resources. Lee Plan Goals 77, 124, 125, Objectives 1.5, 77.3, 126.2, Policies 1.5.1, 6.1.6, 77.3.1, 77.3.3, 123.2.4, 123.2.8, 123.2.15, 123.4.4, 124.1.1, 126.2.1, and Standard 4.1.4.
  - f. Public services and infrastructure will be available to serve the development. Goals 2, 4, 5, 6, 95, Objectives 2.1, 2.2, 4.1, Policies 2.2.1, 6.1.4, 160.1.1, 161.1.2, 161.4.3, Standards 4.1.1, 4.1.2.
3. The proposed uses are appropriate at the location. Lee Plan Goals 2, 5, 6, 11; Objectives 2.1, 2.2, 135.1, Policies 1.1.5, 1.1.6, 2.1.1, 2.1.2, 5.1.3, 5.1.10, 6.1.4, 6.1.7, 6.1.8, 135.1.9, 135.9.6, 160.1.3, 161.3.1, Lee Plan Tables 1(a), 1(b).
4. The County regulations and recommended conditions provide sufficient safeguards to protect the public interest and relate to impacts expected from the proposed development. Lee Plan Goals 123, 124, 125, 126, Objectives 2.6, 77.3, 126.2, Policies 5.1.5, 6.1.4, 53.1.5, 54.1.2, 56.1.4, 77.3.1, 123.1.1, 123.1.5, 123.2.4, 123.2.8, 123.2.9, 123.2.11, 123.2.15, 126.2.1, 126.3.3, 135.9.6; LDC §§ 34-377(a)(3), 34-411 and 34-932(c).
5. Deviations recommended for approval enhance the planned development and preserve public health, safety, and welfare. LDC §§ 34-373(a)(9), 34-377(a)(4).

#### SECTION F. SCRIVENER'S ERRORS

The Board intends that this resolution can be renumbered or relettered and typographical errors that do not affect the intent and are consistent with the Board's action can be corrected with the authorization of the County Manager or his designee, without the need for a public hearing.

Commissioner Mulicka made a motion to adopt the foregoing resolution, seconded by Commissioner Pendergrass. The vote was as follows:

Adopted by unanimous consent.

Kevin Ruane	Absent
Cecil L Pendergrass	Aye
David Mulicka	Aye
Brian Hamman	Aye
Mike Greenwell	Absent

DULY PASSED AND ADOPTED this 20th day of August 2025.

ATTEST:  
KEVIN C. KARNES  
CLERK OF CIRCUIT COURT

BY: Melinda Butler  
Deputy Clerk

BOARD OF COUNTY COMMISSIONERS  
OF LEE COUNTY, FLORIDA

BY: [Signature]  
Kevin Ruane, Chair  
*Vice*  
Commissioner Cecil L Pendergrass, ~~Chair~~  
Lee County Board of County ~~Commissioner~~  
District 2



APPROVED AS TO FORM FOR THE  
RELIANCE OF LEE COUNTY ONLY

[Signature]  
Amanda L. Swindle  
Assistant County Attorney, Senior  
County Attorney's Office

RECEIVED  
MINUTES OFFICE  
MB  
2025 AUG 29 PM 11:31

# Exhibit A



Rhodes and Rhodes Land Surveying  
28100 Bonita Grande Drive, STE 107  
Bonita Springs, FL 34135  
239-405-8166

## LEGAL DESCRIPTION

A PORTION OF THOSE LANDS DESCRIBED AND RECORDED IN OFFICIAL RECORDS BOOK 3539, PAGES 3116 THROUGH 3119 (INCLUSIVE), TOGETHER WITH A PARCEL OF LAND LOCATED IN SECTIONS 5, 6, 7, AND 8, TOWNSHIP 47 SOUTH, RANGE 25 EAST, LEE COUNTY, FLORIDA BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHEAST CORNER OF THE NORTHEAST 1/4 OF SECTION 7, TOWNSHIP 47 SOUTH, RANGE 25 EAST, LEE COUNTY, FLORIDA; THENCE RUN NORTH 01°34'59" WEST, ALONG THE EAST LINE OF THE NORTHEAST 1/4 OF SAID SECTION 7, A DISTANCE OF 40.03 FEET TO A POINT ON THE BOUNDARY OF THOSE LANDS DESCRIBED AND RECORDED IN OFFICIAL RECORDS BOOK 3539, PAGES 3116 THROUGH 3119 (INCLUSIVE) OF THE PUBLIC RECORDS OF LEE COUNTY, FLORIDA; THENCE SOUTH 89°42'53" EAST, ALONG THE BOUNDARY OF LAST SAID LANDS, A DISTANCE OF 25.01 FEET TO THE POINT OF BEGINNING OF THE PARCEL OF LAND HEREIN DESCRIBED; THENCE RUN THE FOLLOWING SEVEN (7) COURSES ALONG THE BOUNDARY OF LAST SAID LANDS; COURSE NO. 1: SOUTH 89°42'53" EAST, 1,242.78 FEET TO A POINT ON THE EAST LINE OF THE WEST 1/2 OF THE NORTHWEST 1/4 OF SECTION 8, TOWNSHIP 47 SOUTH, RANGE 25 EAST, THE SAME BEING A POINT ON THE WESTERLY BOUNDARY OF EL DORADO ACRES, AN UNRECORDED SUBDIVISION, AS RECORDED IN OFFICIAL RECORDS BOOK 82, PAGE 474 OF THE PUBLIC RECORDS OF SAID LEE COUNTY, FLORIDA; COURSE NO. 2: NORTH 01°27'43" WEST, ALONG LAST SAID LINES, A DISTANCE OF 2,612.02 FEET TO THE MOST NORTHWEST CORNER OF EL DORADO ACRES; COURSE NO. 3: SOUTH 89°52'45" EAST, ALONG THE NORTHERLY BOUNDARY OF SAID EL DORADO ACRES, A DISTANCE OF 610.69 FEET TO THE NORTHWEST CORNER OF LOT 8, BLOCK NUMBER 14 OF SAID EL DORADO ACRES; COURSE NO. 4: SOUTH 01°17'58" EAST, ALONG THE BOUNDARY OF SAID LOT 8, A DISTANCE OF 132.29 FEET TO THE SOUTHWEST CORNER OF SAID LOT 8; COURSE NO. 5: SOUTH 89°39'36" EAST, ALONG THE BOUNDARY OF SAID LOT 8, A DISTANCE OF 75.00 FEET TO THE SOUTHEAST CORNER OF SAID LOT 8; COURSE NO. 6: NORTH 01°17'58" WEST, ALONG THE BOUNDARY OF SAID LOT 8, A DISTANCE OF 132.58 FEET TO THE NORTHEAST CORNER OF SAID LOT 8; COURSE NO. 7: SOUTH 89°52'45" EAST, ALONG THE NORTHERLY BOUNDARY OF SAID EL DORADO ACRES, A DISTANCE OF 587.45 FEET TO THE SOUTH 1/4 CORNER OF SECTION 5, TOWNSHIP 47 SOUTH, RANGE 25 EAST, SAID LEE COUNTY, FLORIDA, THE SAME BEING A POINT ON THE WESTERLY PROLONGATION OF THE NORTHERLY BOUNDARY LINE OF MEADOWBROOK OF BONITA SPRINGS, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 60, PAGES 53 THROUGH 59 (INCLUSIVE) OF THE PUBLIC RECORDS OF SAID LEE COUNTY, FLORIDA; THENCE SOUTH 89°13'02" EAST, ALONG LAST SAID LINES, A DISTANCE OF 2,581.04 FEET TO THE SOUTHEAST CORNER OF SAID SECTION 5, THE SAME BEING A POINT ON THE EAST LINE OF THE SOUTHEAST 1/4 OF SAID SECTION 5 AND A POINT ON THE EASTERLY BOUNDARY OF FLORIDA GULF LAND COMPANY'S SUBDIVISION, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 1, PAGE 59 OF THE PUBLIC RECORDS OF SAID LEE COUNTY, FLORIDA; THENCE NORTH 00°35'20" WEST, ALONG SAID LINES, A DISTANCE OF 2,103.32 FEET TO A POINT ON THE WESTERLY BOUNDARY OF THOSE LANDS DESCRIBED AS A 100.00 FOOT FLORIDA POWER AND LIGHT COMPANY EASEMENT (PARCEL B) AND RECORDED IN DEED BOOK 244, PAGES 138 THROUGH 140 (INCLUSIVE) OF THE PUBLIC RECORDS OF SAID LEE COUNTY, FLORIDA; THENCE NORTH 21°22'09" WEST, ALONG THE WESTERLY BOUNDARY OF LAST SAID LANDS, A DISTANCE OF 660.57 FEET TO A POINT ON THE NORTH LINE OF THE SOUTHEAST 1/4 OF SAID SECTION 5, THE SAME BEING A POINT ON THE NORTHERLY BOUNDARY OF LAST SAID PLAT; THENCE SOUTH 89°05'10" WEST, ALONG LAST



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SAID LINES, A DISTANCE OF 2,362.08 FEET TO THE CENTER OF SAID SECTION 5, THE SAME BEING A POINT ON THE BOUNDARY OF AFORESAID LANDS DESCRIBED AND RECORDED IN OFFICIAL RECORDS BOOK 3539, PAGES 3116 THROUGH 3119 (INCLUSIVE) OF THE PUBLIC RECORDS OF SAID LEE COUNTY, FLORIDA; THENCE RUN THE FOLLOWING EIGHT (8) COURSES ALONG THE BOUNDARY OF LAST SAID LANDS; COURSE NO. 1: SOUTH 89°07'39" WEST, 2,592.74 FEET; COURSE NO. 2: SOUTH 01°54'31" EAST, 92.62 FEET; COURSE NO. 3: SOUTH 88°43'54" WEST, 349.45 FEET; COURSE NO. 4: SOUTH 01°16'23" EAST, 162.43 FEET; COURSE NO. 5: NORTH 81°48'03" WEST, 600.65 FEET; COURSE NO. 6: SOUTH 45°44'29" WEST, 523.57 FEET; COURSE NO. 7: SOUTH 01°15'33" EAST, 775.71 FEET; COURSE NO. 8: SOUTH 89°14'26" WEST, 199.41 FEET TO A POINT ON THE BOUNDARY OF THOSE LANDS DESCRIBED AND RECORDED IN OFFICIAL RECORDS BOOK 3627, PAGES 2061 THROUGH 2083 (INCLUSIVE) OF THE PUBLIC RECORDS OF SAID LEE COUNTY, FLORIDA (CONSERVATION EASEMENT #1), THE SAME BEING A POINT ON THE MEAN HIGH WATER LINE OF ESTERO BAY; THENCE RUN THE FOLLOWING TWENTY TWO (22) COURSES ALONG LAST SAID LINES; COURSE NO. 1: SOUTH 04°39'14" EAST, 104.21 FEET; COURSE NO. 2: SOUTH 20°14'29" EAST, 105.00 FEET; COURSE NO. 3: SOUTH 68°35'55" WEST, 154.32 FEET; COURSE NO. 4: SOUTH 13°48'24" EAST, 50.99 FEET; COURSE NO. 5: SOUTH 36°09'47" WEST, 64.03 FEET; COURSE NO. 6: SOUTH 02°29'49" EAST, 50.00 FEET; COURSE NO. 7: SOUTH 26°14'47" EAST, 54.63 FEET; COURSE NO. 8: SOUTH 18°08'21" EAST, 51.92 FEET; COURSE NO. 9: SOUTH 52°41'29" EAST, 78.10 FEET; COURSE NO. 10: SOUTH 31°44'44" EAST, 57.31 FEET; COURSE NO. 11: SOUTH 28°08'16" EAST, 55.46 FEET; COURSE NO. 12: SOUTH 10°27'59" EAST, 50.49 FEET; COURSE NO. 13: SOUTH 04°01'02" EAST, 63.86 FEET; COURSE NO. 14: SOUTH 14°29'27" EAST, 88.09 FEET; COURSE NO. 15: SOUTH 19°11'46" EAST, 52.20 FEET; COURSE NO. 16: SOUTH 35°06'58" EAST, 59.36 FEET; COURSE NO. 17: SOUTH 12°16'28" EAST, 49.94 FEET; COURSE NO. 18: SOUTH 02°32'45" WEST, 50.98 FEET; COURSE NO. 19: SOUTH 15°30'26" WEST, 84.12 FEET; COURSE NO. 20: SOUTH 20°31'47" EAST, 72.71 FEET; COURSE NO. 21: SOUTH 17°54'30" EAST, 56.94 FEET; COURSE NO. 22: SOUTH 46°11'03" EAST, 61.03 FEET; THENCE NORTH 89°20'35" EAST, A DISTANCE OF 1.00 FEET TO A POINT ON THE EASTERLY BOUNDARY OF THOSE LANDS DESCRIBED AND RECORDED IN OFFICIAL RECORDS INSTRUMENT NUMBER 2013000240450 OF THE PUBLIC RECORDS OF SAID LEE COUNTY, FLORIDA; THENCE RUN THE FOLLOWING TWENTY-THREE (23) COURSES ALONG THE BOUNDARY OF LAST SAID LANDS; COURSE NO. 1: SOUTH 02°48'29" EAST, 247.54 FEET; COURSE NO. 2: SOUTH 13°36'38" EAST, 49.89 FEET; COURSE NO. 3: SOUTH 18°52'38" EAST, 49.96 FEET; COURSE NO. 4: SOUTH 28°04'28" EAST, 51.29 FEET; COURSE NO. 5: SOUTH 10°24'54" EAST, 50.55 FEET; COURSE NO. 6: SOUTH 11°27'49" WEST, 56.18 FEET; COURSE NO. 7: SOUTH 04°21'29" EAST, 50.65 FEET; COURSE NO. 8: SOUTH 24°52'17" EAST, 50.48 FEET; COURSE NO. 9: SOUTH 25°52'22" EAST, 51.13 FEET; COURSE NO. 10: SOUTH 09°20'00" WEST, 55.12 FEET; COURSE NO. 11: SOUTH 25°50'13" EAST, 21.40 FEET; COURSE NO. 12: SOUTH 21°13'24" EAST, 54.88 FEET; COURSE NO. 13: SOUTH 41°15'02" EAST, 70.64 FEET; COURSE NO. 14: SOUTH 11°13'24" WEST, 49.00 FEET; COURSE NO. 15: SOUTH 10°16'42" EAST, 51.40 FEET; COURSE NO. 16: SOUTH 03°26'02" WEST, 49.83 FEET; COURSE NO. 17: SOUTH 29°06'14" EAST, 59.23 FEET; COURSE NO. 18: SOUTH 05°12'32" EAST, 50.79 FEET; COURSE NO. 19: SOUTH 04°32'08" EAST, 50.65 FEET; COURSE NO. 20: SOUTH 13°37'57" WEST, 52.21 FEET; COURSE NO. 21: SOUTH 89°00'08" WEST, 230.82 FEET; COURSE NO. 22: SOUTH 09°02'32" WEST, 80.80 FEET; COURSE NO. 23: SOUTH 39°36'41" EAST, 105.50 FEET TO A POINT ON THE SOUTH LINE OF GOVERNMENT LOT 1, SECTION 7, TOWNSHIP 47 SOUTH, RANGE 25 EAST, SAID LEE COUNTY, FLORIDA; THENCE NORTH 89°06'42" EAST, ALONG LAST SAID LINE, A DISTANCE OF 188.36 FEET TO A POINT ON THE BOUNDARY OF THOSE LANDS DESCRIBED AND RECORDED IN CITY OF BONITA SPRINGS, FLORIDA ORDINANCE NUMBER 14-10 (ANNEXATION AREA); THENCE RUN THE FOLLOWING THIRTY (30) COURSES ALONG THE BOUNDARY OF LAST SAID LANDS; COURSE NO. 1: NORTH 13°37'57" EAST, 214.95 FEET; COURSE NO. 2: NORTH 04°32'08" WEST, 58.94 FEET; COURSE NO. 3:



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NORTH 05°12'32" WEST, 61.67 FEET; COURSE NO. 4: NORTH 29°06'14" WEST, 55.22 FEET; COURSE NO. 5: NORTH 03°26'02" EAST, 41.25 FEET; COURSE NO. 6: NORTH 10°16'42" WEST, 47.92 FEET; COURSE NO. 7: NORTH 11°13'24" EAST, 64.15 FEET; COURSE NO. 8: NORTH 41°15'02" WEST, 86.46 FEET; COURSE NO. 9: NORTH 21°13'24" WEST 48.07 FEET; COURSE NO. 10: NORTH 25°50'13" WEST, 7.57 FEET; COURSE NO. 11: NORTH 09°20'00" EAST, 55.14 FEET; COURSE NO. 12: NORTH 25°52'22" WEST, 66.56 FEET; COURSE NO. 13: NORTH 24°52'17" WEST, 40.99 FEET; COURSE NO. 14: NORTH 04°21'29" WEST, 34.66 FEET; COURSE NO. 15: NORTH 11°27'49" EAST, 58.90 FEET; COURSE NO. 16: NORTH 10°24'54" WEST, 67.98 FEET; COURSE NO. 17: NORTH 28°04'28" WEST, 55.04 FEET; COURSE NO. 18: NORTH 18°52'38" WEST, 43.64 FEET; COURSE NO. 19: NORTH 13°36'38" WEST, 42.86 FEET; COURSE NO. 20: NORTH 02°48'29" WEST, 263.13 FEET; COURSE NO. 21: NORTH 46°11'03" WEST, 68.47 FEET; COURSE NO. 22: NORTH 17°54'30" WEST, 45.26 FEET; COURSE NO. 23: NORTH 20°31'47" WEST, 57.29 FEET; COURSE NO. 24: NORTH 15°30'26" EAST, 73.32 FEET; COURSE NO. 25: NORTH 02°32'45" EAST, 63.41 FEET; COURSE NO. 26: NORTH 12°16'28" WEST, 66.88 FEET; COURSE NO. 27: NORTH 35°06'58" WEST, 62.53 FEET; COURSE NO. 28: NORTH 19°11'46" WEST, 42.97 FEET; COURSE NO. 29: NORTH 14°29'27" WEST, 81.14 FEET; COURSE NO. 30: NORTH 74°05'31" EAST, 710.32 FEET TO A POINT ON THE BOUNDARY OF THOSE LANDS DESCRIBED AND RECORDED AS INSTRUMENT NUMBER 2023000146467 OF THE PUBLIC RECORDS OF SAID LEE COUNTY, FLORIDA; THENCE RUN THE FOLLOWING TWENTY-SIX (26) COURSES ALONG THE BOUNDARY OF LAST SAID LANDS; COURSE NO. 1: SOUTH 36°08'20" EAST, 37.55 FEET; COURSE NO. 2: SOUTH 05°57'36" WEST, 410.85 FEET; COURSE NO. 3: SOUTH 31°41'08" EAST, 104.97 FEET; COURSE NO. 4: NORTH 58°57'13" EAST, 194.96 FEET; COURSE NO. 5: NORTH 31°02'46" WEST, 44.76 FEET; COURSE NO. 6: NORTH 00°03'41" EAST, 125.64 FEET; COURSE NO. 7: NORTH 13°25'09" WEST, 70.59 FEET; COURSE NO. 8: NORTH 56°53'27" EAST, 107.37 FEET TO A POINT ON A NON-TANGENTIAL CURVE; COURSE NO. 9: NORTHERLY, 63.69 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 182.00 FEET, THROUGH A CENTRAL ANGLE OF 20°03'07" AND BEING SUBTENDED BY A CHORD THAT BEARS NORTH 14°13'59" WEST, 63.37 FEET TO A POINT OF REVERSE CURVATURE; COURSE NO. 10: NORTHERLY, 96.67 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE WESTERLY, HAVING A RADIUS OF 266.00 FEET, THROUGH A CENTRAL ANGLE OF 20°49'18" AND BEING SUBTENDED BY A CHORD THAT BEARS NORTH 14°37'05" WEST, 96.14 FEET TO A POINT OF COMPOUND CURVATURE; COURSE NO. 11: NORTHWESTERLY, 178.78 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 966.00 FEET, THROUGH A CENTRAL ANGLE OF 10°36'14" AND BEING SUBTENDED BY A CHORD THAT BEARS NORTH 30°19'51" WEST, 178.53 FEET TO A POINT OF REVERSE CURVATURE; COURSE NO. 12: NORTHERLY, 152.00 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 214.00 FEET, THROUGH A CENTRAL ANGLE OF 40°41'44" AND BEING SUBTENDED BY A CHORD THAT BEARS NORTH 15°17'06" WEST, 148.82 FEET; COURSE NO. 13: NORTH 05°03'46" EAST, 277.10 FEET TO A POINT OF CURVATURE; COURSE NO. 14: NORTHERLY, 121.63 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE WESTERLY, HAVING A RADIUS OF 266.00 FEET, THROUGH A CENTRAL ANGLE OF 26°11'54" AND BEING SUBTENDED BY A CHORD THAT BEARS NORTH 08°02'11" WEST, 120.57 FEET; COURSE NO. 15: NORTH 21°08'08" WEST, 101.90 FEET TO A POINT OF CURVATURE; COURSE NO. 16: NORTHERLY, 194.40 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 204.00 FEET, THROUGH A CENTRAL ANGLE OF 54°36'02" AND BEING SUBTENDED BY A CHORD THAT BEARS NORTH 06°09'53" EAST, 187.13 FEET TO A POINT OF COMPOUND CURVATURE; COURSE NO. 17: NORTHEASTERLY, 38.44 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 134.00 FEET, THROUGH A CENTRAL ANGLE OF 16°26'18" AND BEING SUBTENDED BY A CHORD THAT BEARS NORTH 41°41'03" EAST, 38.31 FEET TO A POINT OF COMPOUND CURVATURE;



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Bonita Springs, FL 34135  
239-405-8166

COURSE NO. 18: NORTHEASTERLY, 158.22 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 393.00 FEET, THROUGH A CENTRAL ANGLE OF 23°04'02" AND BEING SUBTENDED BY A CHORD THAT BEARS NORTH 61°26'13" EAST, 157.15 FEET TO A POINT OF COMPOUND CURVATURE; COURSE NO. 19: EASTERLY, 181.01 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE SOUTHERLY, HAVING A RADIUS OF 184.00 FEET, THROUGH A CENTRAL ANGLE OF 56°21'48" AND BEING SUBTENDED BY A CHORD THAT BEARS SOUTH 78°50'52" EAST, 173.79 FEET TO A POINT OF COMPOUND CURVATURE; COURSE NO. 20: SOUTHEASTERLY, 130.68 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 434.00 FEET, THROUGH A CENTRAL ANGLE OF 17°15'08" AND BEING SUBTENDED BY A CHORD THAT BEARS SOUTH 42°02'24" EAST, 130.19 FEET; COURSE NO. 21: SOUTH 33°24'51" EAST, 27.61 FEET; COURSE NO. 22: NORTH 56°35'09" EAST, 14.26 FEET; COURSE NO. 23: SOUTH 66°02'09" EAST, 78.97 FEET; COURSE NO. 24: NORTH 64°31'27" EAST, 128.50 FEET; COURSE NO. 25: NORTH 22°32'45" WEST, 125.49 FEET; COURSE NO. 26: NORTH 67°27'15" EAST, 13.12 FEET TO A POINT ON THE BOUNDARY OF AFORESAID LANDS DESCRIBED AND RECORDED IN OFFICIAL RECORDS BOOK 3539, PAGES 3116 THROUGH 3119 (INCLUSIVE) OF THE PUBLIC RECORDS OF SAID LEE COUNTY, FLORIDA; THENCE RUN THE FOLLOWING TEN (10) COURSES ALONG THE BOUNDARY OF LAST SAID LANDS; COURSE NO. 1: SOUTH 20°50'26" EAST, 152.26 FEET; COURSE NO. 2: SOUTH 25°28'33" EAST, 245.21 FEET; COURSE NO. 3: SOUTH 18°20'32" EAST, 130.83 FEET; COURSE NO. 4: SOUTH 27°46'07" WEST, 205.73 FEET; COURSE NO. 5: SOUTH 16°30'00" EAST, 265.70 FEET; COURSE NO. 6: SOUTH 54°23'52" EAST, 190.76 FEET; COURSE NO. 7: SOUTH 22°38'40" EAST, 87.71 FEET; COURSE NO. 8: SOUTH 71°46'53" WEST, 131.17 FEET; COURSE NO. 9: SOUTH 68°44'48" WEST, 363.26 FEET; COURSE NO. 10: SOUTH 21°12'13" EAST, 161.13 FEET TO A POINT ON THE BOUNDARY OF AFORESAID LANDS DESCRIBED AND RECORDED IN CITY OF BONITA SPRINGS, FLORIDA ORDINANCE NUMBER 14-10 (ANNEXATION AREA); THENCE RUN THE FOLLOWING NINETEEN (19) COURSES ALONG THE BOUNDARY OF LAST SAID LANDS; COURSE NO. 1: SOUTH 21°12'13" EAST, 4.51 FEET TO A POINT OF CURVATURE; COURSE NO. 2: SOUTHEASTERLY, 60.98 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 258.00 FEET, THROUGH A CENTRAL ANGLE OF 13°32'33" AND BEING SUBTENDED BY A CHORD THAT BEARS SOUTH 27°58'29" EAST, 60.84 FEET; COURSE NO. 3: SOUTH 34°44'46" EAST, 155.79 FEET TO A POINT OF CURVATURE; COURSE NO. 4: SOUTHERLY, 186.50 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE WESTERLY, HAVING A RADIUS OF 330.00 FEET, THROUGH A CENTRAL ANGLE OF 32°22'48" AND BEING SUBTENDED BY A CHORD THAT BEARS SOUTH 18°33'22" EAST, 184.02 FEET; COURSE NO. 5: NORTH 89°47'40" EAST, 11.43 FEET TO A POINT ON A NON-TANGENTIAL CURVE; COURSE NO. 6: SOUTHERLY, 169.80 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE WESTERLY, HAVING A RADIUS OF 275.00 FEET, THROUGH A CENTRAL ANGLE OF 35°22'36" AND BEING SUBTENDED BY A CHORD THAT BEARS SOUTH 17°28'14" WEST, 167.11 FEET TO A POINT OF REVERSE CURVATURE; COURSE NO. 7: SOUTHWESTERLY, 110.74 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 375.00 FEET, THROUGH A CENTRAL ANGLE OF 16°55'14" AND BEING SUBTENDED BY A CHORD THAT BEARS SOUTH 26°41'55" WEST, 110.34 FEET; COURSE NO. 8: SOUTH 18°14'18" WEST, 248.83 FEET TO A POINT OF CURVATURE; COURSE NO. 9: SOUTHEASTERLY, 879.51 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 610.00 FEET, THROUGH A CENTRAL ANGLE OF 82°36'37" AND BEING SUBTENDED BY A CHORD THAT BEARS SOUTH 23°04'00" EAST, 805.28 FEET TO A POINT OF REVERSE CURVATURE; COURSE NO. 10: SOUTHEASTERLY, 68.09 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 675.00 FEET, THROUGH A CENTRAL ANGLE OF 05°46'48" AND BEING SUBTENDED BY A CHORD THAT BEARS SOUTH 61°28'55" EAST, 68.07 FEET TO A POINT OF COMPOUND CURVATURE;

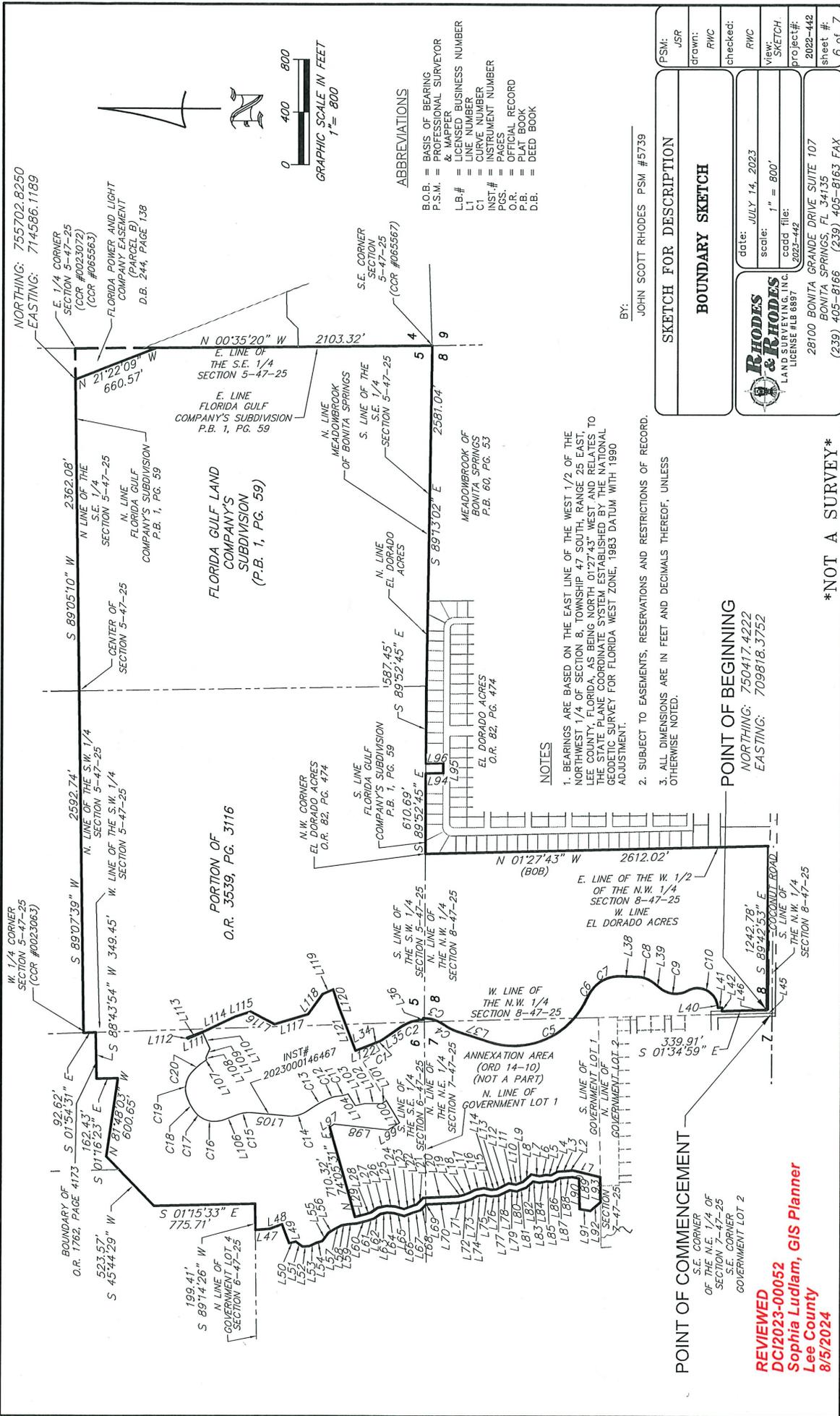


Rhodes and Rhodes Land Surveying  
28100 Bonita Grande Drive, STE 107  
Bonita Springs, FL 34135  
239-405-8166

COURSE NO. 11: SOUTHEASTERLY, 273.04 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 260.00 FEET, THROUGH A CENTRAL ANGLE OF 60°10'09" AND BEING SUBTENDED BY A CHORD THAT BEARS SOUTH 28°30'26" EAST, 260.66 FEET; COURSE NO. 12: SOUTH 01°34'37" WEST, 129.72 FEET TO A POINT OF CURVATURE; COURSE NO. 13: SOUTHERLY, 147.14 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE WESTERLY, HAVING A RADIUS OF 225.00 FEET, THROUGH A CENTRAL ANGLE OF 37°28'04" AND BEING SUBTENDED BY A CHORD THAT BEARS SOUTH 20°18'39" WEST, 144.53 FEET; COURSE NO. 14: SOUTH 39°02'41" WEST, 55.64 FEET TO A POINT OF CURVATURE; COURSE NO. 15: SOUTHERLY, 225.28 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 190.00 FEET, THROUGH A CENTRAL ANGLE OF 67°56'02" AND BEING SUBTENDED BY A CHORD THAT BEARS SOUTH 05°04'40" WEST, 212.31 FEET TO A POINT OF REVERSE CURVATURE; COURSE NO. 16: SOUTHWESTERLY, 294.51 FEET ALONG THE ARC OF A CIRCULAR CURVE, CONCAVE NORTHWESTERLY, HAVING A RADIUS OF 155.00 FEET, THROUGH A CENTRAL ANGLE OF 108°52'02" AND BEING SUBTENDED BY A CHORD THAT BEARS SOUTH 25°32'40" WEST, 252.17 FEET; COURSE NO. 17: SOUTH 79°58'40" WEST, 20.35 FEET; COURSE NO. 18: SOUTH 01°34'59" EAST, 30.27 FEET; COURSE NO. 19: SOUTH 88°25'01" WEST, 26.60 FEET TO A POINT ON THE EASTERLY RIGHT-OF-WAY LINE OF COCONUT ROAD, AS RECORDED IN OFFICIAL RECORDS BOOK 3421, PAGES 1095 THROUGH 1097 (INCLUSIVE) OF THE PUBLIC RECORDS OF SAID LEE COUNTY, FLORIDA; THENCE SOUTH 01°34'59" EAST, ALONG SAID EASTERLY RIGHT-OF-WAY LINE, A DISTANCE OF 339.91 FEET TO THE POINT OF BEGINNING.

CONTAINING 430.934 ACRES, MORE OR LESS.

**REVIEWED**  
**DCI2023-00052**  
**Sophia Ludlam, GIS Planner**  
**Lee County**  
**8/5/2024**



NORTHING: 755702.8250  
EASTING: 714586.1189



**ABBREVIATIONS**

- B.O.B. = BASIS OF BEARING
- P.S.M. = PROFESSIONAL SURVEYOR & REGISTERED
- L.B.# = LICENSED BUSINESS NUMBER
- L1 = LINE NUMBER
- C1 = CURVE NUMBER
- INST.# = INSTRUMENT NUMBER
- PGS. = PAGES
- O.R. = OFFICIAL RECORD
- P.B. = PLAT BOOK
- D.B. = DEED BOOK

BY: JOHN SCOTT RHODES PSM #5739

PSM: JSR	drawn: RWC
	checked: RWC
VIEW: SKETCH	date: JULY 14, 2023
	scale: 1" = 800'
PROJECT#: 2022-442	cad file: 2023-442
SHEET #: 6 of 7	

**SKETCH FOR DESCRIPTION**

**BOUNDARY SKETCH**

**R. RHODES & R. RHODES**  
LAND SURVEYING, INC.  
LICENSE #LB 6897

28100 BONITA GRANDE DRIVE SUITE 107  
BONITA SPRINGS, FL 34135  
(239) 405-8166 (239) 405-8163 FAX

- NOTES**
- BEARINGS ARE BASED ON THE EAST LINE OF THE WEST 1/2 OF THE NORTHWEST 1/4 OF SECTION 8, TOWNSHIP 47 SOUTH, RANGE 25 EAST, LEE COUNTY, FLORIDA, AS BEING NORTH 01°27'43" WEST AND RELATES TO THE STATE PLANE COORDINATE SYSTEM ESTABLISHED BY THE NATIONAL GEODETIC SURVEY FOR FLORIDA WEST ZONE, 1983 DATUM WITH 1990 ADJUSTMENT.
  - SUBJECT TO EASEMENTS, RESERVATIONS AND RESTRICTIONS OF RECORD.
  - ALL DIMENSIONS ARE IN FEET AND DECIMALS THEREOF, UNLESS OTHERWISE NOTED.

**POINT OF BEGINNING**  
NORTHING: 750417.4222  
EASTING: 709818.3752

**POINT OF COMMENCEMENT**  
S.E. CORNER OF THE N.E. 1/4 OF SECTION 7-47-25 GOVERNMENT LOT 2

**REVIEWED**  
DCI2023-00052  
Sophia Ludlam, GIS Planner  
Lee County  
8/5/2024

**\*NOT A SURVEY\***

LINE	LENGTH	BEARING
L1	214.95'	N 13°37'57" E
L2	58.94'	N 04°32'08" W
L3	61.67'	N 05°12'32" E
L4	55.22'	N 29°06'14" W
L5	41.25'	N 03°28'02" E
L6	47.92'	N 10°16'42" E
L7	64.15'	N 11°3'24" E
L8	86.46'	N 41°15'02" W
L9	48.07'	N 21°13'24" W
L10	7.57'	N 25°50'13" W
L11	55.14'	N 09°20'00" E
L12	66.56'	N 25°52'22" W
L13	40.99'	N 24°52'17" W
L14	34.66'	N 04°21'29" W
L15	58.90'	N 11°27'49" E
L16	67.98'	N 10°24'54" W
L17	55.04'	N 28°04'28" W
L18	43.64'	N 18°52'38" W
L19	42.86'	N 13°36'38" W
L20	263.13'	N 02°48'29" W
L21	68.47'	N 46°11'03" W
L22	45.26'	N 17°54'30" W
L23	57.29'	N 20°31'47" W
L24	73.32'	N 15°30'26" E
L25	63.41'	N 02°32'45" E
L26	66.88'	N 12°16'28" W
L27	62.53'	N 35°06'58" W
L28	42.97'	N 19°11'46" W
L29	81.14'	N 14°29'27" W
L30	4.51'	S 21°12'13" E
L31	155.79'	S 34°44'46" E
L32	11.43'	N 89°47'40" E
L33	248.83'	S 18°14'18" W
L34	129.72'	S 01°34'37" W
L35	55.64'	S 39°02'41" W
L36	20.35'	S 79°58'40" W
L37	30.27'	S 01°34'59" E
L38	26.60'	S 88°25'01" W
L39	40.03'	N 01°34'59" W

LINE	LENGTH	BEARING
L46	25.01'	S 89°42'53" E
L47	104.21'	S 04°39'14" E
L48	105.00'	S 20°14'29" E
L49	154.32'	S 68°35'55" W
L50	50.99'	S 13°48'24" E
L51	64.03'	S 36°09'47" W
L52	50.00'	S 02°29'49" E
L53	54.63'	S 26°14'47" E
L54	51.92'	S 18°08'21" E
L55	78.10'	S 52°41'29" E
L56	57.31'	S 31°44'44" E
L57	55.46'	S 28°08'16" E
L58	50.49'	S 10°27'59" E
L59	63.86'	S 04°01'02" E
L60	88.09'	S 14°29'27" E
L61	52.20'	S 19°11'46" E
L62	59.36'	S 35°06'58" E
L63	49.94'	S 12°16'28" E
L64	50.98'	S 02°32'45" W
L65	84.12'	S 15°30'26" W
L66	72.71'	S 20°31'47" E
L67	56.94'	S 17°54'30" E
L68	61.03'	S 46°11'03" E
L69	1.00'	N 89°20'35" E
L70	247.54'	S 02°48'29" E
L71	49.89'	S 13°36'38" E
L72	49.96'	S 18°52'38" E
L73	51.29'	S 28°04'28" E
L74	50.55'	S 10°24'54" E
L75	56.18'	S 11°27'49" W
L76	50.65'	S 04°21'29" E
L77	50.48'	S 24°52'17" E
L78	51.13'	S 25°52'22" E
L79	55.12'	S 09°20'00" W
L80	21.40'	S 25°50'13" E
L81	54.88'	S 21°3'24" E
L82	70.64'	S 41°15'02" E
L83	49.00'	S 11°13'24" W
L84	51.40'	S 10°16'42" E

LINE	LENGTH	BEARING
L85	49.83'	S 03°26'02" W
L86	59.23'	S 29°06'14" E
L87	50.79'	S 05°12'32" E
L88	50.65'	S 04°32'08" E
L89	52.21'	S 13°37'57" W
L90	230.82'	S 89°00'08" W
L91	80.80'	S 09°02'32" W
L92	105.50'	S 39°36'44" E
L93	188.36'	N 89°06'42" E
L94	132.29'	S 01°17'58" E
L95	75.00'	S 89°39'36" E
L96	132.58'	N 01°17'58" W
L97	37.55'	S 06°08'20" E
L98	410.85'	S 05°57'36" W
L99	104.97'	S 31°41'08" E
L100	194.96'	N 58°57'13" E
L101	44.76'	N 31°02'46" W
L102	125.64'	N 00°03'41" E
L103	70.59'	N 13°25'09" W
L104	107.37'	N 56°53'27" E
L105	277.10'	N 05°03'46" E
L106	101.90'	N 21°08'08" W
L107	27.61'	S 35°24'51" E
L108	14.26'	N 56°35'09" E
L109	78.97'	S 66°02'09" E
L110	128.50'	N 64°31'27" E
L111	125.49'	N 22°32'45" W
L112	13.12'	N 67°27'15" E
L113	152.96'	S 20°50'26" E
L114	245.21'	S 25°28'33" E
L115	130.83'	S 18°20'32" E
L116	205.73'	S 27°46'07" W
L117	265.70'	S 16°30'00" E
L118	190.76'	S 54°23'52" E
L119	87.71'	S 22°38'40" E
L120	131.17'	S 71°46'53" W
L121	363.26'	S 68°44'48" W
L122	161.13'	S 21°12'13" E

LINE	LENGTH	BEARING
L123	105.50'	S 03°26'02" W
L124	59.23'	S 29°06'14" E
L125	50.79'	S 05°12'32" E
L126	50.65'	S 04°32'08" E
L127	52.21'	S 13°37'57" W
L128	230.82'	S 89°00'08" W
L129	80.80'	S 09°02'32" W
L130	105.50'	S 39°36'44" E
L131	188.36'	N 89°06'42" E
L132	132.29'	S 01°17'58" E
L133	75.00'	S 89°39'36" E
L134	132.58'	N 01°17'58" W
L135	37.55'	S 06°08'20" E
L136	410.85'	S 05°57'36" W
L137	104.97'	S 31°41'08" E
L138	194.96'	N 58°57'13" E
L139	44.76'	N 31°02'46" W
L140	125.64'	N 00°03'41" E
L141	70.59'	N 13°25'09" W
L142	107.37'	N 56°53'27" E
L143	277.10'	N 05°03'46" E
L144	101.90'	N 21°08'08" W
L145	27.61'	S 35°24'51" E
L146	14.26'	N 56°35'09" E
L147	78.97'	S 66°02'09" E
L148	128.50'	N 64°31'27" E
L149	125.49'	N 22°32'45" W
L150	13.12'	N 67°27'15" E
L151	152.96'	S 20°50'26" E
L152	245.21'	S 25°28'33" E
L153	130.83'	S 18°20'32" E
L154	205.73'	S 27°46'07" W
L155	265.70'	S 16°30'00" E
L156	190.76'	S 54°23'52" E
L157	87.71'	S 22°38'40" E
L158	131.17'	S 71°46'53" W
L159	363.26'	S 68°44'48" W
L160	161.13'	S 21°12'13" E

CURVE	RADIUS	DELTA	LENGTH	CHORD	CHORD BEARING
C1	258.00'	1°32'33"	60.98'	60.84'	S 27°58'29" E
C2	330.00'	3°22'48"	186.50'	184.02'	S 18°33'22" E
C3	275.00'	5°52'36"	169.80'	167.11'	S 17°28'14" W
C4	375.00'	16°55'14"	110.74'	110.34'	S 26°41'55" W
C5	610.00'	82°36'37"	879.51'	805.28'	S 23°04'00" E
C6	675.00'	5°46'48"	68.09'	68.07'	S 61°28'55" E
C7	260.00'	60°10'09"	273.04'	260.66'	S 28°30'26" E
C8	190.00'	67°56'02"	225.28'	212.31'	S 05°04'40" W
C9	225.00'	37°28'04"	147.14'	144.53'	S 20°18'39" W
C10	155.00'	108°52'02"	294.51'	252.17'	S 25°32'40" W
C11	182.00'	20°03'07"	63.69'	63.37'	N 14°13'59" W
C12	266.00'	20°49'18"	96.67'	96.14'	N 14°37'05" W
C13	966.00'	10°36'14"	178.78'	178.53'	N 30°19'51" W
C14	214.00'	40°41'44"	152.00'	148.82'	N 15°17'08" W
C15	266.00'	28°11'54"	121.63'	120.57'	N 08°02'11" W
C16	134.00'	54°36'02"	194.40'	187.13'	N 06°09'53" E
C17	134.00'	16°26'18"	38.44'	38.31'	N 41°10'3" E
C18	393.00'	23°04'02"	158.22'	157.15'	N 61°26'13" E
C19	184.00'	56°21'48"	181.01'	173.79'	S 78°50'52" E
C20	434.00'	17°15'08"	130.68'	130.19'	S 42°02'24" E

**SKETCH FOR DESCRIPTION**

**BOUNDARY SKETCH**

date: JULY 14, 2023

scale: N/A

view: TABLES

project #: 2023-442

sheet #: 7 of 7

checked: RWC

drawn: JSR

RWC



**RHODES & RHODES**  
LAND SURVEYING, INC.  
LICENSE #LS 6897

28100 BONITA GRANDE DRIVE SUITE 107  
BONITA SPRINGS, FL 34135  
(239) 405-8166 (239) 405-8163 FAX

REVIEWED  
 DCI2023-00052  
 Sophia Ludlam, GIS Planner  
 Lee County  
 8/5/2024

\*NOT A SURVEY\*

DCI2023-00052

Zoning

 City Limits

 Subject Property

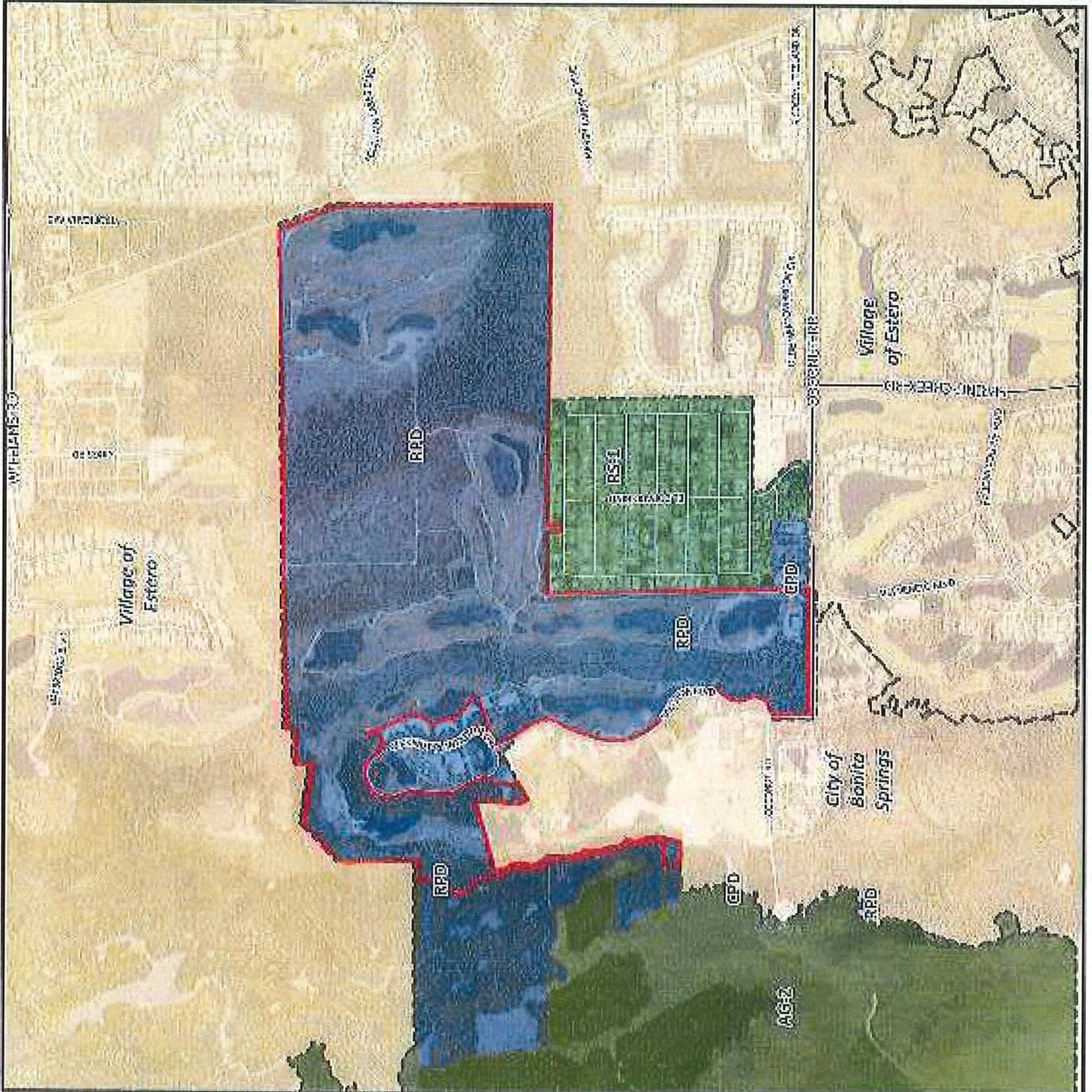
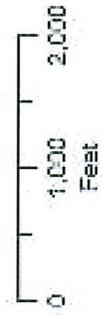
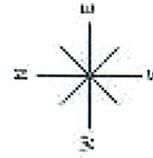
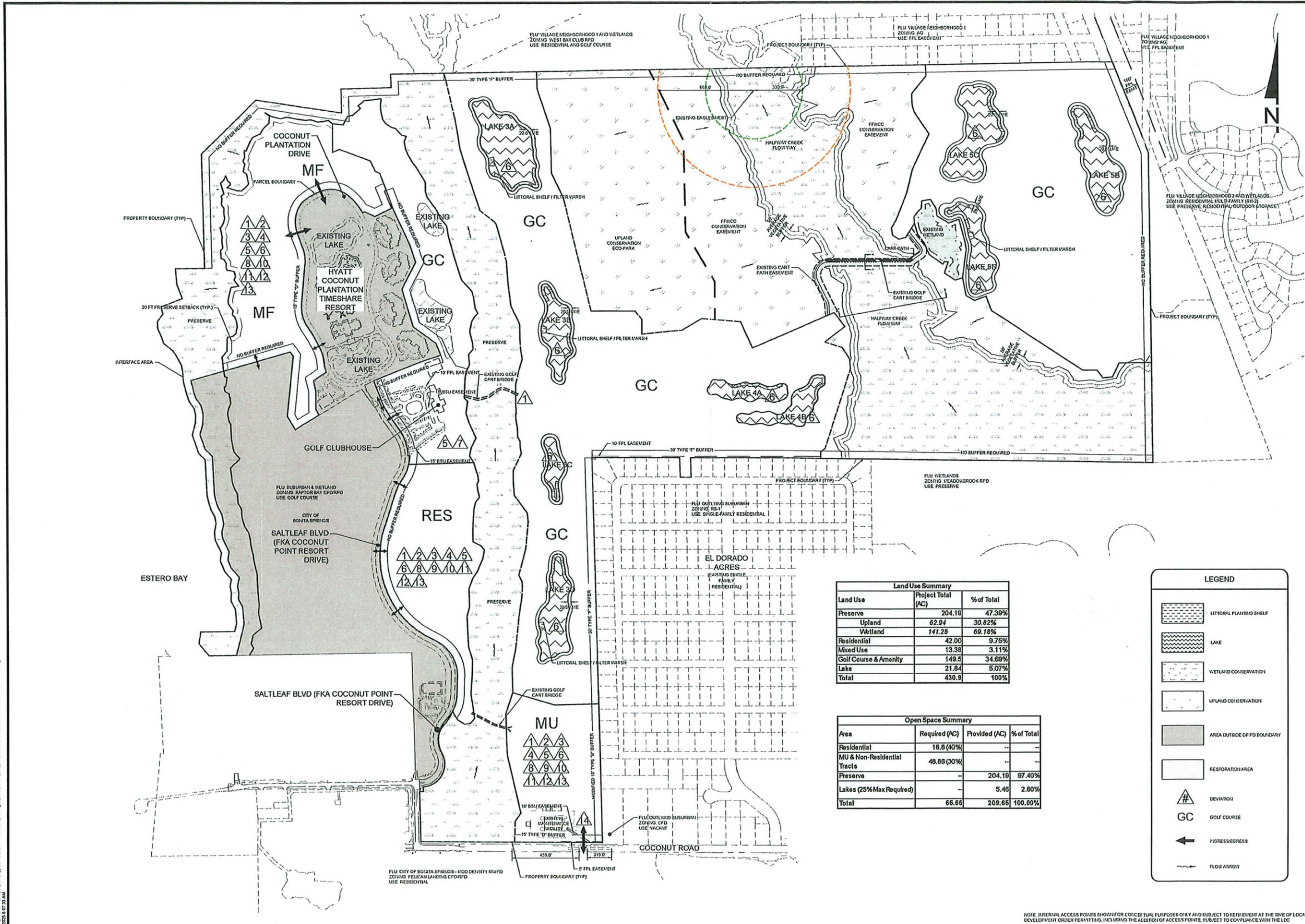


Exhibit "B"



Land Use Summary		
Land Use	Project Total (AC)	% of Total
Reserve	204.18	47.39%
Upland	62.94	30.82%
Wetland	141.25	69.18%
Residential	42.00	9.75%
Mixed Use	13.38	3.11%
Golf Course & Amenity	149.5	34.68%
Lake	21.84	5.07%
<b>Total</b>	<b>430.9</b>	<b>100%</b>

Open Space Summary			
Area	Required (AC)	Provided (AC)	% of Total
Residential	16.8 (40%)	--	--
MU & Non-Residential Tracts	48.08 (30%)	--	--
Reserve	--	204.19	97.40%
Lakes (25% Max Required)	--	5.46	2.60%
<b>Total</b>	<b>65.66</b>	<b>209.65</b>	<b>100.00%</b>

**LEGEND**

- LITTORAL FLATTENING SHELF
- LAKE
- WETLAND CONSERVATION
- UPLAND CONSERVATION
- AREA OUTSIDE OF PD BOUNDARY
- RESTORATION AREA
- DEVIATIONS
- GOLF COURSE
- EGRESSEGRESS
- FLOW ARROW

MASTER CONCEPT PLAN

# PELICAN LANDING MPD

CLIENT: LONDON BAY



PLAN REVISIONS



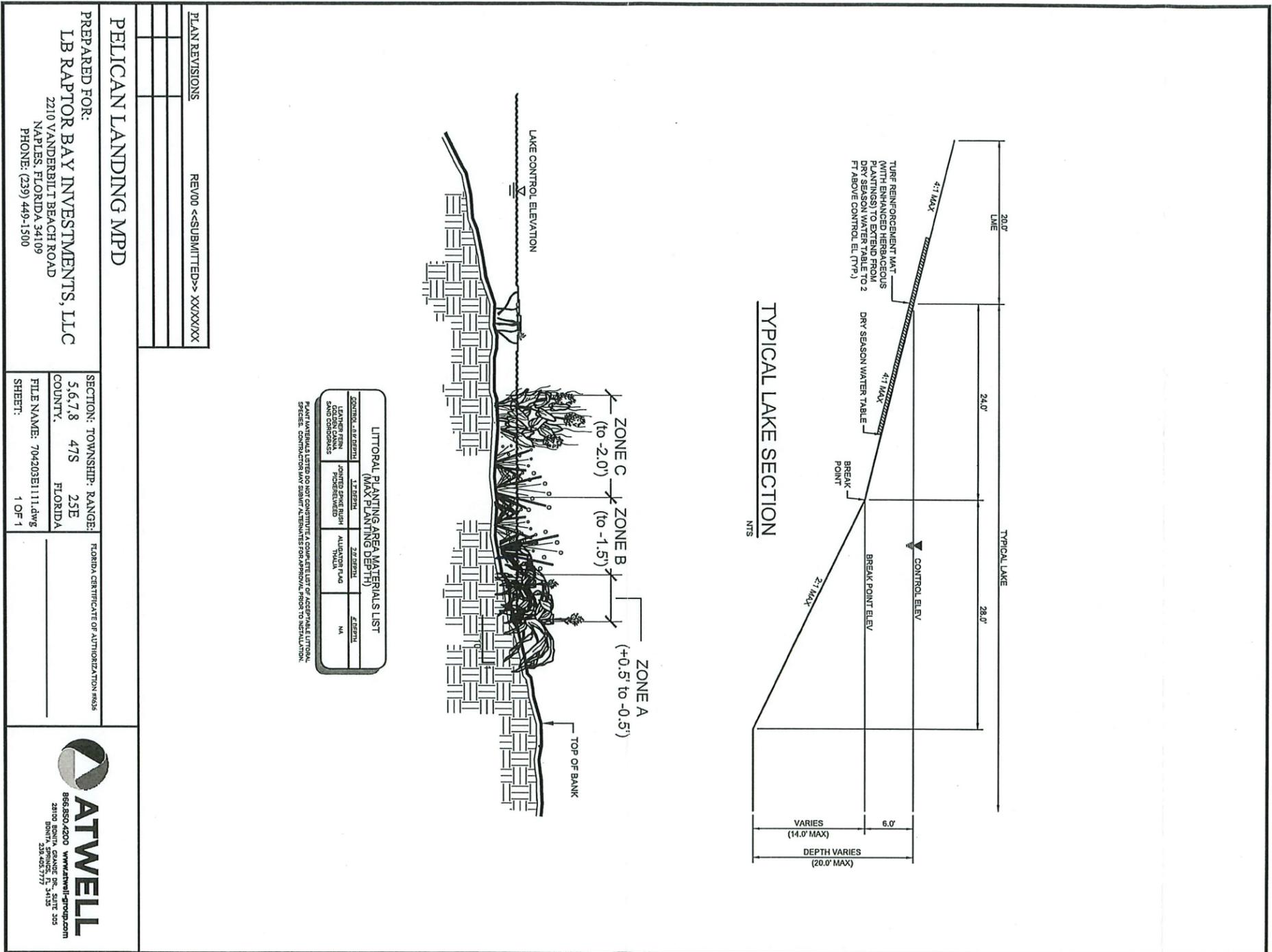
FLORIDA CERTIFICATE OF AUTHORIZATION #1916

SET NUMBER: 704-203  
SHEET: 1

B:\Projects\2023\23001 Pelican Bay\GIS\Concept\Revision\23001-00052-011\_Golf Course MDP\Concept\Print\DCI2023-00052-011.dwg  
 06/17/2025 10:24 AM

Approved as Exhibit **C**  
 MCP Page **1** of **3**  
 Resolution # **Z-25-004**





Approved as Exhibit C  
MCP Page 3 of 3  
Resolution # 2-35-004

**RAPTOR BAY GOLF COURSE RENOVATION  
INDIGENOUS PRESERVE AND PROTECTED SPECIES  
MANAGEMENT PLAN**

**Revised December 2022**

Prepared For:

***LBRaptor, LLC***  
*2210 Vanderbilt Beach Road, Suite 1300*  
*Naples, Florida 34109*  
*(239) 449-1550*

Prepared By:

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Project No. 20LBR3290

Exhibit "D"

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## 1.0 INTRODUCTION

The following outlines the Lee County Indigenous Preserve and Protected Species Management Plan for Raptor Bay (Project) located in Sections 5 and 8, Township 47 South, Range 25 East, Lee County (Appendix A). This plan has been prepared to meet the requirements outlined in Section 10-415(b)(4) of the Lee County Land Development Code (LDC). The Project totals 306.89± acres and is located north of Coconut Road, approximately 1.5 miles west of U.S. 41 and approximately 2.28 miles south of Corkscrew Road. More specifically, the site is bordered to the north by West Bay Club; to the south by Coconut Road, El Dorado Acres, and Meadowbrook; to the east by an existing Florida Power & Light easement; and to the west by existing conservation lands, the Raptor Bay Golf Club, and the Hyatt Residence Club. Halfway Creek bisects the eastern portion of the Project.

The Project's preserve area totals 143.95± acres and was previously placed under conservation easement per South Florida Water Management District (SFWMD) and Florida Fish and Wildlife Conservation Commission (FWCC) requirements. The preserve area contains a mosaic of native forested and herbaceous upland and wetland habitats (Appendix B). The proposed conservation areas will contain the following:

- Preservation and enhancement of 61.54± acres of indigenous wetlands and 57.74± acres of indigenous uplands (existing forested and herbaceous habitats with less than 75 percent exotics).
- Restoration of 16.44± acres of indigenous wetlands and 6.74± acres of indigenous uplands through the removal of exotic vegetation (existing forested and herbaceous habitats with greater than 75 percent exotics) and supplemental plantings.
- Previously permitted golf cart path and bridge (1.49± acres).

The protected species management plan contained in this report pertains to the American alligator (*Alligator mississippiensis*), gopher tortoise (*Gopherus polyphemus*), listed wading birds, bald eagle (*Haliaeetus leucocephalus*), Florida black bear (*Ursus americanus floridanus*), and Big Cypress fox squirrel (*Sciurus niger avicennia*).

## 2.0 EXISTING INDIGENOUS VEGETATION HABITATS

Pursuant to LDC Section 10-1, indigenous native vegetation means those plant species that are characteristic of the major plant communities within Lee County. Native habitats where invasive exotic vegetation has exceeded 75 percent coverage are not considered to be indigenous vegetation.

The Project site includes 159.41± acres (combined pre-development wetland and upland acres) of existing indigenous native vegetation. The indigenous areas occur on-site as wetland and upland herbaceous and forested habitats with less than 75 percent coverage by exotics. These indigenous areas are surrounded by golf course and existing development. An aerial with Florida Land Use, Cover and Forms Classification System (FLUCFCS) is attached as Appendix B and depicts the existing indigenous wetland and upland vegetation communities.

The indigenous wetland habitats total 62.32± acres and consist mostly of mixed wetland hardwood, mixed wetland forests, cypress, and freshwater marsh habitats. The indigenous uplands total 97.09± acres and consist mostly of pine, pine flatwoods, and scrubby flatwood habitats.

A total of 119.28± acres (61.54± acres of wetlands and 57.74± acres of uplands) of indigenous vegetation will be preserved and enhanced. Listed below are the FLUCFCS descriptions of the indigenous wetland and upland habitats proposed for preservation and enhancement.

## 2.1 Indigenous Wetland Habitats

### Mixed Wetland Hardwoods, Disturbed (0-24%) (FLUCFCS Code 6179 E1)

The canopy of this habitat type consists of scattered red maple (*Acer rubrum*), Carolina willow (*Salix caroliniana*), and bald cypress (*Taxodium distichum*). The sub-canopy contains buttonbush (*Cephalanthus occidentalis*), Carolina willow, red maple, and pond apple (*Annona glabra*). The ground cover contains swamp fern (*Telmatoblechnum serrulatum*), maidencane (*Panicum hemitomon*), West Indian marsh grass (*Hymenachne amplexicaulis*), and climbing hempvine (*Mikania scandens*).

### Cypress, Disturbed (0-24%) (FLUCFCS Code 6219 E1)

The canopy of this habitat type includes bald cypress, scattered cabbage palm (*Sabal palmetto*), and widely scattered melaleuca (*Melaleuca quinquenervia*). The sub-canopy contains bald cypress, wax myrtle (*Morella cerifera*), buttonbush, pond apple, and scattered Brazilian pepper (*Schinus terebinthifolia*). The ground cover contains swamp fern, sawgrass (*Cladium jamaicense*), little blue maidencane (*Amphicarpum muhlenbergianum*), and widely scattered West Indian marsh grass.

### Mixed Wetland Forest, Disturbed (25-49%) (FLUCFCS Code 6309 E2)

The canopy of this habitat type contains cabbage palm, bald cypress, Carolina willow, red maple, oak (*Quercus* sp.), and melaleuca. The sub-canopy contains bald cypress, cabbage palm, Carolina willow, buttonbush, and scattered pop ash (*Fraxinus caroliniana*) and Brazilian pepper. The ground cover contains swamp fern, maidencane, sawgrass, and red ludwigia (*Ludwigia repens*).

### Freshwater Marsh, Disturbed (0-24%) (FLUCFCS Code 6419 E1)

The canopy and sub-canopy of this habitat type contain Carolina willow and pond apple on the edges. The ground cover contains cattail (*Typha* sp.), sawgrass, fireflag (*Thalia geniculata*), leather fern (*Acrostichum danaeifolium*), and maidencane.

## 2.2 Indigenous Upland Habitats

### Pine Flatwoods, Disturbed (0-24%) (FLUCFCS Code 4119 E1)

The canopy of this habitat type includes slash pine (*Pinus elliottii*), melaleuca, and scattered cabbage palm and earleaf acacia (*Acacia auriculiformis*). The sub-canopy contains slash pine, melaleuca, twining snoutbean (*Rhynchosia tomentosa*), wax myrtle, myrsine (*Myrsine guianensis*), saltbush (*Baccharis halimifolia*), saw palmetto (*Serenoa repens*), dahoon holly (*Ilex cassine*), gallberry (*Ilex glabra*), Brazilian pepper, muscadine

grapevine (*Vitis rotundifolia*), climbing cassia (*Senna pendula*) and scattered cabbage palm and earleaf acacia. The ground cover is dominated by saw palmetto.

Scrubby Flatwoods (0-24%) (FLUCFCS Code 4169 E1)

The canopy of this habitat type contains scattered slash pine and sand live oak (*Quercus geminata*). The sub-canopy contains myrtle oak (*Quercus myrtifolia*), Chapman's oak (*Quercus chapmanii*), sand live oak, dahoon holly, rosemary (*Ceratiola ericoides*), gallberry, staggerbush (*Lyonia fruticosa*), fetterbush (*Lyonia lucida*), tarflower (*Bejaria racemosa*), saw palmetto, and widely scattered earleaf acacia. The ground cover contains saw palmetto, muscadine grapevine, prickly pear (*Opuntia* sp.), pawpaw (*Asimina* sp.), and wiregrass (*Aristida stricta*).

### **3.0 EXISTING NON-INDIGENOUS VEGETATION HABITATS**

Approximately 147.48± acres of the Project site consist of vegetation communities and land cover types that do not meet the LDC's definition of indigenous vegetation. The non-indigenous areas are predominantly golf course, hydric melaleuca, excavated ponds, and forested habitats with greater than 75 percent exotics. Existing non-indigenous wetlands on the site total 31.99± acres and consist of melaleuca areas, excavated ponds, and wetland habitats with greater than 75 percent coverage by exotics, primarily Brazilian pepper and melaleuca. Non-indigenous uplands on the Project site total 115.49± acres and consist primarily of golf course, disturbed land, and pine flatwoods with greater than 75 percent exotics. The non-indigenous wetland and upland vegetation communities are depicted in Appendix B.

A total of 23.18± acres (16.44± acres of wetlands and 6.74± acres of uplands) with greater than 75 percent exotics will be restored. Listed below are the FLUCFCS descriptions of the non-indigenous areas proposed for restoration.

#### **3.1 Non-Indigenous Wetland Habitats**

Melaleuca, Hydric (FLUCFCS Code 4241)

The canopy of this habitat type contains melaleuca, dahoon holly, and widely scattered slash pine. The sub-canopy contains melaleuca, Brazilian pepper, dahoon holly, earleaf acacia, slash pine, saw palmetto, and myrsine. The ground cover contains swamp fern, royal fern (*Osmunda regalis*), Japanese climbing fern (*Lygodium japonicum*), rosy camphorweed (*Pluchea baccharis*), gulfdune paspalum (*Paspalum monostachyum*), beaksedge (*Rhynchospora microcarpa*), and scattered wiregrass and saw palmetto.

Exotics Wetland Hardwoods (FLUCFCS Code 619)

The canopy and sub-canopy of this habitat type contain Brazilian pepper, climbing cassia, and widely scattered cabbage palm. The ground cover is mostly open with Brazilian pepper sprouts.

Cypress, Disturbed (76-100%) (FLUCFCS Code 6219 E4)

This habitat type is similar to FLUCFCS Code 6219 E1, but contains 76 to 100 percent melaleuca in the canopy and sub-canopy.

Mixed Wetland Forest, Disturbed (76-100%) (FLUCFCS Code 6309 E4)

This habitat type is similar to FLUCFCS Code 6309 E2, but contains 76 to 100 percent melaleuca in the canopy and sub-canopy.

### 3.2 Non-Indigenous Upland Habitats

Pine Flatwoods, Disturbed (76-100%) (FLUCFCS Code 4119 E4)

This habitat type is similar to FLUCFCS Code 4119 E1, but contains 76 to 100 percent melaleuca in the canopy and downy rose-myrtle (*Rhodomyrtus tomentosa*) in the sub-canopy.

## 4.0 INDIGENOUS VEGETATION PRESERVE AND ENHANCEMENT

A total of 119.28± acres (61.54± acres of wetlands and 57.74± acres of uplands) with less than 75 percent existing exotic vegetation will be preserved and enhanced by the hand-removal/treatment of exotic and nuisance species. The locations of the indigenous preservation areas are shown on Appendix C.

### 4.1 Methods to Remove and Control Exotic and Nuisance Plants

Exotics to be eradicated include, but are not limited to, the 21 species of prohibited invasive exotic species listed in Section 10-420(h) of the LDC (Table 1).

**Table 1. Prohibited Invasive Exotics**

Common Name	Scientific Name
Air potato	<i>Dioscorea alata</i>
Australian pines	All <i>Casuarina</i> species
Bishopwood	<i>Bischofia javanica</i>
Brazilian pepper	<i>Schinus terebinthifolia</i>
Carrotwood	<i>Cupaniopsis anacardioides</i>
Chinese tallow	<i>Sapium sebiferum</i>
Cork tree	<i>Thespesia populnea</i>
Cuban laurel fig	<i>Ficus microcarpa</i>
Downy rose-myrtle	<i>Rhodomyrtus tomentosus</i>
Earleaf acacia	<i>Acacia auriculiformis</i>
Japanese climbing fern	<i>Lygodium japonicum</i>
Java plum	<i>Syzygium cumini</i>

**Table 1. (Continued)**

<b>Common Name</b>	<b>Scientific Name</b>
Melaleuca	<i>Melaleuca quinquenervia</i>
Murray red gum	<i>Eucalyptus camaldulensis</i>
Old World climbing fern	<i>Lygodium microphyllum</i>
Rose apple	<i>Syzygium jambos</i>
Rosewood	<i>Dalbergia sissoo</i>
Tropical soda apple	<i>Solanum viarum</i>
Wedelia	<i>Wedelia trilobata</i>
Weeping fig	<i>Ficus benjamina</i>
Woman's tongue	<i>Albizia lebeck</i>

Exotic vegetation removal activities will be coordinated with Lee County's Department of Community Development (DCD) staff and will be conducted prior to the issuance of a Certificate of Compliance for the development. Exotic vegetation removal methods will be conducted using hand-removal methods consistent with the previously approved WilsonMiller Habitat Management Plan (See Section 6.0 of Appendix D). This includes the following for the wetland portions of the preserve:

- Wetland habitats will be initially managed by removing exotic and nuisance plant species (primarily melaleuca, Brazilian pepper, and downy rose-myrtle). Exotic eradication and maintenance will be accomplished via hand removal; no mechanized clearing or use of heavy equipment will occur within wetland conservation areas. Hand removal exotic clearing methods will include the use of implements such as chainsaws, axes, and machetes to cut down exotic vegetation. Vehicles such as trucks, trailers, and chippers to process the debris will also be used.
- Plants that are visible 50 feet from the conservation area perimeter will be cut down and removed from the mitigation area. Stumps of cut plants will be chemically treated within 15 minutes of cutting. Debris generated during this phase of removal will be temporarily stockpiled in adjacent upland areas for later burning, chipping/spreading, or transport off-site for disposal. If utilized, chipping will be conducted within the development footprint and not within the preserve areas. Chipped material will be burned on-site or hauled off-site for disposal.
- Interior plants (>50 feet from conservation area perimeter) will primarily be eradicated by chemical treatment of standing trees in order to minimize disruption and impacts to existing native wetland vegetation. Smaller individuals will be eradicated through completed removal, cut and treat, or foliar herbicidal treatment. Only Environmental Protection Agency-approved herbicides will be utilized, and a visual tracer dye will be added if not already contained in the specific herbicide mixture. All herbicides will be applied in accordance with label specifications. Such applications will be conducted by or under the direction of an appropriately licensed applicator. Felled material that

is not removed from the interior of conservation areas will be handled in general accordance with the SFWMD publication Draft Guidelines for Melaleuca Removal date September 14, 1998.

- On-going control of undesirable species will be via directed herbicide applications, physical uprooting, or a combination of these methods. Ongoing maintenance will consist solely of hand-removal; no heavy equipment will be operated within conservation areas.
- During prescribed burning of upland areas of the Eco-Park, appropriate steps will be taken to ensure that site wetlands are not unduly damaged by fire (e.g., installing fire breaks, back-burning, executing burns under climatic conditions when wetland vulnerability to fire is minimized, etc.)

For clarification, vehicles utilized to process vegetative debris such as trucks, trailers, and chippers will be kept outside of the preserve area. In addition, no stockpiling of vegetative debris will occur within the preserve. Exotic vegetation that has been removed from the preserve will be stockpiled within the Project's development footprint.

Exotic vegetation removal activities in the upland portions of the preserve will utilize similar hand removal methods consistent with Gopher Tortoise Incidental Take Permit (ITP) No. LEE-9, which is attached to Appendix D.

#### **4.2 Debris Removal**

The preserve areas will be inspected annually for trash/garbage. Any trash/garbage located within the preserve areas will be removed and disposed of by hand.

#### **4.3 Method and Frequency of Pruning and Trimming**

Exotic removal is scheduled to begin after the applicable permits and approvals have been attained. After the initial removal of exotics, semi-annual inspections of the preserves will occur for the first two years. During these inspections, the Project area will be traversed by a qualified ecologist. Locations of nuisance and/or exotic species will be identified for immediate treatment with an appropriate herbicide. Any additional potential problems will also be noted and corrective actions taken. Once exotic/nuisance species levels have been reduced to acceptable limits (i.e., less than five percent cover), inspections of the Project area will be conducted annually.

Maintenance will be conducted in perpetuity to ensure that the conservation areas are free of exotic vegetation, including the prohibited invasive exotic species listed in Section 10-420(h) of the LDC (Table 1).

As specified in Gopher Tortoise ITP No. LEE-9, maintenance in the upland preserve areas will involve a combination of mechanical treatment, selective hand clearing, and/or prescribed burning. Mechanical treatment method would include mowing and bush

hogging, which would be conducted when daytime temperatures are below 75 degrees Fahrenheit. Hand pruning or clearing of midstory vegetation could occur as necessary to control overgrowth. Removal of all or parts of larger trees may be performed in order to increase or maintain sunlight penetration to ground level. The frequency of maintenance activities specific to xeric scrub and pine flatwoods habitats is outlined in Gopher Tortoise ITP No. LEE-9, which is attached to Appendix D.

## 5.0 INDIGENOUS VEGETATION RESTORATION

Restoration and re-establishment of indigenous vegetation communities will be conducted in areas with greater than 75 percent coverage by exotic vegetation within the conservation areas. Restoration activities will include 23.18± acres of exotic removal and supplemental plantings within areas containing greater than 75 percent coverage by exotic vegetation. The restoration area locations are shown on Appendix C.

In addition to restoring the wetland and upland areas containing 75 percent coverage by exotic vegetation, the temporary road needed to construct the golf cart path and gain access to the eastern portion of the site will be restored with native vegetation plantings once construction is completed.

### 5.1 Removal of Exotics and Supplemental Plantings

Approximately 16.44± acres of wetlands and 6.74± acres of uplands with greater than 75 percent exotics will be restored by the removal of exotic species and supplemental plantings of native vegetation. Following the removal of exotics, supplemental wetland plantings will be installed in the 16.44± acres of wetland habitats. Wetland plantings will be selected based on the type of native vegetation that occurs in the adjacent or nearby wetland habitats. Tree, shrub, and ground cover species will be planted according to the specifications in Table 2. A minimum of three tree species, two shrub species, and five ground cover species will be planted. The species selected for planting will depend on market availability at the time the plantings are to occur. Additional tree, shrub, and ground cover species may be included in the planting table with approval from Lee County staff.

**Table 2. Supplemental Indigenous Wetland Plantings**

Common Name	Scientific Name	Minimum Height	Container Size	Planting Instruction (On Center)
<b>Trees (minimum three species)</b>				
Bald cypress	<i>Taxodium distichum</i>	5 ft.	3 gal.	15 ft.
Cabbage palm	<i>Sabal palmetto</i>	5 ft.	3 gal.	15 ft.
Dahoon holly	<i>Ilex cassine</i>	5 ft.	3 gal.	15 ft.
Laurel oak	<i>Quercus laurifolia</i>	5 ft.	3 gal.	15 ft.
Pond apple	<i>Ammona glabra</i>	5 ft.	3 gal.	15 ft.
Red maple	<i>Acer rubrum</i>	5 ft.	3 gal.	15 ft.
Slash pine	<i>Pinus elliottii</i>	5 ft.	3 gal.	15 ft.
Swamp bay	<i>Persea palustris</i>	5 ft.	3 gal.	15 ft.

**Table 2. (Continued)**

Common Name	Scientific Name	Minimum Height	Container Size	Planting Instruction (On Center)
<b>Shrubs (minimum two species)</b>				
Buttonbush	<i>Cephalanthus occidentalis</i>	3 ft.	1 gal.	10 ft.
Gallberry	<i>Ilex glabra</i>	3 ft.	1 gal.	10 ft.
Myrsine	<i>Myrsine guianensis</i>	3 ft.	1 gal.	10 ft.
Saltbush	<i>Baccharis</i> sp.	3 ft.	1 gal.	10 ft.
Wax myrtle	<i>Morella cerifera</i>	3 ft.	1 gal.	10 ft.
<b>Ground Cover (minimum five species)</b>				
Alligator flag	<i>Thalia geniculata</i>	12 in.	1 gal.	3 ft.
Arrowhead	<i>Sagittaria lancifolia</i>	12 in.	1 gal.	3 ft.
Blue flag iris	<i>Iris virginica</i>	12 in.	1 gal.	3 ft.
Blue maidencane	<i>Amphicarpum muhlenbergianum</i>	12 in.	1 gal.	3 ft.
Golden canna	<i>Canna flaccida</i>	12 in.	1 gal.	3 ft.
Gulfdune paspalum	<i>Paspalum monostachyum</i>	12 in.	1 gal.	3 ft.
Maidencane	<i>Panicum hemitomon</i>	12 in.	1 gal.	3 ft.
Muhly grass	<i>Muhlenbergia capillaris</i>	12 in.	1 gal.	3 ft.
Pickerelweed	<i>Pontederia cordata</i>	12 in.	1 gal.	3 ft.
Sand cordgrass	<i>Spartina bakeri</i>	12 in.	1 gal.	3 ft.
Sawgrass	<i>Cladium jamaicense</i>	12 in.	1 gal.	3 ft.
Soft-stem bulrush	<i>Scirpus validus</i>	12 in.	1 gal.	3 ft.
Spikerush	<i>Eleocharis interstincta</i>	12 in.	1 gal.	3 ft.
Swamp fern	<i>Telmatoblechnum serrulatum</i>	12 in.	1 gal.	3 ft.

Following the removal of exotics, supplemental upland plantings will be installed in the 6.74± acres of upland habitats. Upland plantings will be selected based on the type of native vegetation that occurs in the adjacent or nearby upland habitats. Upland tree, shrub, and ground cover plantings will be installed according to the specifications listed in Table 3. A minimum of three tree species, two shrub species, and four ground cover species will be planted. The species selected for planting will depend on market availability at the time the plantings are to occur. Additional tree, shrub, and ground species may be included in the planting table with approval from Lee County staff.

**Table 3. Supplemental Indigenous Upland Plantings**

Common Name	Scientific Name	Minimum Height	Minimum Container Size	Planting Density (On Center)
<b>Trees (minimum three species)</b>				
Cabbage palm	<i>Sabal palmetto</i>	5 ft.	3 gal.	15 ft.
Dahoon holly	<i>Ilex cassine</i>	3 ft.	1 gal.	15 ft.
Laurel oak	<i>Quercus laurifolia</i>	5 ft.	3 gal.	15 ft.
Live oak	<i>Quercus virginiana</i>	5 ft.	3 gal.	15 ft.
Slash pine	<i>Pinus elliotii</i> var. <i>densa</i>	5 ft.	3 gal.	15 ft.

**Table 3. (Continued)**

Common Name	Scientific Name	Minimum Height	Minimum Container Size	Planting Density (On Center)
<b>Shrubs (minimum two species)</b>				
Cocoplum	<i>Chrysobalanus icaco</i>	3 ft.	1 gal.	10 ft.
Gallberry	<i>Ilex glabra</i>	3 ft.	1 gal.	10 ft.
Myrsine	<i>Myrsine guianensis</i>	3 ft.	1 gal.	10 ft.
Rusty lyonia	<i>Lyonia ferruginea</i>	3 ft.	1 gal.	10 ft.
Saltbush	<i>Baccharis halimifolia</i>	3 ft.	1 gal.	10 ft.
Saw palmetto	<i>Serenoa repens</i>	3 ft.	1 gal.	10 ft.
<b>Ground Cover (minimum four species)</b>				
Chalky bluestem	<i>Andropogon virginicus</i> var. <i>glaucus</i>	12 in.	2 in.	5 ft.
Gulfdune paspalum	<i>Paspalum monostachyum</i>	12 in.	2 in.	3 ft.
Little blue maidencane	<i>Amphicarpum muhlenbergianum</i>	12 in.	2 in.	3 ft.
Muhly grass	<i>Muhlenbergia capillaris</i>	12 in.	2 in.	5 ft.
Sand cordgrass	<i>Spartina bakeri</i>	12 in.	2 in.	5 ft.
Wiregrass	<i>Aristida stricta</i>	12 in.	2 in.	3 ft.

In addition to restoring the wetland and upland areas containing 75 percent coverage by exotic vegetation, a 0.82± acre temporary road, needed to construct the Halfway Creek golf cart path and gain access to the eastern portion of the site, will be restored with native vegetation plantings once construction is completed. The approximate location of the temporary road is located within the area depicted as cart path on Appendix C; however, specific details of this area are included in the engineering plans prepared by Waldrop Engineering, P.A., provided under separate cover.

Florida Department of Transportation No. 1 Coarse aggregate, or approved equivalent, will be used to create the temporary access road. After construction is completed, and prior to the Golf Course receiving the final Certificate of Compliance from Lee County, the No. 1 Coarse aggregate will be removed and replaced with in-situ like soil material to ensure survivability of indigenous vegetation plantings. Once the soil has been restored and ground surface leveled to match existing natural grade, plantings will be installed in accordance with the standards outlined in LDC Section 14-384. Replacement trees and shrubs must be nursery grown in a container. Trees must be no less than six feet in height and shrubs must be planted on no less than three-foot centers. Thus, 357 trees and 3,969 shrubs will be installed within the temporary road area based on a 0.82± acre planting area.

Tree plantings will consist of a minimum of three of the species included in Table 4 and shrub planting will consist of a minimum of two of the species included in Table 4. The species selected for planting will depend on market availability at the time the plantings are to occur.

**Table 4. Temporary Road Restoration Planting List**

Common Name	Scientific Name	Minimum Height	Container Size	Planting Instruction (On Center)
<b>Trees (minimum three species)<sup>1</sup></b>				
Bald cypress	<i>Taxodium distichum</i>	6 ft.	3 gal.	10 ft.
Dahoon holly	<i>Ilex cassine</i>	6 ft.	3 gal.	10 ft.
Laurel oak	<i>Quercus laurifolia</i>	6 ft.	3 gal.	10 ft.
Pond apple	<i>Annona glabra</i>	6 ft.	3 gal.	10 ft.
Red maple	<i>Acer rubrum</i>	6 ft.	3 gal.	10 ft.
Slash pine	<i>Pinus elliottii</i>	6 ft.	3 gal.	10 ft.
Cabbage palm	<i>Sabal palmetto</i>	6 ft.	3 gal.	10 ft.
Swamp bay	<i>Persea palustris</i>	6 ft.	3 gal.	10 ft.
Swamp dogwood	<i>Cornus foemina</i>	6 ft.	3 gal.	10 ft.
<b>Shrubs (minimum two species)<sup>2</sup></b>				
Buttonbush	<i>Cephalanthus occidentalis</i>	3 ft.	1 gal.	3 ft.
Gallberry	<i>Ilex glabra</i>	3 ft.	1 gal.	3 ft.
Myrsine	<i>Myrsine guianensis</i>	3 ft.	1 gal.	3 ft.
Wax myrtle	<i>Myrica cubana</i>	3 ft.	1 gal.	3 ft.

<sup>1</sup>Tree plantings total 357. A minimum of 25 percent of the tree plantings (89 trees) must be at least ten feet in height. In addition, 50 percent of the ten-foot trees (45 trees) must be slash pine.

<sup>2</sup>Shrub plantings total 3,969. Three-gallon shrubs may be substituted for one-gallon shrubs for a total of 1,323 shrub plantings.

## 6.0 SUCCESS CRITERIA

### 6.1 Indigenous Wetland and Upland Preserve and Enhancement Areas

The following are the success criteria for the indigenous preserve areas:

1. Initial eradication of exotic and nuisance vegetation will be completed.
2. The preserve area will be maintained free from exotic vegetation. Exotic vegetation species include, but are not limited to, the 21 species of prohibited invasive exotic species listed in Section 10-420(h) of the LDC (Table 1).

### 6.2 Indigenous Wetland and Upland Restoration Areas

The following are the success criteria for the indigenous wetland and upland restoration areas:

1. Initial eradication of exotic and nuisance vegetation will be completed.
2. Planting will be completed in the indigenous restoration areas.
3. A minimum 80 percent survival of tree and ground cover plantings after five years.

4. The preserve areas will be maintained free from exotic vegetation. Exotic vegetation species include, but are not limited to, the 21 species of prohibited invasive exotic species listed in Section 10-420(h) of the LDC (Table 1).

## **7.0 MONITORING REPORTS**

Monitoring will be conducted annually for the conservation areas. Annual reports documenting the achievement of the enhancement and restoration activities will be submitted to the DCD. Annual monitoring reports will be provided for five years after the Certificate of Compliance has been issued by the DCD.

The monitoring reports will include documented exotic and nuisance species; mortality of vegetation; estimated causes of mortality; growth of the vegetation; hydrologic conditions of the wetland preserve areas including monitoring well hydrographs, wildlife observed, photographs, and factors that demonstrate the functional health of the conservation areas. A brief description of anticipated maintenance work to be conducted over the next year will also be included. In addition, monitoring reports will provide recommendations and/or corrective measures to address deficiencies observed, including impacts to wetland hydrology. Periodic inspections will be conducted by DCD staff to ensure the accuracy of the monitoring reports.

## **8.0 LONG-TERM MANAGEMENT**

As stated in Section 1.0, the conservation area was previously placed under conservation easement granted to the SFWMD and the FWCC. The conservation easement will prevent the encroachment of future development, as well as activities that are incompatible with the goal of sustaining the preserved and restored conservation areas in good ecological health. Responsibility for long-term management of the conservation areas will shift to the long-term management entity following the completion of enhancement and restoration activities on-site. Long-term management of exotic and nuisance vegetation, debris removal, and methods and frequency of trimming and pruning will adhere to the requirement outlined in Section 4.0 of this plan.

## **9.0 PROTECTED SPECIES MANAGEMENT PLAN**

Passarella & Associates, Inc. conducted a Lee County protected species survey on the Project site for six days between August 26 and September 9, 2021. The survey was conducted to meet the requirement of LDC Chapter 10, Article III, Division 8 (Protection of Habitat) Standards. Four protected species were documented during the August and September survey. The listed species and their sign (i.e., burrows) observed on the property include one American alligator, 3 little blue herons (*Egretta caerulea*), 2 snowy egrets (*Egretta thula*), 3 gopher tortoises, and 424 gopher tortoise burrows. Additionally, one bald eagle nest tree was identified in the property. The location of the bald eagle nest tree is depicted on Appendix C. Management activities for the bald eagle nest tree are included in Section 9.4 below.

## **9.1 American Alligator Management Plan**

One American alligator was observed on the Project site during the protected species survey. Additionally, there is potential for American alligators to utilize the adjacent lakes associated with the golf course. The following plan outlines the protection guidelines that will be implemented for the American alligator during clearing operations for the Project. The American alligator is listed as threatened (due to similarity of appearance to the American crocodile (*Crocodylus acutus*)) by the U.S. Fish and Wildlife Service (USFWS) and the FWCC.

### **9.1.1 Biology**

The American alligator is a reptile with an elongated, armored, lizard-like body with a muscular flat tail. Adult alligators are dark with a pale underside while juveniles have bright yellow stripes and blotches. The average size for adults is 8.2 feet for females and 11.2 feet for males. The body weight can reach up to one-half ton. American alligators inhabit all counties in the State of Florida and are most common in the major river drainage basins and large lakes in the central and southern portions of the state. They also can be found in marshes, swamps, ponds, drainage canals, phosphate-mine settling ponds, and ditches. Alligators are tolerant of poor water quality and occasionally inhabit brackish marshes along the coast. A few even venture into saltwater. Individuals are wide-ranging and some males may utilize an area of two square miles or more. Individuals of both sexes are most likely to become more active and extend their ranges during the April to May courtship and breeding season. Prey may include frogs, snakes, birds, and small mammals, although alligators are opportunistic feeders and may prey on what is readily available. Larger individuals often prefer carrion to fresh meat.

### **9.1.2 Management Plan**

The proposed Project is not anticipated to impact the American alligator. Alligators commonly move from water body to water body in response to factors such as season, disturbances, food supply, etc. The American alligator is listed as a federally threatened species (by similarity of appearance to the American crocodile). Only representatives of the FWCC are authorized to handle nuisance alligators. If an alligator is present within the limits of construction at the time of clearing, work within the immediate vicinity of the alligator will be halted and the animal will be allowed to move out and into safer territory. Once the alligator has moved, work can be restarted. If an active alligator nest is found, it will be temporarily protected with an adequate buffer zone until the hatchlings leave the nest.

American alligator habitat will be provided on the property through wetland preservation and enhancement. This includes the removal of exotics and installation of native plantings in approximately 77.98± acres of existing wetlands on the property. These wetlands consist of mixed wetland hardwoods and marsh habitat

types. Invasive exotic removal and native plantings will result in wetland preserves that are more suitable to alligators and their prey species. The preserve areas will be maintained per Sections 4.0 and 8.0 of this plan.

Signs will be posted between the Project and the adjacent preserve areas, as well as around the adjacent lakes, to instruct construction workers, golfers, and maintenance staff not to feed or harass the American alligator. The sign will indicate that the offense is punishable by law (Appendix E).

Informational pamphlets providing background information on identification, habits, and protection of the American alligator will be made available to construction, management, and maintenance staff (Appendix F). The pamphlet states if there is a problem with a persistent nuisance alligator, they will need to contact the FWCC, as they are the only agency empowered to handle nuisance alligators.

## **9.2 Gopher Tortoise Management Plan**

Three gopher tortoises and 424 gopher tortoise burrows were located on the Project site during the protected species survey. This includes 170 burrows located within Eco-Park and 254 burrows located within the Project's development footprint. The following plan outlines the management activities that will be implemented for the gopher tortoise prior to implementation of site clearing. The gopher tortoise is listed as threatened by the FWCC.

### **9.2.1 Biology**

The gopher tortoise is a large, terrestrial turtle averaging 23 to 28 centimeters (9 to 11 inches) in shell length. Maximum length is around 38 centimeters (15 inches). The gopher tortoise is characterized by stumpy, elephantine hind feet and flattened; shovel-like forelimbs adapted for digging. The tan, brown, or gray carapace (top portion of the shell) is domed and oblong. The plastron (bottom portion of the shell) is somewhat concave in males. Growth annuli may be conspicuous, particularly in juveniles. Hatchlings are approximately 4.4 centimeters (1.7 inches) in length and are yellowish-orange in color.

The gopher tortoise occurs in the southeastern coastal plain of the United States from East Louisiana to Southeast South Carolina and throughout Florida. In Florida, gopher tortoises occur in portions of all 67 counties. Gopher tortoises inhabit a wide variety of upland vegetative communities. Three environmental conditions are especially important for gopher tortoises: well-drained, sandy soil in which to burrow; adequate low-growing herbaceous ground cover for food; and relatively open sunlit areas for nesting. The gopher tortoise is primarily associated with longleaf pine scrub and oak woodlands (sandhills), but it is also found in sand pine scrub, coastal strands, live oak hammocks, dry prairies, pine flatwoods, and mixed hardwood-pine communities. Disturbed habitats, such as roadsides, fencerows, clearings, and old fields often support relatively high tortoise densities.

Gopher tortoises excavate burrows averaging 4.5 meters (14.8 feet) in length and 2 meters (6.6 feet) in depth and wide enough to allow them to turn around at any point. These burrows provide protection from temperature extremes, desiccation, and predators; and serve as refuges for a variety of other animals. The placement and depth of burrows vary with the soil type, geographic location, and groundwater levels. An individual tortoise may use more than one burrow and may excavate new burrows at any time during its life.

Gopher tortoise densities and movements are affected by the amount of herbaceous ground cover present. Generally, feeding activity is confined to within 50 meters (164 feet) of the burrow. Principal foods include grasses, legumes, and grass-like plants of the sedge and aster families. Legumes appear to be particularly important in the diet of juveniles. Fruits such as blackberries, pawpaws, gopher apples, and saw palmetto berries are also consumed.

### **9.2.2 Management Plan**

The FWCC issued Gopher Tortoise ITP No. LEE-9 for the Pelican Landing Development, which includes the Project site, on August 29, 1995. The ITP allows for the on-site relocation of gopher tortoises to the Eco-Park preserve located within the western portion of the conservation area. However, due to the existing tortoise burrow density within Eco-Park, the opportunity for on-site relocation is limited. Therefore, the applicant will obtain a permit from the FWCC to relocate gopher tortoises located within the development footprint to an off-site, protected recipient site prior to site clearing activities. The recipient site will be approved by the FWCC and managed in perpetuity, consistent with FWCC's 2012 Gopher Tortoise Management Plan. Gopher tortoises located in Eco-Park will remain in the preserve.

Appendix G depicts the location of double row silt fence that will be installed between the golf course renovation area and on-site preserves to protect the gopher tortoises that will remain within the on-site preserve areas. The silt fence will be buried a minimum of eight inches beneath the ground surface in accordance with current FWCC standards. The use of wire fencing will not be utilized since it has been known to ensnare snakes and other small animals.

Management of on-site gopher tortoise habitat will be conducted in accordance with Section 4.0 of this plan.

### **9.3 Florida Sandhill Crane and Wading Bird Management Plan**

Although no Florida sandhill crane (*Grus canadensis pratensis*) or wading bird nesting activity were observed on the site during the August and September 2021 protected species survey, three little blue herons and two snowy egrets were observed utilizing the Project site. The following management plan has been prepared for the purpose of addressing the management of potential Florida sandhill crane and wading bird habitat on the site.

### **9.3.1 Management Plan**

Prior to clearing activities, a qualified ecologist will survey the construction impact area and adjacent habitats for the presence of Florida sandhill crane and state-listed wading bird nests. If there is evidence of Florida sandhill crane or state-listed wading bird nesting, the appropriate FWCC-recommended buffer will be provided around the nest site(s) to avoid disturbance by human activities. If Florida sandhill crane or state-listed wading bird nesting is discovered after construction has begun or if maintaining the buffers is not possible, the applicant will contact the FWCC staff to discuss potential permitting requirements.

The Project will enhance, restore, and preserve wetlands within the existing conservation area that provide foraging and roosting habitat for wading birds. In addition, the existing and proposed golf course lakes could potentially be utilized by wading birds for foraging and nesting.

Problematic encounters between future residents and wading birds are not anticipated. Construction, management, and maintenance staff will be informed that the wading birds are a protected species and will be provided with a wading bird informational brochure (Appendix H).

## **9.4 Burrowing Owl Management Plan**

No burrowing owls (*Athene cunicularia*) were observed on-site during the Project's PSS or other fieldwork. However, there is potential for the species to be found in the open golf course lands on the Project site.

The following management plan outlines the protection guidelines that will be implemented for the burrowing owl if they are to be found on-site. The burrowing owl is listed as threatened by the FWCC.

### **9.4.1 Biology**

The burrowing owl lives and breeds in varied habitats throughout the Florida peninsula with the primary natural habitat occurring in dry prairie and, during the dry season, the edges of depressional marshes. Presently, the burrowing owl inhabits several ruderal areas including pastures, golf courses, airports, athletic fields, school campuses, vacant areas in residential or industrial neighborhoods, and road Right-of-Ways (Hipes *et al* 2001). One of the largest sub-populations of burrowing owls is located on the Cape Coral peninsula in Lee County.

Burrowing owls nest and inhabit underground burrows that they excavate or adopt from other burrowing animals, such as gopher tortoises. Culverts, PVC pipes, and spaces underneath sidewalks and roofs also serve as nesting locations for the burrowing owl. Predominately, the burrowing owl is non-migratory and resides within the vicinity of the burrow. They are mostly monogamous and territorial

around their burrows. During the nesting season, burrows are adorned with various materials such as grasses and palm fronds before egg laying. Subsequent to the laying of eggs, the entrance to the burrow is decorated with highly visible, non-natural objects such as tinfoil and plastics.

In Southern Florida, the burrowing owl feeds primarily on the brown anole (*Anolis sagrei*), marine toad (*Bufo marinus*), and Cuban treefrog (*Osteopilus septentrionalis*). To a lesser extent, other amphibians, small rodents, insects, arachnids, and crayfish provide supplemental sustenance. The majority of foraging occurs at dusk, but they also will hunt from perches or burrow entrances during the day. Fence posts serve as a main source for perching (Wood 2001).

#### **9.4.2 Pre-Construction Surveys**

Prior to clearing activities, a qualified biologist will survey the construction impact area and adjacent habitats for the presence of owl burrows. Inactive (i.e., contains no eggs or flightless chicks) nest burrows within the proposed impact area will be removed with an FWCC permit and in accordance with State and Federal regulations. Nest burrows can generally be considered inactive from July 10 to February 15, although some nesting occurs as early as October each year. Between February 15 and July 10, burrows attended by one or more burrowing owls are considered active nests unless information is available to suggest otherwise (i.e., proof that young fledged from the nest prior to July 10). Burrows within the impact area that are determined to be active will be temporarily protected from clearing by a 50-foot radius of undisturbed buffer (staked and/or roped-off) until the young fledge, as confirmed by a qualified biologist. These burrows will then be removed, with an FWCC permit and in accordance with state regulations.

#### **9.4.3 Management Plan**

Efforts will be made to leave existing burrows undisturbed, where feasible. The owls, burrows, and their eggs are protected from harassment and/or disturbance by state law. Burrowing owls are also protected by the federal Migratory Bird Treaty Act. Golf course maintenance staff and construction personnel will be notified that the Florida burrowing owl is a protected species and instructed to report malicious destruction or harassment of burrowing owls or their nests to 888-404-FWCC (3922).

### **9.5 Least Tern Management Plan**

No least terns (*Sterna antillarum*) were observed on-site during the Project's PSS or other fieldwork. However, there is potential for the species to occur on-site. The least tern is listed as threatened by FWCC.

While existing conditions on-site likely do not support least tern nesting, clearing associated with construction may create conditions favorable for beach-nesting colonies.

If least terns are observed nesting during construction or maintenance activities, FWCC staff will be notified and a buffer will be provided to the nest to avoid disturbance. Research conducted recommends a disturbance buffer of 180 meters (about 197 yards) for least tern nests (FWCC 2013). If maintaining a 180-meter buffer is not possible, FWCC staff will be contacted to discuss methods to reduce disturbance to the nest.

Problematic encounters with least terns are not anticipated. Construction personnel and maintenance staff will be informed that least terns are a protected species.

## **9.6 Bald Eagle Management Plan**

One bald eagle nest (LE-028A) was observed on the Project site during the protected species survey. The bald eagle has been delisted at both the state and federal levels, but is still protected under the Bald and Golden Eagle Protection Act and Lee County Bald Eagle Ordinance No. 08-25. As such, management activities for the bald eagle nest are included below.

### **9.6.1 Management Plan**

Nest LE-028A and its associated 330-foot and 660-foot buffer zones are located within the designated conservation area (Appendix C). Specifications regarding the treatment of exotic vegetation within 660 feet of LE-028A must follow the specific elements outlined in the Bald Eagle Management Plan for Nest LE-28A (Appendix I).

## **9.7 Florida Black Bear Management Plan**

Though no Florida black bear or their sign were documented on the Project site during the protected species survey, it is anticipated that Florida black bears are within the general vicinity of the Project. The following management plan has been prepared for the purpose of addressing the management of potential black bear activities. The Florida black bear is not listed by the FWCC or the USFWS. However, the FWCC and the Lee County LDC have specific management activities for this species.

### **9.7.1 Biology**

The Florida black bear is a subspecies of the American black bear (*Ursus americanus*). The Florida black bear is a solitary animal that inhabits heavily wooded terrain and is most often found in large tracts of swamp forest and undisturbed upland forest. Some of the most important habitat types for the Florida black bear include pine flatwoods, hardwood swamps, cypress swamps, cabbage palm forests, sand pine scrub, and mixed hardwood hammocks. Denning often occurs in remote swamps or thickets with dense vegetation. Adult females breed in alternating years during the months of June and July. In Florida, hibernation may be restricted to females producing cubs. Hibernation most often occurs during the winter months. The diet of Florida black bears is highly variable and includes both

plants and animals including saw palmetto, berries, honeybees (*Apis* sp.), ants (*Formicidae* sp.), armadillo (*Dasypus novemcinctus*), feral hog (*Sus scrofa*), and white-tailed deer (*Odocoileus virginianus*) (Humphrey 1992).

### **9.7.2 Management Plan**

Problematic encounters between humans and black bears are not anticipated. However, to reduce the potential for problematic encounters, construction, management, and maintenance staff will be provided with FWCC's educational brochure titled "A Guide to Living in Bear Country" (Appendix J).

## **9.8 Big Cypress Fox Squirrel Management Plan**

Though no Big Cypress fox squirrels were observed during the protected species survey, there is potential for them to utilize the forested habitats within the Project site. The following management plan has been prepared for the purpose of addressing the conservation of Big Cypress fox squirrel habitat on the Project site. The plan outlines the protection guidelines that will be implemented for the Big Cypress fox squirrel prior to, during, and after construction of the Project. The Big Cypress fox squirrel is listed as threatened by the FWCC. There is no federal listing for the Big Cypress fox squirrel in Florida.

### **9.8.1 Biology**

The Big Cypress fox squirrel lives and breeds in varied habitats in Southwest Florida including cypress swamps, pine flatwoods, tropical hardwood forests, live oak woods, mangrove forests, and suburban habitats including golf courses, city parks, and residential areas in native vegetation (Humphrey 1992). Dense cypress/hardwood swamps are avoided. This may be due to the competition for food and habitat with the gray squirrel (*Sciurus carolinensis*). Little data is available on the preferred forage habitat of the Big Cypress fox squirrel. Big Cypress fox squirrels prefer to feed on the male and female cones of slash pine. Cabbage palm fruits, bromeliad (*Bromeliaceae* sp.) buds, and acorns are also important food items. A smaller percentage of the diet may consist of seasonal fruits, berries, and seeds (Humphrey 1992).

Big Cypress fox squirrels often form platform nests in pines and hardwoods, and moss and stick nests in cypress, tops of cabbage palms, and large clumps of bromeliads. Cabbage palms and bromeliads are especially important because they can provide immediate shelter, which allows the squirrel to travel over large areas without requiring a daily return to a permanent nesting facility (Humphrey 1992).

Big Cypress fox squirrels are solitary animals. Interaction between animals occurs primarily during mating season. Mating chases occur frequently throughout the months of May through August. During the non-mating season, interactions are infrequent and often occur around food sources. Young remain in the nest for

approximately 90 days. Home ranges are 40 hectares (approximately 100 acres) for males and 20 hectares (approximately 50 acres) for females (Humphrey 1992).

### **9.8.2 Pre-Construction Surveys**

A qualified ecologist will be on-site to supervise Big Cypress fox squirrel management and monitoring activities as detailed in this plan. Prior to clearing activities, the preserve areas will be staked in the field and clearly identified with silt fencing or an equivalent barrier. The fencing will be inspected by the preserve manager prior to clearing activities. The operation and storage of construction equipment and the stockpiling of fill and construction material will be prohibited within the fenced preserve areas. The fencing identifying the limits of the preserves will be maintained for the duration of construction activities.

Also, prior to commencement of clearing activities in the development area and removal of exotic trees within the preserve areas, a survey will be conducted by a qualified ecologist to identify potential Big Cypress fox squirrel nests. If potential nests are identified within the clearing limits or within the preserve areas, observations will be conducted to determine if the nests are being utilized by Big Cypress fox squirrels. The FWCC will be notified of nests determined to be utilized by Big Cypress fox squirrels. Active nests will be temporarily protected from clearing by a 125-foot radius undisturbed buffer until juvenile fox squirrels have vacated the nest(s), as confirmed by a qualified ecologist. After completion of nesting and observations documenting that juvenile fox squirrels have vacated the nest(s), a written request to remove the nest tree(s) will be made to the FWCC. After receipt of the written authorization from the FWCC, the nest tree and buffer can be cleared.

### **9.8.3 Management Plan**

Enhancement and restoration of the preserve areas will be conducted as detailed in Section 4.0 of this plan. The preserve areas will provide foraging and nesting habitats for Big Cypress fox squirrels.

Problematic encounters between future residents and Big Cypress fox squirrels are not anticipated. The typical nest location, high within the tree canopy, will ensure against disturbance to fox squirrel nests. Construction, management, and maintenance staff will be informed that the Big Cypress fox squirrel is a protected species.

## **9.9 Listed and Less Common Plant Species**

Every effort will be made to relocate listed and other less common plant species located within the development footprint to open space and landscaped areas. This includes listed orchid and airplant species, Florida coontie (*Zamia integrifolia*), Catesby's lilies (*Lilium catesbaei*), leather fern, or cabbage palm with golden polypody (*Phlebodium aureum*) or

shoestring fern (*Vittaria lineata*). Methods will include the hand and/or mechanical relocation of these species, provided that it is safe and feasible to do so.

## **10.0 HUMAN-WILDLIFE COEXISTENCE PLAN**

The following Human-Wildlife Coexistence Plans are provided for the American alligator, wading birds, and Florida black bear.

### **10.1 American Alligator**

The FWCC's educational brochure entitled "A Guide to Living with Alligators" (Appendix F) will be provided to construction, management, and maintenance staff. The brochure can be found at [http://myfwc.com/media/152524/Alligator\\_Brochure.pdf](http://myfwc.com/media/152524/Alligator_Brochure.pdf).

Construction, management, and maintenance personnel will be instructed that in the event there is a problem with a persistent nuisance alligator, they should contact the FWCC's Nuisance Alligator Hotline at 866-FWC-GATOR (866-392-4286). The FWCC is the only agency empowered to handle nuisance alligators.

### **10.2 Wading Bird**

A wading bird informational brochure entitled "Wading Bird Informational Pamphlet" (Appendix H) will be provided to construction, management, and maintenance personnel. The brochure provides wading bird information and methods to prevent human-wading bird interactions. In addition, the brochure informs construction personnel and the management and maintenance staff of the need to avoid disturbance around a nest(s), should a wading bird nest(s) be identified on the property in the future.

### **10.3 Florida Black Bear**

Construction, management, and maintenance personnel will be educated about the presence of black bears in the area. The FWCC's educational brochure entitled "A Guide to Living in Bear Country" (Appendix J) will be provided to construction, management, and maintenance staff. This brochure can be found at <https://myfwc.com/media/1891/livinginbearcountrybrochure.pdf>.

## **11.0 PRESERVE SIGNAGE**

Signage shall be placed around preserve areas to identify and protect the preserves during construction. The signs shall be a maximum height of four feet and a maximum size of two square feet, and otherwise comply with Section 5.06.00 of the LDC. Maximum sign spacing shall be 300 feet. Signs identifying the preserve as a "nature preserve area" will be installed along the boundary of the preserve. The signage should include language stating, "No dumping allowed." A typical preserve sign is attached as Appendix E.

## 12.0 REFERENCES

- Florida Fish and Wildlife Conservation Commission. 2013. A species action plan for four imperiled species of beach-nesting birds. Tallahassee, Florida.
- Florida Natural Areas Inventory. 2010. Guide to the natural communities of Florida: 2010 edition. Florida Natural Areas Inventory, Tallahassee, Florida.
- Hipes, D., D.R. Jackson, K. NeSmith, D. Printiss, and K. Brandt. 2001. Field Guide to the Rare Animals of Florida. Florida Natural Areas Inventory, Tallahassee, Florida.
- Humphrey, Stephen R. 1992. Rare and Endangered Biota of Florida; Volume I. Mammals. University Press of Florida, Gainesville, FL. 392 pages.
- Rodgers, J.A., Jr., H.W. Kale II, H.T. Smith (*eds.*). 1996. Rare and Endangered Biota of Florida, Vol. V. Birds. University of Florida Press, Gainesville, Florida, USA.
- U.S. Fish and Wildlife Service. 1999. South Florida Multi-Species Recovery Plan.
- Wood, Don A. 2001. Florida's Fragile Wildlife Conservation and Management. University Press of Florida. Gainesville, FL.

**APPENDIX A**  
**PROJECT LOCATION MAP**



**APPENDIX B**

**AERIAL WITH FLUCFCS AND WETLANDS MAP**



**APPENDIX C**

**AERIAL WITH SITE PLAN AND INDIGENOUS PRESERVE**



**APPENDIX D**

**WILSONMILLER'S MARCH 6, 2000 PROPOSED  
RECONFIGURATION OF PELICAN LANDING DRI ECO-PARK**

# *WilsonMiller*

## **Proposed Reconfiguration of Pelican Landing DRI Eco-Park**

**Section 5, Township 47 South, Range 25 East  
Lee County, Florida**

Prepared for:

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**RECEIVED**  
MAR 15 2000

**ZONING COUNTER**

September 30, 1999  
**Revised March 6, 2000**

*Planners Engineers Ecologists Surveyors  
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**Proposed Reconfiguration of  
Pelican Landing DRI Eco-Park**

**Section 5, Township 47 South, Range 25 East  
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September 30, 1999  
**Revised March 6, 2000**

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## 1.0. INTRODUCTION AND PROJECT HISTORY

*This document serves to revise the initial report dated September 30, 1999 that was submitted to Jim Beever of the Florida Fish and Wildlife Conservation Commission. Changes have been made to the document to update it for the purposes of providing information pertinent to a request to modify Gopher Tortoise Incidental Take Permit #Lee-9 issued to Westinghouse Bayside Communities, Inc. on August 29, 1995.*

*Changes made to the document compared to the initial version include:*

- 1) A change to the configuration of the proposed Eco-Park such that the 1.47-acre isolated melaleuca wetland and associated 1.04 acres of adjacent upland buffer, located in the east-central region of the previously-proposed Eco-Park, have been removed from the Eco-Park. This wetland and associated upland buffer will instead be placed under a conservation easement to the South Florida Water Management District (SFWMD) since extensive enhancement activities will occur in this wetland as part of the project's overall wetland mitigation plan (Figures 3, 4, 5).*
- 2) Minor changes have been made to the upland acreage of the proposed Eco-Park due to minor modifications to the project design (Tables 1 and 3).*
- 3) Updating of the status of coordination with the U.S. Fish and Wildlife Service regarding the project's Bald Eagle Management Plan (Section 1.0).*
- 4) Addition of information summarizing the proposed relocation of gopher tortoises inhabiting the deletion parcel to that portion of the existing Eco-Park to remain intact (Section 4.4).*
- 5) Addition of information summarizing proposed mitigation for impacts to gopher tortoises inhabiting portions of the Skebe tract that will be developed (Section 4.5, Table 2).*
- 6) Refinement of the location of the golf cart path, golf cart bridge, and surface water management conveyance/outfall structures (Figure 5).*
- 7) Updating proposed habitat management methods in accordance with those proposed to the SFWMD and Corps as part of the wetland mitigation plan for the overall project (Section 6.0).*

Pelican Landing is a 2,580-acre Development of Regional Impact (DRI) located approximately three miles north of the Lee/Collier County line. The DRI property is bounded on the west by Estero Bay, on the north by the West Bay Club residential development, on the east by U.S. 41, and on the south by Spring Creek. The original Development Order for the Pelican Landing DRI was issued by Lee County on August 29, 1994 and has been amended several times. The latest amendment is the Fifth Development Order Amendment issued by Lee County on September 21, 1998.

The Florida Game and Fresh Water Fish Commission issued a gopher tortoise incidental take permit to Westinghouse Bayside Communities, Inc. on August 29, 1995 (Permit #Lee-9 - Appendix A). This permit encompasses 680.6 acres of gopher tortoise (*Gopherus polyphemus*) habitat within the DRI and authorizes the taking of gopher tortoises (GTs), their eggs, and their burrows. Condition #1 of the permit requires that 78 acres of GT habitat be preserved and managed via a perpetual conservation easement. The conservation easement was executed on September 21, 1995 and recorded in the official records of Lee County on October 18, 1995 (OR Book 2644, Page 1127-1134; see Appendix B). The resulting parcel of land encompassed by this easement is referred to as the Pelican Landing "Eco-Park". Figure 1 provides a general location map for the Pelican Landing Eco-Park. All figures referenced herein are located in Section 9.0 of this report.

The purpose of this document is to provide the Florida Fish and Wildlife Conservation Commission (FWC) with a proposal to revise the boundary of the Eco-Park. As has been discussed in recent meetings with the FWC, the original configuration of the Eco-Park was based on property boundaries and/or preliminary/conceptual subdivision plans for adjacent lands. Now that WCI Communities, Inc.

has refined the required area and uses of adjacent lands, it has become apparent that a modification to the Eco-Park boundary could allow for a larger, more balanced and diverse preservation area. The modifications proposed herein are based on the acquisition or planned acquisition of adjacent parcels, changes in the site development plan, and the desire to utilize an ecosystem approach in reconfiguring the Eco-Park. This document provides a detailed summary of the proposed changes and the benefits derived therefrom.

Due to the presence of a bald eagle's nest in the Eco-Park (Nest #LE-28A), WilsonMiller is also coordinating with the U.S. Fish and Wildlife Service (USFWS) regarding the proposed boundary configuration. A revised bald eagle management plan incorporating the proposed boundary revision was submitted to the USFWS (Kim Dryden) on September 21, 1999 for review, comment, and approval. The plan has been revised based on USFWS and FFWCC comments and is in the final stages of approval. The plan maintains a Primary Protection Zone (PPZ) of 1,200 feet and a Secondary Protection Zone (SPZ) of 2,500 feet (1,300 feet outward from PPZ) in the directions most utilized by inbound and outbound eagle flight paths. In the direction of seldom utilized flight paths, the PPZ is 750 feet and the SPZ is 1,500' (750' outward from the PPZ), in accordance with bald eagle management guidelines. Details of the plan are available by request or by contacting Kim Dryden of the USFWS.

## 2.0 CHARACTERISTICS OF CURRENT ECO-PARK

Figure 2 provides a map showing the existing configuration of the Eco-Park and its Florida Land Use, Cover and Forms Classification System (FLUCCS; FDOT, 1985) habitats. Figure 2 also provides the acreage of each FLUCCS type within the existing Eco-Park, as well as the location of eagle nest #LE-28A. Habitat boundaries have been modified/updated as-needed based on aerial photography and ground truthing. The following is a description of the habitat types present in the existing Eco-Park.

Xeric Oak (FLUCCS #421): This habitat is the most abundant, comprising approximately 54.1 acres or 69% of the Eco-Park. Xeric oak (scrub) habitat of the site has a sparse of slash pine (*Pinus elliotii*) canopy and a midstory dominated by sand live oak (*Quercus geminata*), other species of scrub oak, and rusty lyonia (*Lyonia ferruginea*). Ground cover is predominately saw palmetto (*Serenoa repens*), with paspalum (*Paspalum* sp.), cordgrass (*Spartina bakerii*), rosemary (*Ceratiola ericoides*), prickly pear cactus (*Opuntia humifusa*), and reindeer lichen (*Cladonia* spp.). Scrub habitat in the southern one-third to one-half of the Eco-Park differs from that in the north by having fewer bare sandy areas, a lesser density of scrub oaks, and a denser ground cover of saw palmetto and grasses. The northern portion of Eco-Park has a more traditional scrub appearance, replete with open sandy areas, abundant scrub oak in the midstory, and a lesser density of saw palmetto and grasses. Appendix C provides representative photographs of xeric scrub habitat in the northern portion of the Eco-Park.

Xeric Oak with High Density Shrub Layer (FLUCCS #4211): This habitat occurs in the northern portion of the Eco-Park. It is similar to the xeric oak scrub habitat, but occurs at a slightly lower elevation and has a greater density of saw palmetto and oaks in the midstory and shrub strata.

Palmetto Prairie (FLUCCS #321): Palmetto prairie habitat occurs in the middle and northern portion of the Eco-Park. Palmetto prairies have very few slash pines in the canopy. The midstory layer consists of scattered paw paw (*Asimina reticulata*), rusty lyonia, and wax myrtle (*Myrica cerifera*). The ground cover is dominated by a thick, dense layer of saw palmetto, with lesser amounts of pineweed (*Hypericum gentianoides*), St. Johns wort (*Hypericum fasciculatum*), big blue stem (*Andropogon virginicus*), yellow-eyed grass (*Xyris platylepis*), paspalum, cordgrass (*Spartina bakerii*), gopher apple (*Licania michauxii*), and partridge pea (*Chamaecrista fasciculata*).

Pine Flatwoods (FLUCCS #411): A small amount of pine flatwoods occurs in the Eco-Park. This habitat has a canopy of slash pine, a sparse to absent midstory, and a ground cover stratum dominated by saw palmetto.

Pine Flatwoods/Palmetto Prairie (FLUCCS #411/321): This habitat is the second-most abundant on-site (19% of site) and is a mix of the pine flatwoods and palmetto prairie habitats. It differs from pine flatwoods and palmetto prairie by having a variable pine canopy density intermediate between these two habitat types. Thus, it has been given a dual designation. The majority of this habitat occurs in the southern portion of the Eco-Park. Plant species are typical of the flatwoods and palmetto prairie vegetative associations described above.

**3.0 LOCATION AND HABITAT TYPES OF PROPOSED SWAP PARCELS**

**3.1 General Information**

The proposed reconfiguration of the Eco-Park provides for "swapping" of parcels of the Eco-Park. One parcel is located in the southern portion of the existing Eco-Park and is proposed to be removed from the Eco-Park ("deletion parcel" – Figure 3). Four other parcels are proposed to be added to the Eco-Park. These four parcels will be collectively referred to as the "addition parcel" in the remainder of this report. The largest of the parcels is located to the east of the existing Eco-Park on an adjacent site known as the "Skebe" tract. WCI Communities, Inc. has entered into an agreement with the owner of the Skebe tract to purchase the site pending the USFWS's and the FFWCC's approval of the proposed reconfiguration. Three other smaller parcels are located immediately west of and contiguous to the central and northern region of the existing Eco-Park (Figure 3). Table 1 provides a summary of the acreages of habitat types in the swap parcels, followed by a description of each habitat type.

**TABLE 1  
Habitat Types and Acreages in Proposed Swap Parcels**

FLUCCS Code	FLUCCS Type	Deletion Parcel (ac.)	Addition Parcels (ac.)	Net Gain/Loss (ac.)
UPLANDS				
321	Palmetto prairie	0.53	0.72	+0.19
411	Pine flatwoods	0.23	23.84*	+23.61
411/321	Pine flatwoods/Palmetto prairie	10.94	0.16	-10.78
421	Xeric oak	10.50	2.24	-8.26
4211	Xeric oak w/ high, dense shrub layer	---	0.31	+0.31
423E1	Pine-cabbage palm-oaks, 10-24% exotics	---	4.66	+4.66
424	Melaleuca	---	1.36	+1.36
743	Spoil area	---	0.12	+0.12
UPLAND TOTAL		-22.20	33.41	+12.34
WETLANDS				
513	Ditch	---	0.02	+0.02
600	Shrub wetland	---	6.28	+6.28
616	Inland pond	---	0.49	+0.49
621	Cypress	---	45.45	+45.45
WETLAND TOTAL		---	52.24	+52.24
GRAND TOTAL		22.20	+ 85.65	+63.45

\* Includes 22.56 acres of flatwoods with 10-75% exotic invasion. Exotics will be removed and habitat enhanced.

55.8  
33.41  
19.21

(78 - 22.20) + 85.65 = 141.45  
33.41 uplands  
52.24 wetlands

### 3.2 Proposed Deletion Parcel

Habitat types present in the proposed deletion parcel in the southern portion of the Eco-Park (Figure 3) include xeric oak (FLUCCS #421), pine flatwoods/palmetto prairie (#411/321), palmetto prairie (#321), and pine flatwoods (#411). A description of these habitats is provided in Section 2.0 and their acreages are provided in Table 1. Appendix D provides representative photographs of xeric oak and pine flatwoods/palmetto prairie habitats of the deletion parcel.

### 3.3 Proposed Addition Parcels

Ten habitat types occur on parcels proposed to be added to the Eco-Park (Figure 3). These habitats are described below and associated acreages are provided in Table 1. Appendix E provides representative photographs of most of the habitats of the addition parcel.

Palmetto Prairie (FLUCCS #321): Several areas of palmetto prairie habitat are contiguous with and essentially identical to that located in the existing Eco-Park.

Pine Flatwoods (FLUCCS #411): This community is essentially identical to that located in the existing Eco-Park (see Section 2.0), with the exception that flatwoods of the Skebe site tend to have a higher abundance of exotic species (10-75% total cover), primarily melaleuca (*Melaleuca quinquenervia*) and downy rose myrtle (*Rhodomyrtus tomentosus*).

Xeric Oak (FLUCCS #421): Xeric oak habitat on the Skebe tract is similar in vegetative composition and species abundance to that of the proposed deletion parcel. There are also proposed addition areas of higher quality xeric oak that are located to the west of, and are contiguous with, the central and northern region of the existing Eco-Park (Figure 3).

Pine-Cabbage Palm-Oaks (FLUCCS #423): This community is located along the perimeter of Halfway Creek. The canopy consists of large slash pine. The midstory consists of cabbage palm (*Sabal palmetto*), laurel oak (*Quercus laurifolia*), and scattered scrub oaks. Saw palmetto, myrsine (*Myrsine guianensis*), and greenbrier (*Smilax* spp.) are abundant in the understory. Very little herbaceous vegetation is present under the dense saw palmetto stratum. Melaleuca is present in occasional dense patches and overall comprises 10-24% of the cover in this habitat.

Melaleuca (FLUCCS #424): This habitat is a monoculture or pure stand of melaleuca, with occasional slash pine and saw palmetto. Very few other plants grow in the dense shade of this exotic plant community.

Shrub Wetland (FLUCCS #600): This vegetative association is present in the southern portion of the addition area and is dominated by willow (*Salix* sp.) and buttonbush (*Cephalanthus occidentalis*). Very few canopy trees are present in this habitat. This shrub wetland may be permanently flooded.

Inland Pond (FLUCCS #616): This cover type is an open water body present in the southeast corner of the addition area. The area may remain ponded throughout the year. It is bordered by a narrow shrub fringe.

Cypress (FLUCCS #621): This jurisdictional wetland community is dominated by tall-stature cypress (*Taxodium distichum*) and comprises the majority of Halfway Creek. Cabbage palm, laurel oak, red maple (*Acer rubrum*), pop ash (*Fraxinus caroliniana*), and wax myrtle are also present in the canopy and midstory. Swordfern (*Nephrolepis* spp.) dominates the understory. Melaleuca is present in patches along the wetland-upland interface with occasional Brazilian pepper (*Schinus terebinthifolius*).

Spoil Area (FLUCCS #743): This area consists of what appears to be the grade for an old road that crossed Halfway Creek. There is a gap in the western portion of the spoil berm where a bridge probably once sat. Much of the flow of Halfway Creek flows through this gap during the rainy season.

As noted above, some of the habitats of the addition parcel have exotic species invasion. These habitats will be eradicated of exotic species and maintained/managed in perpetuity as part of the proposed Eco-Park reconfiguration (see habitat management plan in Section 6.0).

#### **4.0 GOPHER TORTOISE (GT) POPULATION OF PROPOSED SWAP PARCELS**

##### *4.1 GT Population of Proposed Deletion Parcel*

Gopher tortoise burrow surveys were conducted on the deletion parcel by WilsonMiller ecologists for the purpose of evaluating the GT population of the parcel. The locations of identified burrows are provided in Figure 4.

Field work was conducted between July 28, 1999 and August 2, 1999. Pedestrian transects were performed through each of the habitats identified as potential tortoise habitat. The biologist walked the transects recording the number of active, inactive and old burrows and identifying their approximate location on aerial photographs. Upon completion of one transect line, the biologist would begin the next transect at a given distance from the previous line established parallel to the previous line. This process was repeated until the entire deletion parcel had been surveyed. The distance between transects was varied based on visibility limits and ranged from 10 feet in dense vegetation to 20 feet in more open scrub habitat. A minimum of 98% of each habitat was surveyed.

A total of 69 burrows; 37 active, 27 inactive, and 5 old; were identified on the deletion parcel. Based on the 98% habitat coverage, the estimated number of active+inactive burrows on the parcel is 65. Prior studies conducted within the Bonita Bay and adjacent Spring Creek West DRIs indicate that burrow occupancy factors in the project area are 0.21 for xeric oak habitat and 0.31 for pine flatwoods and saw palmetto prairie habitats. Utilization of these occupancy factors yields GT densities of 0.82 for xeric oak habitat of the deletion parcel and 0.65 GTs/acre for pine flatwoods/palmetto prairie habitat of the deletion parcel. It is estimated that a total of 16 GTs are present on the deletion parcel.

##### *4.2 GT Population of Proposed Addition Parcel*

Gopher tortoise burrow surveys were conducted on the Skebe addition parcel by ecologists from Boylan Environmental Consultants, Inc. The locations of identified burrows are provided in Figure 4.

Field work was conducted during the period of March through July, 1999. Pedestrian transects were performed through each of the habitats identified as potential tortoise habitat and active, inactive, and old GT burrows were identified. The distance between parallel transects varied based on visibility, which ranged from 20 to 30 feet. A minimum of 90% of each habitat was surveyed.

A total of 15 burrows; 5 active, 5 inactive, and 5 old; were identified on the addition parcel. Based on Boylan Environmental's average habitat coverage of 90%, it is estimated that a total of 11 active+inactive burrows are present on the parcel. When broken down by habitat type, GT densities are 0.15 GTs/acre for pine flatwoods using an occupancy factor of 0.31 and 0.41 GTs/acre for xeric oak habitat using an occupancy factor of 0.21. The relatively low GT densities on the Skebe addition parcel appear to be the result of the greater abundance of exotics compared to the deletion parcel, especially in pine flatwoods habitats. It is anticipated that the quality of the pine flatwoods and xeric oak habitats of the addition parcel can be enhanced via exotic removal and maintenance/management such that the carrying capacity for GTs can be substantially increased over its existing level.

#### 4.3 *GT Population of Portion of Existing Eco-Park to Remain Intact*

Gopher tortoise burrow surveys were conducted by WilsonMiller ecologists on that portion of the existing Eco-Park to remain intact. The surveys were conducted during the period of September 22<sup>nd</sup> through 24<sup>th</sup>, 1999 and the locations of identified burrows are provided in Figure 4. A total of 77 burrows inferred to be active or inactive were identified during the survey. Based on the 98% habitat coverage, the total estimated number of active and inactive burrows is 79. Determination of the activity status of some of the GT burrows was difficult due to the effects of Tropical Storm Harvey which passed through the area one day prior to the survey and resulted in over ten inches of rainfall. The storm flooded burrows in lower lying areas and eliminated indicators of activity status in burrows that had not used following passage of the storm. A total of 18 of the 77 identified burrows were affected in this regard so as to make determination of their exact activity status difficult. However, professional judgment was utilized in evaluating these burrows and resulted in determination of whether these burrows were likely either active or inactive prior to the storm. The results of the survey indicate that the population density of GTs in xeric oak habitat (FLUCCS #421) in the portion of the Eco-Park to remain intact is approximately 0.33 GTs per acre using an occupancy factor of 0.21. No GT burrows were identified in the FLUCCS #4211 habitat of the site that has a high density shrub stratum and that occurs at lower elevations than the higher quality scrub habitat to the west. It is estimated that a total of 16 GTs are present on the portion of the existing Eco-Park to remain intact.

#### 4.4 *Proposed Disposition of GTs Currently Inhabiting the Deletion Parcel*

GTs currently inhabiting the deletion parcel are proposed to be relocated to areas of the existing Eco-Park to remain intact with FLUCCS types 4211, 411/321, and 411E1. Such relocation is in accordance with the Eco-Park's existing management plan, which allows for relocation of GTs into such areas until densities reach 2.0 GTs/acre. Authorization of the relocation will be formally obtained by submitting a request for modification of the existing incidental take permit for the site (#Lee-9). Based on the estimated  $16 \pm$  GTs in the deletion parcel, the aggregate population density of FLUCCS 4211, 411/321, and 411E1 areas of the recipient parcel located just west of Halfway Creek will increase to 1.11 GTs/acre, well below the permit threshold. GT burrows of the deletion parcel will either be bucket trapped or excavated according to FFWCC guidelines. Prior to the commencement of relocation activities, the western and southern boundaries of the portion of the new Eco-Park located west of Halfway Creek will be fenced to preclude relocated GTs from traveling back to the donor parcel. A burrow survey affording 100% coverage of the donor parcel will be conducted no more than 30 days prior to the relocation effort.

No mitigation is proposed for land being deleted from the existing Eco-Park since suitable upland habitats proposed to be added to the Eco-Park are in excess of those being deleted (33.41 acres added vs. 22.20 deleted).

#### 4.5 *Proposed Mitigation for GT Impacts on Skebe Tract*

Proposed mitigation for impacts to GTs inhabiting areas of the Skebe tract that will be developed is summarized in Table 2. Based on the calculations in Table 2, the required mitigation acreage for impacts to occupied uplands totals 3.66 acres. Given that there is an 11.21-acre excess of upland habitat being added to the Eco-Park compared to acreage of habitat proposed to be removed, a sufficient amount of mitigation is being provided for proposed impacts to GT habitat of the Skebe tract. In addition, all GTs within impact areas are proposed to be relocated to preserve areas of the Skebe tract. Thus, no direct taking of GTs will occur. Authorization of the relocation will be formally obtained by submitting a request for modification of the existing incidental take permit for Pelican Landing (#Lee-9).

It should be noted that approximately 50% of the "impact" will remain in a predominantly natural state. Such areas are located primarily between golf course holes (see Figure 5) and will undergo selective clearing. Such clearing will result in an increase in herbaceous groundcover and thus an increase in available foraging habitat. As a result, suitable habitat will remain in these areas following development. Thus, the proposed mitigation requirement is conservative in that it compensates for areas where no taking of GTs will occur and where suitable habitat will remain following development. Based on the estimated 8± GTs that will require relocation (*i.e.*, GTs in the direct footprint of the golf course and surface water management features), the aggregate population density of recipient habitats in proposed upland preserves located on the Skebe tract will increase to approximately 0.31 GTs/acre, a density that can be easily accommodated, especially considering that enhancement and management of such habitats will occur.

**TABLE 2**  
**Proposed Mitigation for Impacts to GT Habitat on the Skebe Parcel**

FLUCCS	Impact Acres	# Active+ Inactive Burrows	Number of #GTs*	GT Density (/acre)	Proposed Mitigation Ratio	Proposed Mitigation Acreage
411	11.54	29	9	0.78	15.0%	1.73
411E1	35.39	14	4	0.12	4.6%	1.63
411E2	5.74	2	1	0.11	4.1%	0.23
411E3	8.57	0	0	0.00	0.0%	0.00
415	0.26	2	1	2.38	25.0%	0.07
424	0.24	0	0	0.00	0.0%	0.00
	61.50	47	15	0.24		3.66

\* Utilizes burrow occupancy rate of 31%.

**5.0 PROPOSED ECO-PARK CONFIGURATION AND ADJACENT DEVELOPMENT CONDITIONS**

The proposed changes to the Eco-Park boundary will increase the size of the Eco-Park by 81% (63-acre net increase) and will create a preserve with a diverse array of upland and wetland habitat types.

Figure 5 shows the proposed reconfiguration of the Pelican Landing Eco-Park along with development conditions proposed in adjacent areas. Table 3 provides a tabulation of the habitat types and acreages contained within the revised Eco-Park boundary.

As has been discussed in recent correspondence with the FWC, the original configuration of the Eco-Park was based on property boundaries and/or preliminary/conceptual subdivision plans for adjacent lands. Now that WCI Communities, Inc. has refined the required area and uses of adjacent lands, it has become apparent that a modification to the Eco-Park boundary is needed. Revisions have been made to the Eco-Park boundary (on paper only herein) due to the acquisition or planned acquisition of adjacent parcels, changes in the site development plan, and the desire to utilize an ecosystem approach in reconfiguring the Eco-Park. The reconfiguration incorporates an ecosystem approach by including a variety of upland and wetland habitat types (as opposed to only several upland habitat types in the existing Eco-Park). The proposed reconfiguration includes a large portion of Halfway Creek, a high quality riverine system that will serve to provide a perpetual buffer to the east of eagle nest LE-28A.

It should be noted that the Eco-Park boundary reconfiguration proposed herein is dependent on acquisition of the Skebe tract. Upon approval of the proposed Eco-Park boundary reconfiguration by the FFWCC and successful acquisition of the Skebe tract, a conservation easement to be approved by the FFWCC will be recorded for the new Eco-Park boundary. Following recordation of the conservation easement, the existing easement will be dissolved.

The revised Eco-Park will serve as a barrier between the proposed golf course on the Skebe tract and those in the deletion parcel to the west. Thus, the new conservation easement will need to include provisions for a paved golf cart path and buried irrigation line through upland portions of the Eco-Park and a golf cart bridge crossing of Halfway Creek. Cart paths in upland areas will be located along existing trails where possible and will avoid existing trees to the maximum extent possible. Pending approval and permitting by the South Florida Water Management District (SFWMD) and the U.S. Army Corps of Engineers (Corps), the cart bridge will be located at the old crossing at Halfway Creek (*i.e.*, aligned along the FLUCCS #743 spoil island). A tentative location of the cart path is provided in Figure 5. Provisions will also be needed for a buried outfall pipe extending from the isolated wetland on the Skebe site to Halfway Creek (Figure 5). This pipe has been located to correspond with the golf cart path to the extent possible to minimize habitat impacts.

**TABLE 3**  
**Habitat Types and Acreages in Revised Eco-Park Boundary**

FLUCCS Code	FLUCCS Type	Acres	% of Total
321	Palmetto prairie	1.55	1.1
411*	Pine flatwoods*	23.99*	17.0
411/321	Pine flatwoods/Palmetto prairie	4.04	2.9
421	Xeric oak	45.80	32.4
4211	Xeric oak, high density shrub layer	7.62	5.4
423*	Pine-cabbage palm-oaks*	4.66	3.3
424**	Melaleuca**	1.36**	1.0
513	Ditch	0.02	0.0
600	Shrub wetland	6.28	4.4
616	Inland pond	0.49	0.3
621	Cypress	45.45	32.1
743***	Spoil area***	0.12***	0.1
<b>TOTAL</b>		<b>141.38</b>	<b>100.0</b>
* Includes areas with exotic invasion to be enhanced/restored.			
** To be cleared of melaleuca and allowed to revegetate naturally. May be planted with appropriate native species to speed recovery.			

## 6.0 HABITAT MANAGEMENT PLAN

Habitat management of upland portions of the Eco-Park will be identical to the previously approved management plan (*i.e.*, will be in accordance with Condition #3 of Gopher Tortoise Incidental Take Permit #Lee-9; Appendix A).

Habitat management of wetland portions of the Eco-Park will consist of the following:

- Wetland habitats will be initially managed by removing exotic and nuisance plant species (primarily melaleuca, Brazilian pepper, and downy rose myrtle). Exotic eradication and maintenance will be accomplished via hand removal; no mechanized clearing or use of heavy equipment will occur within wetland conservation areas. Hand removal exotic clearing methods will include the use of implements such as chainsaws, axes, and machetes to cut down exotic vegetation. Vehicles such as trucks and trailers, and chippers to process the debris, will also be used.
- Plants that are visible for 50 feet from the conservation area perimeter will be cut down and removed from the mitigation area. Stumps of cut plants will be chemically treated within 15 minutes of cutting. Debris generated during this phase of removal will be temporarily stockpiled in adjacent upland areas for later burning, chipping/spreading, or transport off-site for disposal. Where chipping is utilized, any large mounds of chipped materials would either be removed or spread out so as to not inhibit development of desirable groundcover.
- Interior plants (>50' from conservation area perimeter) will primarily be eradicated by chemical treatment of standing trees in order to minimize disruption and impacts to existing native wetland vegetation. Smaller individuals will be eradicated through complete removal, cut and treat, or foliar herbicidal treatment. Only EPA-approved herbicides will be utilized and a visual tracer dye will be added if not already contained in the specific herbicide mixture. All herbicides will be applied in accordance with label specifications. Such applications will be conducted by or under the direction of an appropriately licensed applicator. Felled material that is not removed from the interior of conservation areas will be handled in general accordance with the SFWMD publication *Draft Guidelines for Melaleuca Removal* dated 9/14/98.
- Ongoing control of undesirable species will be via directed herbicide applications, physical uprooting, or a combination of these methods. Ongoing maintenance will consist solely of hand-removal; no heavy equipment will be operated within conservation areas.
- During prescribed burning of upland areas of the Eco-Park, appropriate steps will be taken to insure that site wetlands are not unduly damaged by fire (*e.g.*, installing fire breaks, back-burning, executing burns under climatic conditions when wetland vulnerability to fire is minimized, etc.).

## 7.0 SUMMARY

Based on our evaluation, the proposed reconfiguration of the Pelican Landing Eco-Park provides several advantages over the existing configuration. These advantages include:

- The proposed reconfiguration will increase the size of the Eco-Park by 63 acres (81%).
- The proposed plan incorporates an ecosystem approach by including a variety of upland and wetland habitat types, as opposed to only several upland habitat types in the existing Eco-Park. The proposed reconfiguration includes a large portion of Halfway Creek, an Outstanding Florida Water and high quality riverine system.
- Existing wetland and upland habitats will be enhanced via the removal of exotic vegetation and subsequently managed/maintained in perpetuity.

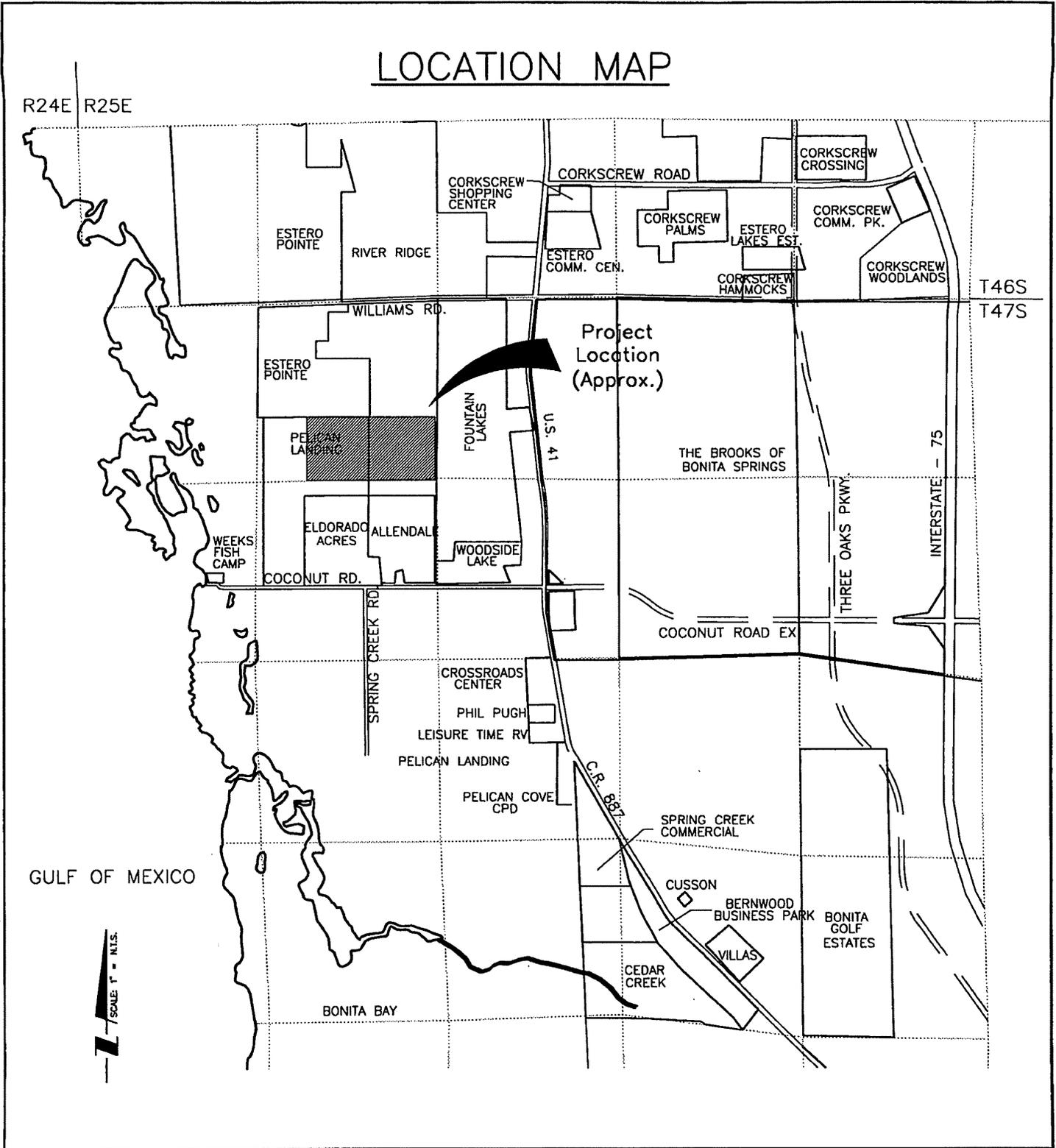
- The USFWS is in the final stages of providing approval of the project's bald eagle management plan. This plan, in conjunction with the proposed changes to the Eco-Park, will substantially increase the controlled acreage of the buffer/protection zone for bald eagle nest #LE-28A. In addition, residential areas previously proposed within the secondary protection zone of the eagle nest will be replaced with golf course and natural areas, land uses more compatible with both eagle nesting and adjacent preservation lands.

## 8.0 REFERENCES

Florida Department of Transportation. 1985. Florida Land Use, Cover and Forms Classification System. Procedure No. 550-010-001-a, Second Edition. 81 pp.

## 9.0 FIGURES

# LOCATION MAP



PROJECT: **PELICAN LANDING DRI ECO-PARK**

APPLICANT: **WCI COMMUNITIES, INC.**

## WilsonMiller

Planners • Engineers • Ecologists • Surveyors • Landscape Architects • Transportation Consultants

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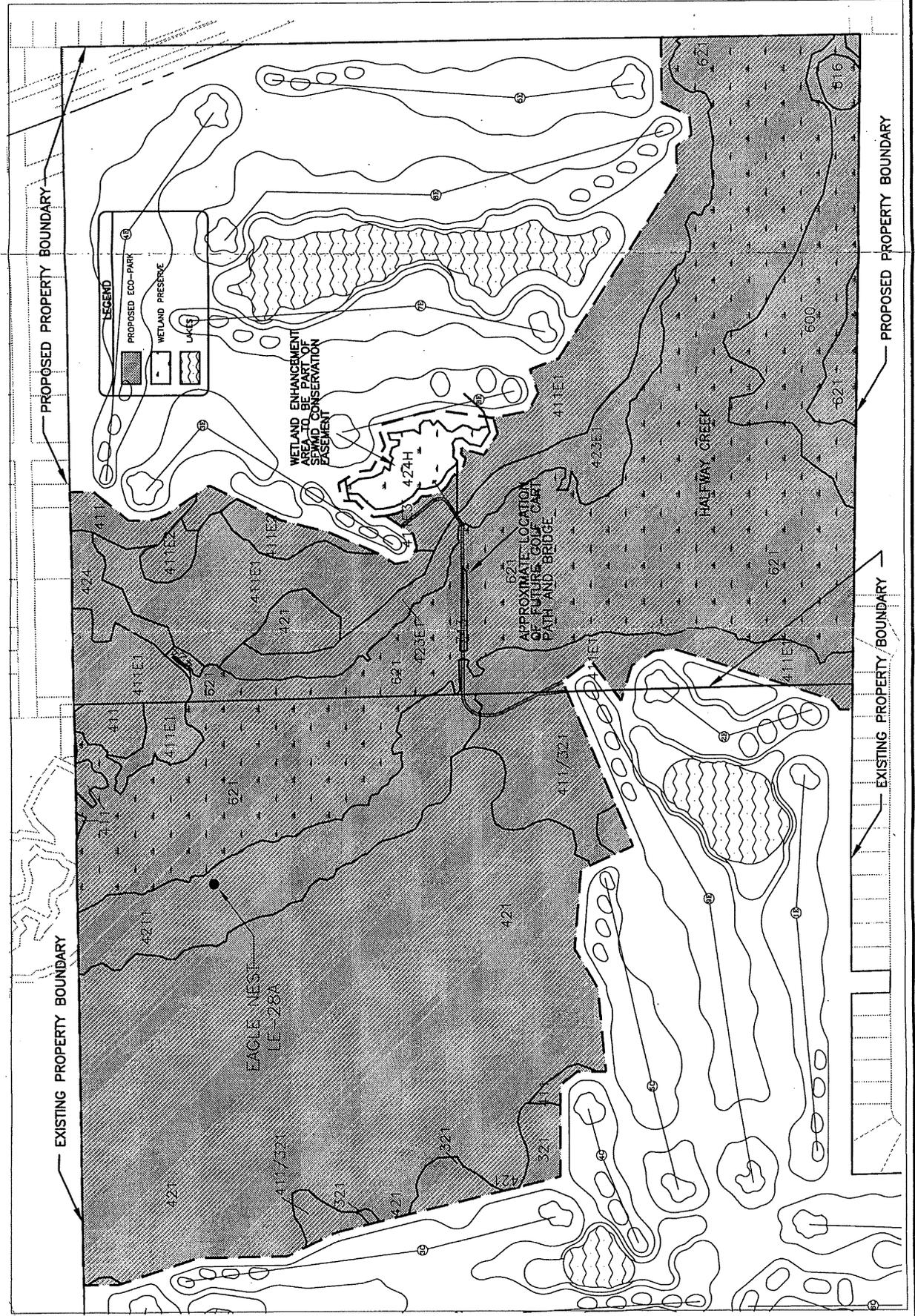
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FLA. REG. #

COUNTY: <b>LEE</b>	DATE: <b>MAR. 2000</b>
SEC: <b>4,5,8,9 47S</b>	REV NO:
TWP: <b>25E</b>	FILE NO: <b>C-0250-50</b>
PROJECT NO: <b>F0250-024-014</b>	SHEET NO: <b>1</b> OF <b>5</b>
DRWN BY/EMP NO: <b>K.L.P./865</b>	

**FIGURE 5  
 PROPOSED CONFIGURATION OF ECO-PARK WITH  
 ADJACENT DEVELOPMENT OF ECO-PARK WITH**

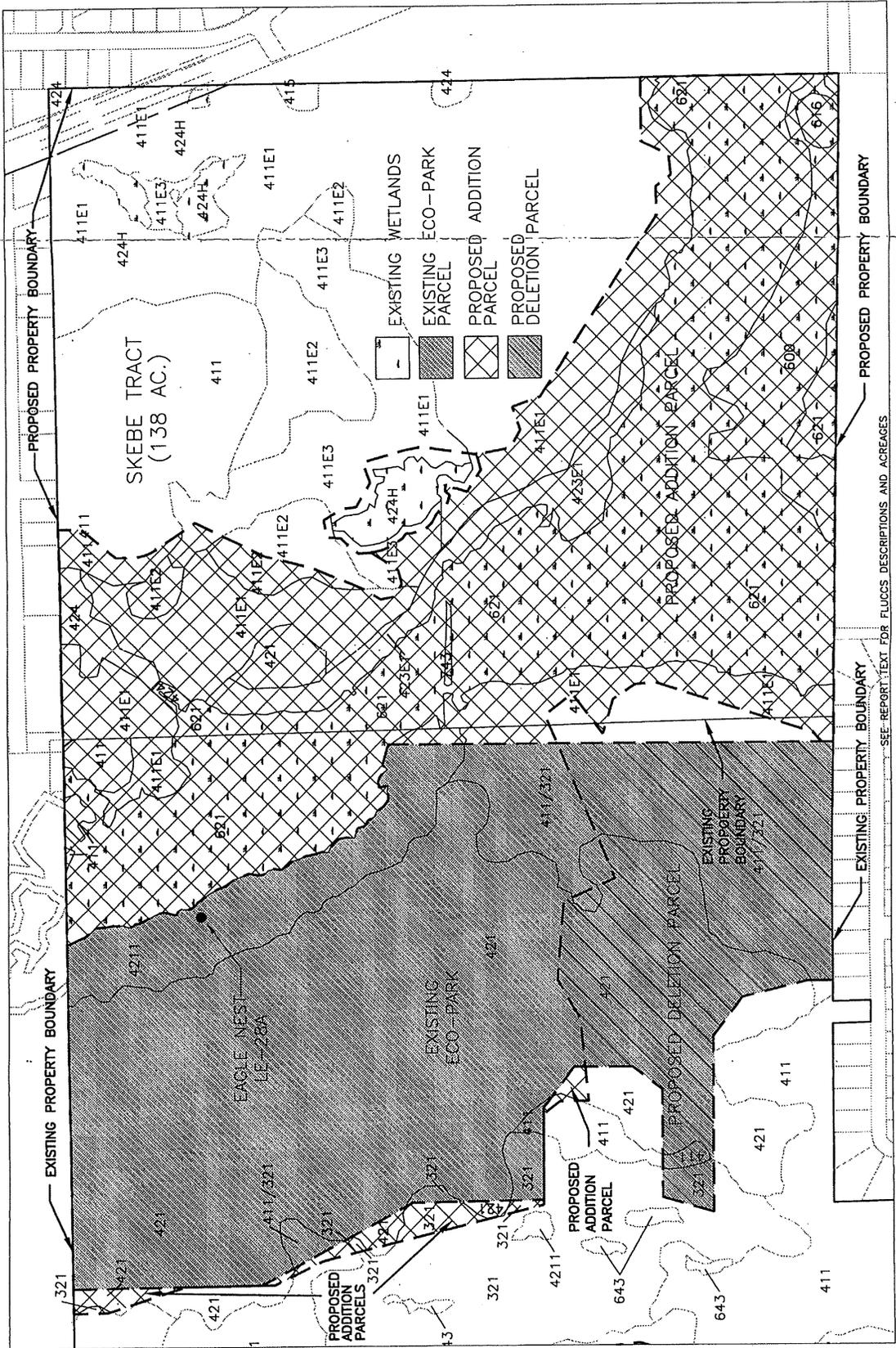
Scale: 1" = 300'  
 Date: 04/11/2008  
 Approved By: [Signature]  
 Checked By: [Signature]  
 Drawn By: M.M./J.H.S.  
 DESIGNED BY: [Signature]  
 SHEET NO. 5 OF 5  
 PROJECT NO. C-000-18





**LOCATION OF PROPOSED SWAP PARCELS**  
**FIGURE 2**

Map Scale: 1" = 300'  
 Date: MAR 2002  
 Prepared by: MLL/RLB  
 Drawn by:  
 Checked by:  
 Approved by:  
 Title: PL 70286-01-011-0502  
 Project: C-020-11  
 Sheet: 3 of 5



SEE REPORT TEXT FOR FLUCCS DESCRIPTIONS AND ACREAGES



**Proposed Reconfiguration of  
Pelican Landing DRI Eco-Park**

**APPENDIX A**

**Gopher Tortoise Incidental Take Permit #Lee-9**

PERMIT FOR TAKING OF GOPHER TORTOISES AND  
THEIR BURROWS

Chapter 39-27.002(4) F.A.C.

STATE OF FLORIDA GAME AND FRESH WATER FISH COMMISSION

Issuance Date: August 29, 1995

Permittee: Westinghouse Bayside Communities, Inc.

Permittee Address: 24820 Burnt Pine Drive  
Bonita Springs, FL 33923  
ATTN: Mr. Terrence S. Dolan

Consultant: Mr. Tim Durham  
Wilson, Miller, Barton & Peek  
3200 Bailey Lane at Airport Road,  
Suite 200  
Naples, Florida 33942

Permit Number: LEE-9

Location of Affected Site: The 1,119-acre Pelican Landing Development of Regional Impact, including 680.6 acres of gopher tortoise habitat, located west of U.S. 41 between the Estero River and Spring Creek, in Sections 5, 7, 8, 9, 16, 17, 18, 20, and 21, Township 47 South, Range 25 East, in southwest Lee County. See Attachment 1, location map and Attachment 2, Map H Master Development Plan).

Permitted Action: The permittee or its agents are authorized to take gopher tortoises, their eggs and their burrows within its development boundaries where such taking is incidental to development activities. The criteria of Rule 39-27.002(4), F.A.C., have been satisfied and the taking, as conditioned below, will not be detrimental to the survival potential of the species.

Provisions/Conditions:

1. The permittee shall protect 78 acres of gopher tortoise habitat located within the western 1/2 of Section 5, Township 47 South, Range 25 East in Lee County (see Attachment 3 identifying the tract as the Eco-Park) by placing the referenced parcel under a perpetual conservation easement, approved by and granted to the Florida Game and Fresh Water Fish Commission (GFC). The permittee shall record the approved and signed conservation easement in the Lee County plat records and send an original of the recorded easement to the GFC at the Office of Environmental Services, 620 South Meridian Street, Tallahassee, FL 32399-1600. Of the 78 acres of gopher tortoise habitat, only 77.8 acres are specifically required for this permit; the remaining 0.2 acres may be used, as appropriate, to satisfy requirements of gopher tortoise incidental take permits subsequently issued by the GFC to the permittee.

2. The permit will not go into effect until the date that the permittee is in possession of a notice from the GFC acknowledging receipt of an original approved and recorded conservation easement for the area described in Condition 1 above. However, as described in the permit Notice of Rights Statement, issuance of this permit may be appealed by a concerned party within 21 days of the permittee's receipt of this notice. If a Petition for Administrative Hearing is timely filed within this prescribed time period, the permittee shall cease all work authorized by this permit until the petition is resolved.
3. The permittee shall have the obligation to manage and maintain the conservation easement lands as habitat for the gopher tortoise in perpetuity as described in pages 5-9 of the "Gopher Tortoise Population Study and Habitat Management Plan for Pelican Landing DRI Including the Elks Club and the Wysok Parcel", dated December 1993 and modified December 1994 and May 1995 (Attachment 4).
4. The permittee shall clearly mark the boundaries of the conservation easement area and permanently maintain the boundary markers so that the area perimeters are clearly discernable to GFC personnel who inspect the site in the future. A wooden rail and post, or post and strong cable fence and associated signage restricting access will be installed between the proposed residential tract to the west of the 78-acre Eco-Park and the Eco-Park boundaries.
5. This permit does not relieve the permittee from any other "taking" requirements by the U.S. Fish and Wildlife Service (USFWS) or the GFC as to other listed species. Specifically, this permit does not authorize any destruction of eagles, scrub jays, or scrub jay and eagle nests or habitat. Consultation with the USFWS should be sought and completed if these species are present. The permittee should clearly note the conditions placed on the use and management of the Eco-Park with regard to eagle nesting activities (see page 6 of Attachment 4).
6. The permittee or its approved agents are authorized to move tortoises, at their discretion, within the Pelican Landing property boundaries, with restrictions for relocation into the Eco-Park as noted on page 8 of Attachment 4, to minimize taking. This permit does not authorize the permittee or its agents to possess or move tortoises off the contiguous ownership of the permittee nor to move tortoises into areas previously authorized as a relocation site by a GFC permit. A separate relocation permit from the GFC shall be required for those activities.
7. This permit does not authorize any taking of gopher tortoises beyond that which is a direct result of development activities or the on-site movement of animals addressed in condition #6. Any other form of taking or relocation will require a separate permit from the Executive Director.
8. This permit must be available for inspection at all times while engaged in the permitted activities.
9. This permit is transferrable to subsequent owners of the property.

Westinghouse Bayside Communities, Inc.  
Gopher Tortoise Incidental Take Permit #LEE-9  
August 29, 1995  
Page 3

Notice of Rights Statement: In accordance with Rules 28-5.111 and 28-6.008, F.A.C., and Section 120.60, F.S., any party may request a hearing on this matter pursuant to Section 120.57, F.S., by filing a completed Elections of Rights form (copy attached) by certified mail, return receipt requested, with the undersigned within twenty-one (21) days of receipt of this notice. If timely requested and a hearing is granted, the hearing will be conducted under the procedures established by Section 120.57, F.S. A party will be given the opportunity to be represented by counsel or other qualified representative, to take testimony, to call and cross-examine witnesses, and to have subpoenas issued on your behalf.

Allan L. Egbert, Ph.D.  
Executive Director

By: \_\_\_\_\_

*Brian Barnett*

ENV 3-2/5  
pelldep

Attachments:

1. Project location map
2. Project boundary map
3. Eco-Park location and boundary map
4. Gopher tortoise management plan excerpt, pages 5-9
5. Elections of Rights form

STATE OF FLORIDA  
GAME AND FRESH WATER FISH COMMISSION

ELECTION OF RIGHTS

I have read the Explanation of Rights form and understand my options.

(You may select one of the options below and return with this form to the Florida Game and Fresh Water Fish Commission (Commission) no later than twenty one (21) days from the receipt of the Notice of Agency Action).

1. ( ) I do not dispute the allegations of fact in the Notice of Agency Action but do wish to be accorded an informal hearing or proceeding, pursuant to Section 120.57(2), Florida Statutes, at which time I will be permitted to submit oral or written evidence in mitigation of the complaint to the agency head or his representative.
2. ( ) I do dispute the allegations of fact contained in the Notice of Agency Action, submit an attached statement of all disputed allegations of fact, and request a formal hearing, pursuant to Section 120.57(1), Florida Statutes, before a hearing officer appointed by the Division of Administrative Hearings.
3. ( ) I do not dispute the allegations of fact in the Notice of Agency Action and waive my right to object or to be heard.

I have read and understand the Election of Rights form and understand that I have the right to be represented by counsel at either an informal or formal

hearing. I also understand that I must attach a petition or written statement of the disputed issues of fact to this request if I have requested a formal hearing.

Please sign and state your current address and telephone number:

\_\_\_\_\_

Date

\_\_\_\_\_

Signature

\_\_\_\_\_

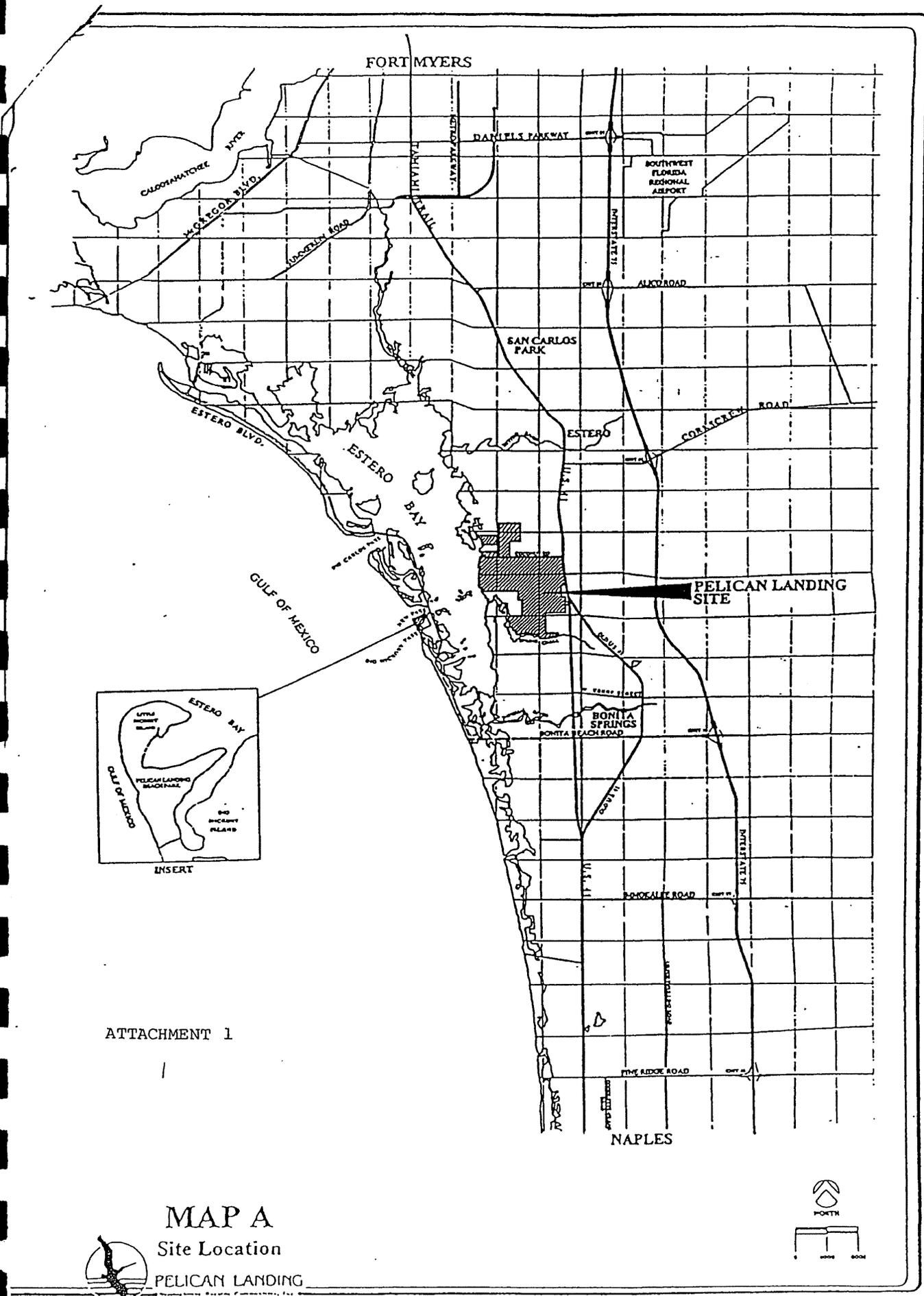
Attorney's name and address

\_\_\_\_\_

Address

Please mail form to:

Office of the General Counsel  
Florida Game and Fresh Water  
Fish Commission  
620 South Meridian Street  
Tallahassee, Florida 32399-1600

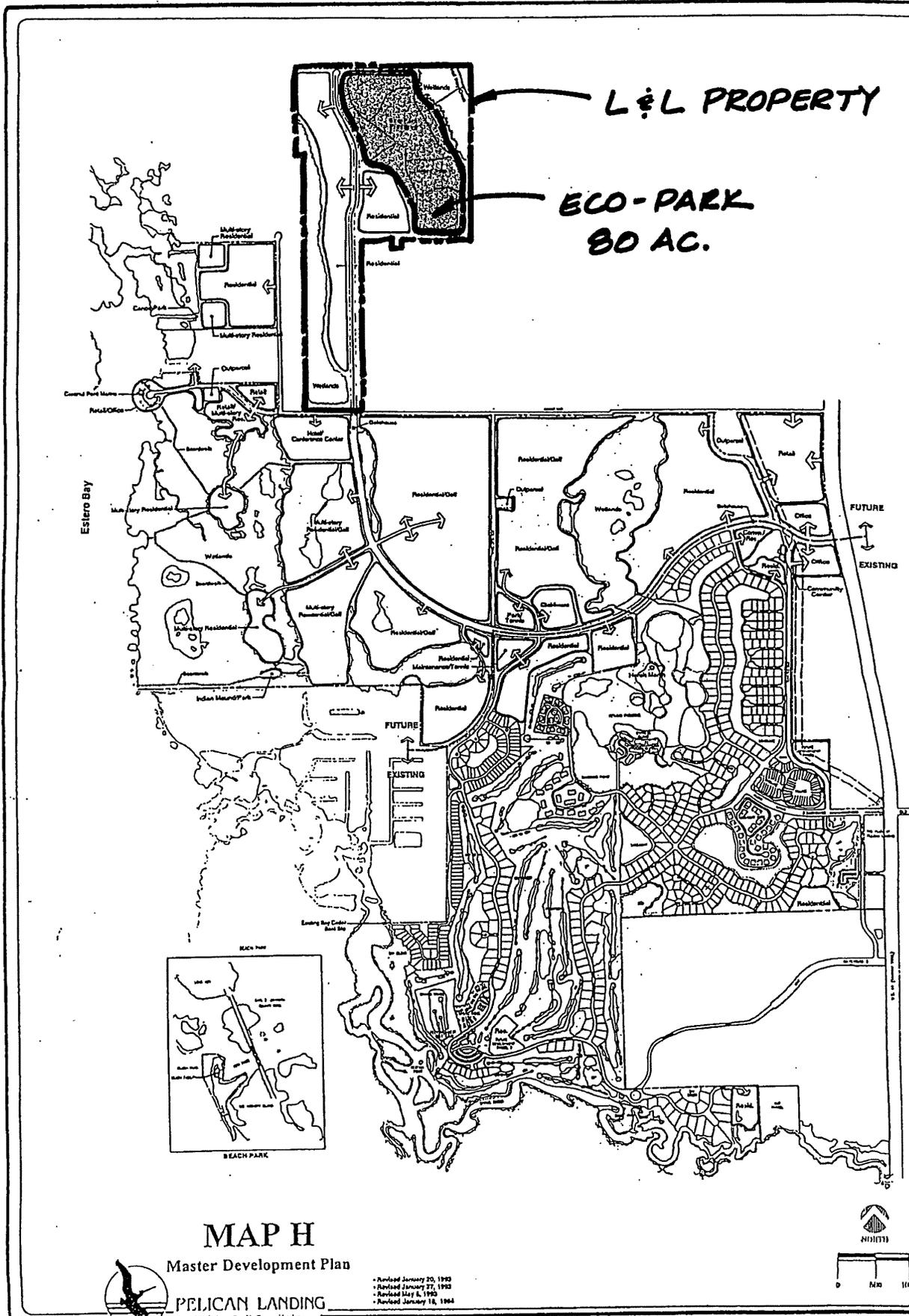


ATTACHMENT 1

# MAP A

Site Location  
 PELICAN LANDING





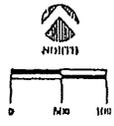
# MAP H

Master Development Plan



**PELICAN LANDING**  
Washington Brydie Consulting, Inc.

- Revised January 20, 1993
- Revised January 27, 1993
- Revised May 6, 1993
- Revised January 18, 1994





WILSON • MILLER • BARTON & PEEK, INC.

**GOPHER TORTOISE POPULATION STUDY  
AND HABITAT MANAGEMENT PLAN**

**FOR  
PELICAN LANDING DRI  
INCLUDING THE ELKS CLUB AND THE WYSOK PARCEL**

**PREPARED FOR:**

**WCI COMMUNITIES, INC.  
24820 BURNT PINE DRIVE  
BONITA SPRINGS, FLORIDA 33923**

**PREPARED BY:**

**WILSON, MILLER, BARTON & PEEK, INC.  
3200 BAILEY LANE  
SUITE 200  
NAPLES, FLORIDA 33942**

**DECEMBER 1993  
MODIFIED DECEMBER 1994  
MODIFIED MAY 1995  
MODIFIED AUGUST 1995**

**WMBP W.O. 16802  
WMBP PROJECT NO. 0208**

## POPULATION STUDY

### Introduction

Staff biologists of Wilson, Miller, Barton & Peek, Inc. (WMBP) and Heald and Associates, Inc. (H&A) have completed a study to identify all suitable gopher tortoise (*Gopherus polyphemus*) habitat and to determine the estimated gopher tortoise population within the undeveloped portions of Pelican Landing DRI. The property includes approximately 1119 acres in Sections 5, 7, 8, 9, 16, 17, 18, 20 and 21, Township 47 South, Range 25 East, Lee County, Florida. The overall study consisted of several phases:

- Mapping and classifying the existing vegetative communities.
- Meandered pedestrian transects to locate the existing tortoise burrows.
- Calculation of the probable tortoise population on-site.
- Calculation of the protection area necessary to off-set impacts to tortoise habitat.

This report describes methodologies, identifies the specific study area and documents our results from this study.

### Existing Habitat/Land Use

Based on aerial photography and extensive ground truthing, the existing vegetative communities and land uses have been mapped and classified using the Florida Land Use, Cover, and Forms Classification System (FLUCCS) — see attached WMBP Drawing No. ENV-141 and ENV-152A. Following is a list of the different habitat and land use types identified with a brief description of each.

#### FLUCCS:      Description:

- |         |  |
|---------|--|
| 162     | <u>Sand or Gravel Pit</u> - Pits used primarily as farm ponds with the soil exported to nursery operations.  |
| 184     | <u>Marina and Fish Camp</u> - Commercial fish house with docks and fish gear storage is located at the western end of Coconut Road.  |
| 261     | <u>Fallow Crop Land</u> - Harvested agricultural land not currently in crop production.  |
| 321     | <u>Palmetto Prairie</u> - Areas in which saw palmetto is the most dominant vegetation.   |
| 411     | <u>Pine Flatwood</u> - Dominated by slash pine. Common understory species include wax myrtle, gallberry and a wide variety of herbs and brush.   |
| 411/321 | <u>Pine Flatwood, Palmetto Prairie</u> - Dominated by slash pine. Predominant understory species is saw palmetto. Wax myrtle, gallberry and a wide variety of herbs and brush are sub-dominants. |
| 411/422 | <u>Pine Flatwood, Brazilian Pepper</u> - Dominated by slash pine with a midstory of Brazilian pepper.  |

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- 411/424/621 Pine, Melaleuca, Cypress Mix - Consists of an even mix of slash pine and cypress with invasion of melaleuca.
- 411/433/422 Pine Flatwood, Slash Pine, Saw Palmetto, Cabbage Palm, Laurel Oak, Brazilian Pepper - Pine flatwood assemblage containing various mesic hardwood species as subdominants.
- 4111 Pine Flatwood, Slash Pine, Saw Palmetto, Scattered Scrub Oak - Dominated by slash pine. Understory species include primarily saw palmetto with a midstory of scrub oak.
- 4201 Mesic Oak Stands with Dense High Saw Palmetto - Large live oaks.
- 421 Xeric Oak - The highest elevations on-site. Dominated by scrub oaks, saw palmetto, stagger bush, and rosemary.
- 4211 Xeric Oak with High Dense Shrubs - Similar to FLUCCS Unit 421 except the dense scrub oaks likely reflect a fire history.
- 422 Brazilian Pepper - Commonly found on disturbed sites. Often established along borrow-pits and old disturbed fields.
- 423/411 Live Oak, Slash Pine, Brazilian Pepper, Downy Rose Myrtle - Dominated by slash pine. Live oak and Brazilian pepper dominate the midstory with downy rose myrtle as a subdominant.
- 424 Melaleuca - Exotic tree species in almost pure strands on disturbed sites.
- 424/321 Melaleuca, Saw Palmetto - Melaleuca canopy over a saw palmetto understory. Probably reflects hydrologic manipulation by nearby agricultural operations.
- 433 Western Everglades Hardwoods - Wetland-upland transitional community dominated by broad leaf trees such as live oak and laurel oak with wild coffee and other West Indian hardwood hammock species and sub-dominants.
- 433/411/422 Cabbage Palm Association Cabbage Palm, Laurel Oak, Live Oak, Brazilian Pepper - Wetland-upland transitional community dominated by cabbage palms and broad leaf trees such as live oak and laurel oak with wild coffee and other West Indian hardwood hammock species and sub-dominants. Midstory is dominated by Brazilian pepper.
- 433/422 Cabbage Palm Hammock, Cabbage Palm, Occasional Pine, Cypress Fern Understory - Remnant agricultural field colonized by cabbage palms with scattered pine and cypress. Ferns form the ground cover.

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- 510            Streams and Waterways - Rivers, creeks, canals and other linear water bodies.
- 542            Bays Closed - Embayments not opening directly into the Gulf of Mexico or the Atlantic Ocean.
- 612            Mangrove Swamp - Coastal hardwood community composed of red, white and/or black mangrove.
- 612/642       Mangrove, Saltmarsh Mix - Vegetated, non-forested wetlands in which the dominant herbaceous species does not achieve 66 percent cover. Cordgrass, Needlerush, and saltwort are some of the species composing this FLUCCS unit. Stunted mangroves exist throughout.
- 616            Inland Ponds and Sloughs - Communities are associated with depressions and drainage areas that are not associated with streams or lakes.
- 617            Mixed Wetland Hardwoods - Wetland hardwoods communities which are composed of a large variety of hardwood species tolerant of hydric conditions yet exhibit an ill defined mixture of species.
- 621            Cypress Swamp - Bald cypress which is either pure or predominant. Associated species include laurel oak, red bay, red maple, and pop ash on drier portions of the site.
- 621/630       Cypress Swamp with Mixed Hardwoods - Predominantly cypress canopy with slash pines and hardwoods mixed as subdominants.
- 630            Wetland Forest Mixed - Mixed wetlands forest in which neither hardwoods or conifers achieve 66 percent dominance of canopy composition.
- 6411           Sawgrass Marsh - Vegetated, non-forested wetlands in which the dominant herbaceous species is sawgrass.
- 6411/422      Sawgrass, Brazilian Pepper - Disturbed, vegetated, non-forested wetlands in which the dominant herbaceous species is sawgrass. Brazilian pepper has invaded much of this FLUCCS category.
- 642            Salt Marsh - Vegetated, non-forested wetlands in which the dominant herbaceous species does not achieve 66 percent cover. Cordgrass, Needlerush, and saltwort are commonly occurring species.
- 643            Wet Prairie - Predominantly grassy vegetation on wet soils. Usually distinguished from marshes by having less water and shorter herbage. Sawgrass, Maidencane, cordgrass, and yellow-eyed grass are common species.

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- 720            Saltern (Bare Sand) - Tidal sand flat area characterized by high soil chlorides.
- 740            Disturbed Land - Areas which have been changed due primarily to human activities other than mining.
- 832            Electrical Power Transmission Line - This line runs south and east from Coconut Road to U.S. 41.

Table 1 lists each of the habitat types along with the approximate acreage of each. The table further identifies the percentage of the total project acreage each type encompasses and the corresponding percentage of the potential tortoise habitat on-site.

A total of 31 different vegetative communities/associations were identified on this property. Only eight (8) were considered to be suitable habitat for gopher tortoises. These included: palmetto prairies, melaleuca over palmetto, disturbed land, and variations of pine flatwood and xeric oak. Approximately 680.0 acres of the 1119 acres of undeveloped property on-site fall within these eight (8) habitat types. Fallow cropland was also surveyed for gopher tortoises with none found, therefore, fallow cropland is not considered for this evaluation.

The biologists conducting this survey are experienced observers with extensive backgrounds in this type of work. The gopher tortoise survey was conducted using sensitive methodologies to achieve thorough coverage of the project site. All methodologies meet or exceed the recommended standards for the Florida Game and Freshwater Fish Commission (FGFWFC).

Survey Methodologies

Once the vegetative communities were identified and mapped, an extensive field survey was conducted in the eight (8) communities identified as suitable for gopher tortoises throughout the undeveloped portions of Pelican Landing.

Temporary pedestrian transects were meandered through each of the habitats identified as possible tortoise habitat. Using existing roads, trails, wetland margins, and other features as landmarks, each habitat type was methodically surveyed to locate tortoise burrows. Biologists walked these meandering transects recording the number of active, inactive and abandoned burrows and identifying their approximate location on aerial photographs. Tortoise burrow locations are not indicated here since tortoises have likely relocated within the local region since the time of the surveys. Distance between transects varied from 10-15' in dense vegetation to 20-30' in open scrub habitat. Table 2a gives the percentage of each suitable habitat surveyed.

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Tortoise Population

Tortoise survey field work was conducted between December 1989 and October 1993. A total of 116 burrows were located on the project site as a result of these surveys. Based on an estimate of 26% habitat coverages, the projected burrow count is 448. Refer to Table 3 for the total number of active and inactive burrows in each suitable habitat type.

Based on a projected burrow count of 448 and a burrow occupancy conversion factor 0.614, the probable gopher tortoise population on-site is 275 tortoises. The analysis uses FGFWFC's burrow occupancy multiplier of 0.614 for the purposes of simplicity. It is our experience on similar projects in the region that the realized multiplier is much lower. Thus, related calculations should be interpreted as very conservative in favor of the tortoise population. Tables 2a and 2b provide data on tortoise densities per FLUCCS category.

HABITAT PROTECTION/CONSERVATION AREA

Based upon FGFWFC habitat protection guidelines for DRI projects, Tables 2a and 2b were generated to illustrate the calculation of Habitat Protection Area acreage. The habitat protection factor shown uses 15% for areas with densities between 0.4 and 0.8 tortoises per acre and 25% for areas with densities equal to or greater than 0.8. Below 0.4 densities, the factor of 15% was prorated. The resulting acreage sum of approximately 78 acres represents the acreage required to be addressed for habitat protection under FGFWFC guidelines. An incidental take permit for the entire 680 acres of gopher tortoise habitat is being applied for as part of this study and management plan submittal.

A 78 acre xeric scrub/pine flatwood upland area will be designated as an upland Habitat Protection Area, or *Pelican Landing Eco-Park*, commensurate with gopher tortoise take permit approval. This area will be set aside for gopher tortoise usage and will be actively managed to assure appropriate vegetative density and composition for gopher tortoise usage in perpetuity. The location for the *Eco-Park* was strategically chosen since it contains a majority of the xeric oak habitat on the entire undeveloped portion of Pelican Landing. Additionally, the *Eco-Park* is connected to the Chapel Ridge Property, a native scrub ridge habitat to the north, thereby retaining the function of the existing community. WMB&P Drawing ENV-141, attached, indicates the approximate location and extent of proposed the *Eco-Park*.

PROTECTION AREA MANAGEMENT PLAN

The proposed protection area encompasses approximately 78 acres in the northeast corner of the property, 65 acres of which are high quality xeric oak habitat and 13 acres are pine flatwood. The xeric scrub habitat borders a cypress/hardwood wetland system to the northeast, the margins of which should serve as foraging habitat for the tortoises in dry season.

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The realized upland Habitat Protection Area may vary due to field adjustments, but will encompass at least 78 acres. The extent of habitat protection acreage will be determined by survey, prior to construction-related impacts, and will be placed under a conservation easement granted to the Florida Game and Fresh Water Fish Commission and managed as outlined below. In conjunction with the survey, a wooden rail and post, or post and strong cable fence and associated signage restricting access will be installed between the proposed residential tract to the west and the Eco-Park.

Monitoring and maintenance of the tortoise habitat area is acknowledged to be an important component of assuring the long term viability of the existing gopher tortoise population. The legal entity responsible for the maintenance of habitat protection areas will be WCI Communities, Inc., or its assignee.

The following components comprise the tortoise protection area maintenance and monitoring plan:

1. Construction related intrusions into the proposed gopher tortoise protection area will be prohibited during clearing and construction operations. Contractors will be provided a copy of WMB&P Drawing ENV-141 and instructed regarding habitat protection. Areas proposed for habitat protection will be flagged, staked, barricaded or otherwise delineated in the field prior to construction.
2. Recreational activities will be restricted to specific pedestrian trails. These will be established subject to FGFWFC approval during final site planning. No designated picnic areas, biking trails, horse trails or interpretive facilities (other than approved signs, vita trails, and bird viewing blinds) will be allowed. The vita trails will not be paved, hardened or made impermeable. The location and design of all facilities will be reviewed and approved prior to construction by the FGFWFC. Educational signage will be placed along the trails.
3. Human access will be restricted, by appropriate signage in the vicinity of any eagle nest during nesting season. During the nesting season, pedestrian trails or other human use, will be restricted to a minimum of 500' from an active eagle's nest. The trail will be barricaded off by a cable across the path.
4. Mulch along the interface between the designated Habitat Protection Area and developed areas will not extend further than one foot into protection areas.
5. Exotic vegetation (primarily melaleuca, Brazilian pepper and downy rose myrtle) will be removed by hand from protection areas in perpetuity.
6. Maintenance activities will be conducted in perpetuity and will involve a combination of mechanical treatment, selective hand clearing, and/or prescribed burning. Mechanical treatment methods would include mowing and bush hogging which would be conducted when daytime temperatures are below 75 degrees F (periods of reduced tortoise mobility). Hand pruning or clearing of midstory vegetation could occur as necessary to control overgrowth. Removal of all or parts of larger trees may be performed in order to increase or maintain sunlight penetration to ground level. No maintenance activities will be conducted within 1300 feet of an active eagle's

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nest during the nesting season. The distance restriction from the active nest may be reduced upon the approval of the USFWS.

A specific indication of preferred maintenance practices per habitat type is as follows.

A. Xeric Scrub

- i. Hand-trim to a height of 6-9 feet at 5 year intervals or as deemed necessary.
- ii. Excessive layers of shrubby growth will be removed by hand at 3 year intervals if necessary.
- iii. Prescribed burns may be conducted at 8 year intervals if judged feasible and necessary. Appropriate steps will be taken to protect the eagle nest and perch trees, such as the removal of fuel from the vicinity of the nest and perch trees.
- iv. No mowing or raking will be performed in xeric scrub areas.
- v. No burning will take place during the eagle nesting season, per distances established by the FGFWFC or the USFWS.

B. Pine Flatwood

- i. Bush hogging and/or mowing at 3 year intervals if judged necessary to maintain a minimum of 30% total ground area clear of saw palmetto or other shrubs.
- ii. Prescribed burn may be conducted at 3 year intervals if feasible and necessary.

Maintenance activities will be performed upon recording of the Habitat Protection Area conservation easement and every other year thereafter.

A locally based nuisance-wildlife expert will be engaged as necessary to round-up, trap, shoot, or otherwise remove feral hogs from the Protection Area.

If deemed necessary by FGFWFC, native plant species of value to gopher tortoises will be used to supplement existing vegetation. Species used would include, but not be limited to, dwarf live oak, gopher apple, buckthorn, lyonia, gallberry, tarflower, and prickly pear cactus.

Prior to scheduled maintenance activities (every other year), a site walk and habitat evaluation will be performed by a qualified biologist to determine maintenance requirements. Potential need for supplemental foraging plant material plantings will also be evaluated.

A report on maintenance/management activities undertaken will be prepared and submitted to FGFWFC every two years with copies supplied to Lee County and SWFRPC. The FGFWFC will review and suggest modifications, if necessary, to improve management of the site.

Brochures containing information on gopher tortoise habitat, behavior and protection measures will be developed and provided to residents adjacent to the *Eco-Park* or golf course fringes.

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## GOPHER TORTOISE MANAGEMENT DURING CONSTRUCTION

The proposed development of the Pelican Landing DRI involves golf course construction and single family homesites in or near those areas which are currently suitable for gopher tortoises. The nature and character of the single family homesite and golf course will be essentially identical to the existing developed portions of Pelican Landing to the south. As such, large amounts of native vegetation will be retained through detailed project layout and deed restrictions.

Tortoises proposed to be impacted as a result of this incidental take permit will be relocated to the proposed Pelican Landing Eco-Park, protection area, until tortoise densities within the 4211, 411/321 FLUCCS categories within the Eco-Park reach 2 per acre. No tortoises will be relocated into the 421 FLUCCS category within the Eco-Park. As construction progresses and if the tortoise density within those FLUCCS categories approaches 2 per acre, temporary holding areas may be constructed outside the Eco-Park to accommodate temporarily displaced tortoises. If necessary, tortoises inside these pens will be provided with supplemental food. Tortoises will not be kept in pens longer than 365 days. The location of holding areas will be outside the Eco-Park area in appropriate habitat south of Coconut Road. Containment fencing will be deployed around the containment area as necessary to contain tortoises. Containment fencing will be wire fence extending at least 2 feet above ground, angled inward, staked tightly to discourage scaling by tortoises and buried a minimum of 1 foot below ground.

Prior to construction-related clearing operations, a qualified biologist with gopher tortoise relocation experience will supervise removal of gopher tortoises from the clearing envelope outside the Eco Park and from within a surrounding distance of 200 feet. Removal will be accomplished by excavation and/or bucket trapping. All tortoises removed will be examined for evidence of respiratory disease, and any exhibiting symptoms will be isolated pending instructions from FGFWFC staff.

All non-diseased tortoises will be placed in either the Habitat Protection Area or in the containment areas as described previously. Care will be taken not to overburden the receiving habitat. Previously relocated tortoises will then be distributed around the golf course fringes (rough) when construction is complete.

## SUPPLEMENTAL DISCUSSION - PRESCRIBED BURNING

Fire plays a major role in native communities such as xeric oak and pineland habitats. In the absence of fire, the xeric oak scrub vegetation continually increases in height and cover, eventually eliminating all open spaces, causing a decrease in wildlife species dependent on scrub. Burning stimulates an increase in the quantity and quality of many herbaceous plants that are important wildlife foods and creates openings in the canopy that will allow sunlight to penetrate to the ground.

The natural succession in pinelands is toward hardwood species. Fire is the dominant controlling agent of succession and has historically kept pinelands in a sub-climax successional stage which is relatively stable.

Controlled burns are conducted in pineland and rangeland by forest and land managers to prevent the buildup of ground fuel, which reduces the chance of catastrophic wildfires, and to release the nutrients bound in the organic material. Fire controls the hardwoods, allowing for regeneration of the pineland communities. Fire also controls saw palmetto, opening the canopy and allowing an increase in herbaceous

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species. Saw palmetto, particularly, can cover scrub and brushland habitats to the exclusion of other species if not controlled.

Historically, summer fires initiated by lightning strikes during thunderstorms were more common than winter fires. It should be noted, however, that summer fires tend to kill many more deciduous shrubs and small trees than winter fires. For this reason, winter burning is perhaps more consistent with habitat management objectives.

Prescribed burning, if deemed feasible, will be effected prior to start of construction on any specific development phase. Any burning will be conducted by an experienced control-burn contractor, as described on page 7 under management of pine flatwoods and xeric scrub habitat. The burn plan will adhere to applicable regulatory guidelines and will be coordinated with the appropriate Fire District and the State of Florida Division of Forestry.

**Table 1 - Existing Vegetation Communities**

Habitat - FLUCCS	Acres	Percentage of Total Suitable Tortoise Habitat	Percentage Total Project Site Acreage
Fallow Crop Land - 261	36.03	0	3.2
Palmetto Prairies - 321	142.17	21	12.7
Pine Flatwood - 411	219.56	32	19.6
Pine Flatwood/Palmetto Prairies - 411/321	126.55	19	11.3
Pine Flatwood/Brazilian Pepper - 411/422	10.89	0	1.0
Pine Flatwood/Western Everglades Hardwoods/Brazilian Pepper - 411/433/422	5.96	0	0.8
Pine Flatwood, Slash Pine, Saw Palmetto, Scattered Scrub Oak - 4111	7.08	1	0.6
Mesic Oak Stands with Dense High Saw Palmetto - 4201	2.01	0	0.2
Xeric Oak - 421	127.40	19	11.4
Xeric Oak with High Dense Shrubs - 4211	46.4	7	4.1
Brazilian Pepper - 422	7.66	0	0.7
Oak-Pine-Hickory/Pine Flatwood - 423/411	1.39	0	0.1
Melaleuca - 424	23.12	0	2.1
Melaleuca/Palmetto Prairies - 424/321	6.12	1	0.5
Western Everglades Hardwood - 433	24.27	0	2.2
Western Everglades Hardwood/Pine Flatwood/Brazilian Pepper - 433/411/422	7.02	0	0.6
Western Everglades Hardwood/Brazilian Pepper - 433/422	6.88	0	0.6
Mangrove Swamps - 612	164.04	0	14.7
Mangrove Swamps/Saltwater Marshes - 612/642	3.66	0	0.3
Inland Ponds and Sloughs - 616	2.94	0	0.3
Mixed Wetland Hardwoods - 617	25.3	0	2.3

(Table 1 cont.)

Habitat - FLUCCS	Acres	Percentage of Total Suitable Tortoise Habitat	Percentage Total Project Site Acreage
Cypress - 621	10.21	0	0.9
Cypress/Wetland Forest Mixed - 621/630	40.25	0	3.6
Wetland Forest Mixed - 630	1.85	0	0.1
Sawgrass - 6411	9.93	0	0.9
Sawgrass/Brazilian Pepper - 6411/422	6.67	0	0.6
Saltwater Marshes - 642	7.25	0	0.6
Wet Prairies - 643	37.16	0	3.3
Disturbed Lands - 740	9.34	1	0.8
<b>TOTAL ACRES</b>	<b>1119.1</b>		

WILSON • MILLER • BARTON & PEEK, INC.

**NOTE: Acreages are according to undeveloped portions of Pelican Landing (December 1993).**

TABLE 2a - Gopher Tortoise Populations Based on Field Surveys

Habitat FLUCCS	Acres in Project	Acreage Surveyed	Percentage Habitat Surveyed	Observed Population*	Tortoise Density Per Acre	Projected Tortoise Population**
421(N)	62	18.1	29	9.8	0.54	33
421(S)	65	32.0	49	30.7	0.96	62
4211	46	9.1	20	4.9	0.54	25
321	142	33.9	24	9.2	0.27	38
411/321	127	26.1	21	17.8	0.68	86
411	219.6	58.2	27	7.5	0.13	28
4111	7	0.4	6	0.0	0.0	0
424/321	6	1.7	28	0.0	0.0	0
740(U)	6	2.3	38	1.2	0.53	3
<b>TOTALS</b>	<b>680.6</b>	<b>181.8</b>				<b>275</b>

(N) Denotes habitat north of Coconut Road.

(S) Denotes habitat south of Coconut Road.

(U) Denotes upland disturbed areas. These consist primarily of man-made berms.

\* = Active + inactive burrows observed x 0.614

\*\* = Observed population ÷ percent habitat surveyed

TABLE 2b - Habitat Protection/Preservation Areas

Habitat FLUCCS	Acres in Project	Tortoise Density Per Acre	Habitat Projection Factor	Potential Habitat Protection Acreage	Acres of Habitat Preserved	Percentage of Habitat Preserved
421(N)	62	0.54	15%	9.3	58	94
421(S)	65	0.96	25%	16.3	0	0
4211	46	0.54	15%	6.9	7	15
321	142	0.27	10%	14.2	0	0
411/321	127	0.68	15%	19.1	13	6
411	219.6	.13	5%	11.0	0	0
4111	7	0.0	0%	0.0	0	0
424/321	6	0.0	0%	0.0	0	0
740(U)	6	0.53	15%	1.0	0	0
<b>TOTALS</b>	680			77.8	78	

(N) Denotes habitat north of Coconut Road.

(S) Denotes habitat south of Coconut Road.

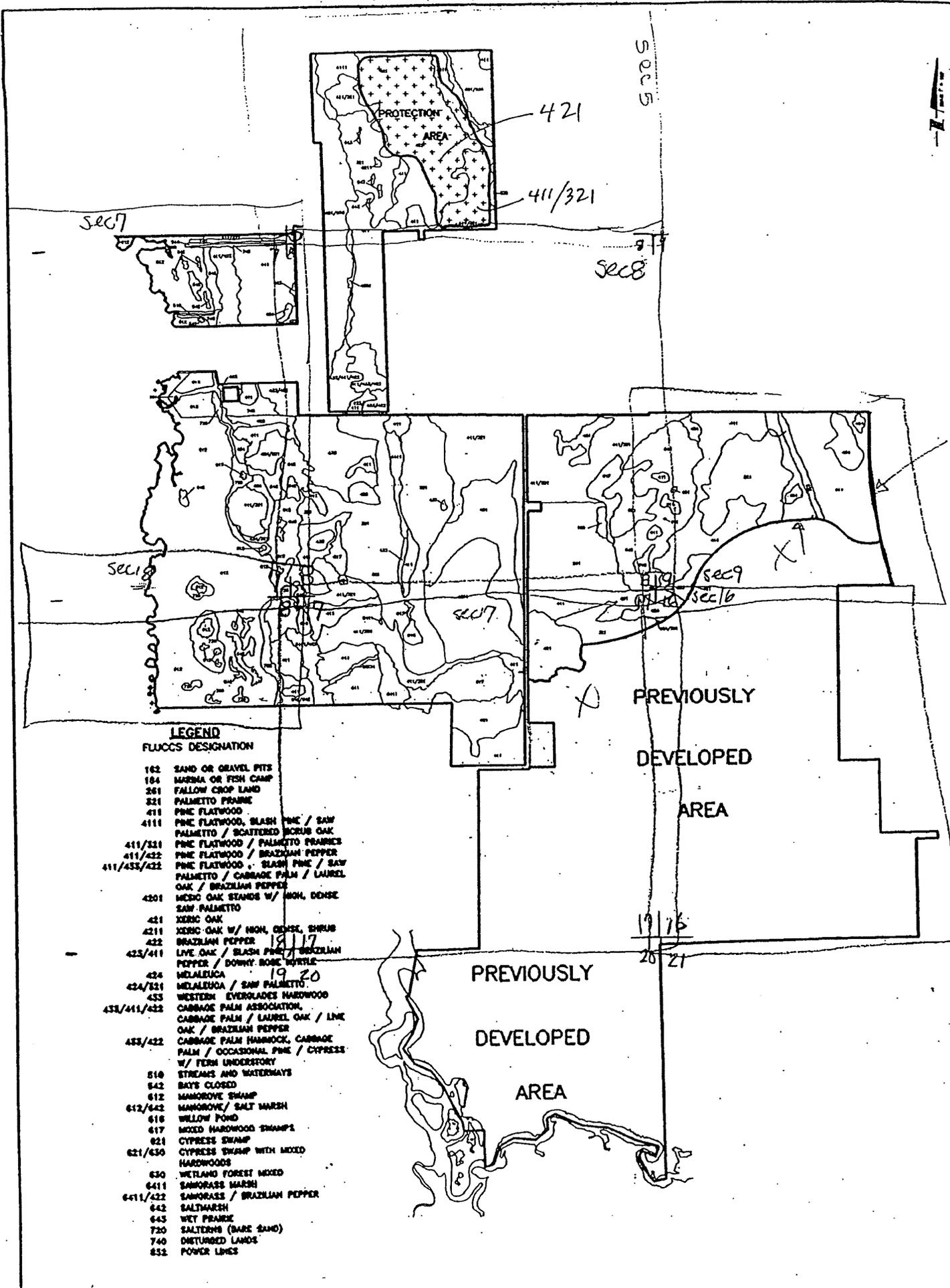
(U) Denotes upland disturbed areas. These consist primarily of man-made berms.

Table 3 - Existing On-Site Tortoise Population - Adjusted Multiplier = 0.614\*

FLUCCS Category	Acres**	Projected Burrows (A + I)	Estimate for Tortoise Population
Xeric Oak - 421(N)	62.0	55	33
Xeric Oak - 421 (S)	65.0	102	62
Xeric Oak w/ Dense Shrubs - 4211	46.0	40	25
Palmetto Prairie - 321	142.0	63	38
Pine Flatwood - 411/321	127.0	138	86
Mesic Pine Flatwood - 411	219.6	45	28
Pine Flatwood w/ Scrub Oak - 4111	7.0	0	0
Melaleuca over Palmetto - 424/321	6.0	0	0
Disturbed Land - 740(U)	6.0	5	3
<b>TOTAL</b>	<b>680.6</b>	<b>448</b>	<b>275</b>

\* Detailed studies of tortoise populations in the region have shown that burrow occupancy multipliers are typically much lower than 0.614.

\*\* Based on current undeveloped acreages, December 1993.



sec 7

SACS



421

411/321

sec 8



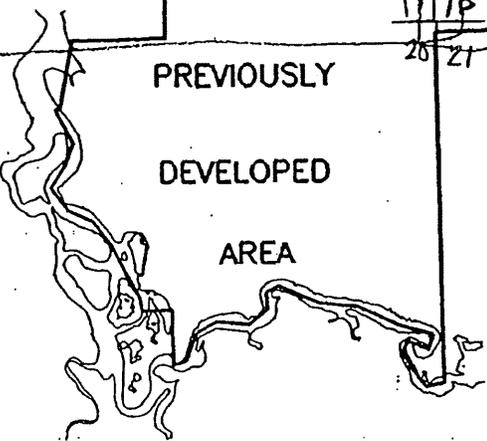
**LEGEND**  
FUXCCS DESIGNATION

- 102 SAND OR GRAVEL PIT
- 104 MARINA OR FISH CAMP
- 201 FALLOW CROP LAND
- 321 PALMETTO FRINGE
- 411 PINE FLATWOOD
- 4111 PINE FLATWOOD, SLASH PINE / SAW PALMETTO / SCATTERED MORUS OAK
- 411/321 PINE FLATWOOD / PALMETTO FRINGE
- 411/422 PINE FLATWOOD / BRAZILIAN PEPPER
- 411/433/422 PINE FLATWOOD / SLASH PINE / SAW PALMETTO / CABBAGE PALM / LAUREL OAK / BRAZILIAN PEPPER
- 4201 MEDIC OAK STANDS W/ HIGH, DENSE SAW PALMETTO
- 421 XERIC OAK
- 4211 XERIC OAK W/ HIGH, DENSE SHRUB
- 422 BRAZILIAN PEPPER
- 423/411 LIVE OAK / SLASH PINE / BRAZILIAN PEPPER / DOWNY BOBE MYRTLE
- 424 MELALEUCA
- 424/321 MELALEUCA / SAW PALMETTO
- 433 WESTERN EVERGLADES HARDWOOD CABBAGE PALM ASSOCIATION, CABBAGE PALM / LAUREL OAK / LIVE OAK / BRAZILIAN PEPPER
- 433/422 CABBAGE PALM HAMMOCK, CABBAGE PALM / OCCASIONAL PINE / CYPRESS W/ FERN UNDERSTORY
- 510 STREAMS AND WATERWAYS
- 542 BAYS CLOSED
- 612 MANGROVE SWAMP
- 612/642 MANGROVE / SALT MARSH
- 616 WELLOW POND
- 617 MIXED HARDWOOD SWAMP
- 621 CYPRESS SWAMP
- 621/630 CYPRESS SWAMP WITH MIXED HARDWOODS
- 630 WETLAND FOREST MIXED
- 6411 SAMPAGNE MARCH
- 6411/422 SAMPAGNE / BRAZILIAN PEPPER
- 642 SALT MARCH
- 643 WET PRAIRIE
- 720 SALTERN (BARE SAND)
- 740 DISTURBED LANDS
- 832 POWER LINES

PREVIOUSLY  
DEVELOPED  
AREA

PREVIOUSLY  
DEVELOPED  
AREA

19/16  
20/21



Proposed Reconfiguration of  
Pelican Landing DRI Eco-Park

**APPENDIX B**

**Existing Conservation Easement for Pelican Landing DRI Eco-Park**



WCI COMMUNITIES  
LIMITED PARTNERSHIP

801 Laurel Oak Drive, Suite 500  
Naples, Florida 33963-2797  
(941) 598-9000, Fax: (941) 597-9400

October 27, 1995

Mr. Brian S. Barnett, Assistant Director  
Office of Environmental Services  
Florida Game and Fresh Water Fish Commission  
620 South Meridian Street  
Tallahassee, FL 32399-1600

RE: Final Conservation Easement, Mitigation for  
Gopher Tortoise Incidental Take Permit LEE-9  
(Pelican Landing)

Dear Mr. Barnett .

In accordance with your letter of September 26, 1995 to Vivien Hastings, enclosed please find the original recorded Grant of Conservation Easement regarding the above-referenced matter. Please feel free to contact us should you have questions or if we can be of further assistance.

Sincerely yours,

**COPY**

Robin Martin, CLA  
Legal Assistant

RM:ilmisc

cc: Vivien Hastings (w/enc.) ✓  
Susan Watts (w/enc.)  
Terrey Dolan (w/enc.)

This instrument prepared by  
and please return to:

Vivien N. Hastings  
901 Laurel Oak Drive  
Suite 500  
Naples, Florida 33963

3854202

70

### GRANT OF CONSERVATION EASEMENT

THIS GRANT OF CONSERVATION EASEMENT is made this 21st day of September, 1995, by WCI COMMUNITIES LIMITED PARTNERSHIP, a Delaware limited partnership, successor to WCN Communities, Inc. (f/k/a Westinghouse Communities of Naples, Inc.), whose address is: c/o 24820 Burnt Pine Drive, Bonita Springs, Florida 33923 ("Grantor"), in favor of the FLORIDA GAME AND FRESH WATER FISH COMMISSION, a Commission created by Section 9, Article IV of the Constitution of the State of Florida, whose address is: Farris Bryant Building, 620 South Meridian Street, Tallahassee, Florida 32399-1600 ("Grantee").

#### R E C I T A L S :

A. The Grantor is the Owner of certain lands situated in Lee County, hereinafter referred to as the "Property", more specifically described in Exhibit "A" (legal descriptions and sketches) attached hereto and incorporated herein by this reference; and

B. This Conservation Easement is being granted by Grantor to Grantee pursuant to the terms of the Pelican Landing Master DRI Gopher Tortoise Incidental Take Permit-Lee - 9 \_\_\_\_\_, issued to Grantor by GRANTEE on August 29, 1995, which permit includes the Gopher Tortoise Population Study and Habitat Management Plan for Pelican Landing DRI, including the Elks Club and the Wysock Parcel (the "Plan"). (such permit and the Plan as they may be amended or modified from time to time are hereinafter collectively called "Permit"); and

C. The purpose of this Conservation Easement is to protect and conserve wildlife by establishing a Gopher Tortoise Preserve upon the Property by way of this Conservation Easement and to manage the Property in conformance with the terms of the Permit; and

D. The Grantee has approved the establishment of the Conservation Easement pursuant to the Permit and the Development Order approving a Development of Regional Impact known as Pelican Landing DRI, State DRI No. 1-9293-121, the Notice of Adoption which is recorded in Official Record Book 2545, Page 1082, of the Public Records of Lee County, Florida.

NOW, THEREFORE, consistent with the facts set forth above, and as consideration of the consent by Grantee to the issuance of the Permit, Grantor hereby grants, creates and establishes a non-exclusive, perpetual Conservation Easement upon the Property described in Exhibit "A", which shall be subject to the terms and conditions set forth below and which shall run with the land and be binding upon the Grantor, Grantee, their successors and assigns, (including, without limitation, any subsequent purchases of the Property or any portion thereof), and shall remain in full force and effect forever.

1. The scope, nature and character of the Conservation Easement is to provide protection for Gopher Tortoises and shall be used as a conservation area pursuant to Section 704.06, Florida Statutes, and consistent with the Permit and the Plan, a copy of which Permit, including the Plan, is attached hereto as Exhibit "B" and incorporated herein by reference. To carry out this purpose, the following rights are conveyed to Grantee by this Conservation Easement:

(a) To enter upon the Property at reasonable times to observe and inspect the Property and to enforce the rights herein granted upon prior notice to Grantor, its heirs, successors and assigns, in a manner that will not unreasonably interfere with the use and quiet enjoyment of the Property (and/or adjacent lands owned by Grantor) by Grantor, its heirs, successors and assigns at the time of such entry; and

(b) To enforce, by any proceeding in law or equity, any and all terms of this Conservation Easement, including the right to enjoin any activity on or use the Property that is inconsistent with the purpose of this Conservation Easement and to enforce the restoration of such areas or features of the Property that may be damaged by any inconsistent activity or use.

2. Grantor reserves to itself, its heirs, successors and assigns, all rights as Owner of the Property, including the right to engage in all uses of the Property that are not expressly prohibited herein and are not inconsistent with the purpose of this Conservation Easement as set forth in Section 704.06, Florida Statutes and the right to implement all the terms and provisions of the Permit, including the right to install, construct and maintain nature trails upon the Property in accordance with the Permit. The following are prohibited activities unless otherwise specifically provided in the Permit or consented to in writing by Grantee:

(a) Construction or placing of buildings, roads, billboards or other advertising except as required for the construction and maintenance of nature trails, as provided in the Permit;

(b) Dumping or placing of soil or other substance or material as landfill or dumping or placing of trash, waste, or unsightly or offensive materials; except as required for the construction and maintenance of nature trails as provided in the Permit.

(c) Removal or destruction of native trees, shrubs, or other vegetation (except for trimming or removal of dead or diseased trees or removal of exotic nuisance vegetation as may be approved by the appropriate state, federal and/or local regulatory agencies), except as authorized by the Permit;

(d) Excavation, dredging, or removal of loam, peat, gravel, soil, rock or other material substance in such a manner as to affect the surface;

(e) Surface use except for purposes that permit the land or water area to remain predominately in its natural condition;

(f) Activities detrimental to drainage, flood control, water conservation, erosion control, soil conservation or fish and wildlife habitat preservation;

(g) Acts or uses detrimental to such retention of land or water areas.

3. No right access by the general public to any portion of the Property is conveyed by this Conservation Easement.

4. Grantor agrees for itself and its successors and assigns, to maintain and repair the Property and agrees to bear all costs related to the operation, upkeep and maintenance of the Property. Notwithstanding the foregoing, Grantor shall have the right, at any time, to assign to the Bayside Improvement Community Development District, a community development district established pursuant to Chapter 190, Florida Statutes, whose address is 10300 N.W. 11th Manor, Coral Springs, Florida 33071 (the "Bayside District"), any or all of its maintenance, upkeep and repair obligations and duties under this Conservation Easement, such assignment and acceptance to be evidenced by an instrument recorded in the Public Records of Lee County, Florida. Upon recording of this instrument, the Bayside District shall automatically assume full responsibility for all of such assigned duties and obligations described herein and Grantor shall have no further obligations with respect thereto. Grantee shall have no maintenance, upkeep or repair responsibilities with respect to this Conservation Easement.

5. Grantor, its successors and assigns, agree to pay any and all real property taxes and assessments levied by competent authority on the Property.

6. Grantee will use care while present on the Property and shall in no way interfere with the right of ingress or egress of Grantor, its successors and assigns, or any other party requiring access to any of the Property over which said Conservation Easement is granted.

7. In the event it becomes necessary for Grantor or Grantee to enforce, judicially or otherwise, the terms and restrictions of this Conservation Easement, including without limitation, costs of suit, attorney's fees, and any cost of restoration necessitated by the

violation of the terms of this Conservation Easement, then the prevailing party shall be entitled to reimbursement of all such costs.

8. Any forbearance on the behalf of Grantor or Grantee to exercise their rights hereunder in the event any breach hereof shall not be deemed or construed to be a waiver of such party's rights hereunder in the event of a subsequent breach.

9. Grantee, or its assigns, agrees (i) that they will hold this Conservation Easement exclusively for conservation purposes, and (ii) that they will not assign their rights and obligations under this Conservation Easement except to another organization which is qualified to hold such interest under applicable state law and who agrees to hold this Conservation Easement exclusively for conservation purposes and subject to strict compliance with the terms hereof, and (iii) that no such assignment will be made without the Grantor's written consent.

10. Grantor agrees that the terms, conditions, restrictions and purposes of this grant will be inserted by it in any subsequent deed or legal instrument by which Grantor divests itself of any interest in the Property.

11. If any provision of the Conservation Easement or the application thereof to any person or circumstance is found to be invalid, the remainder of the provisions of this Conservation Easement, and the applications of such provision to persons or circumstances other than those as to which it is found to be invalid, shall not be affected thereby.

12. All notices, consents, approvals, or other communication hereunder shall be in writing and shall be deemed properly given if sent by United States certified mail, return receipt requested, addressed to the appropriate party or successor-in-interest, at the addresses above set forth or such new addresses as either party may in writing deliver to the other.

13. This Conservation Easement may be amended, altered, released, or revoked only by written agreement between Grantor, the Grantee, their successors or assigns, which shall be filed in the Public Records of Lee County, Florida.

TO HAVE AND TO HOLD unto Grantee, its successors-in-interest and assigns, forever. The covenants, terms, conditions, restrictions and purposes imposed with this easement shall not only be binding upon Grantor but also its agents, personal representatives, heirs, assigns and all other successors to it in interest, and shall continue as a servitude running in perpetuity with the Property.

IN WITNESS WHEREOF, Grantor has set its hand on the day and year first above written.

Signed, Sealed and Delivered  
in our presence as witnesses:

Robin Martin  
Print: Robin Martin

Peter Durabitt  
Print: PETER DURABITT

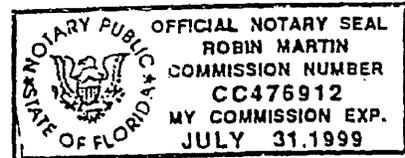
WCI COMMUNITIES LIMITED PARTNERSHIP,  
a Delaware limited partnership  
(f/k/a WCN Communities, Inc.)

By: Jerry H. Schmoyer  
Senior Vice President

STATE OF FLORIDA  
COUNTY OF Lee

The foregoing instrument was acknowledged before me this 21st day  
of September, 1995, by Jerry H. Schmoyer, as Senior Vice  
President of WCI Communities Limited Partnership, a Delaware limited  
partnership (f/k/a WCN Communities, Inc.). He is personally known to me  
and did not take an oath.

Robin Martin  
Notary Public  
Print: Robin Martin  
Commission No.: \_\_\_\_\_  
My Commission Expires: \_\_\_\_\_



GRANTEE ACCEPTANCE

The FLORIDA GAME AND FRESH WATER FISH COMMISSION hereby approves the foregoing Grant of Conservation Easement and agreed to all of the terms and provisions thereof.

FLORIDA GAME AND FRESH WATER  
FISH COMMISSION

Witness:

Bonnie S. Helcomb  
Print: Bonnie S. Helcomb  
Barbara Lewis  
Print: Barbara Lewis

By: William C. Sumner  
Its: ASSISTANT EXECUTIVE DIRECTOR

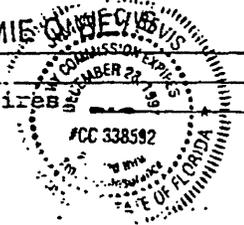
\_\_\_\_\_, Secretary

APPROVED AS TO FORM  
AND LEGAL SUFFICIENCY  
J. M. [Signature]  
Commission Attorney

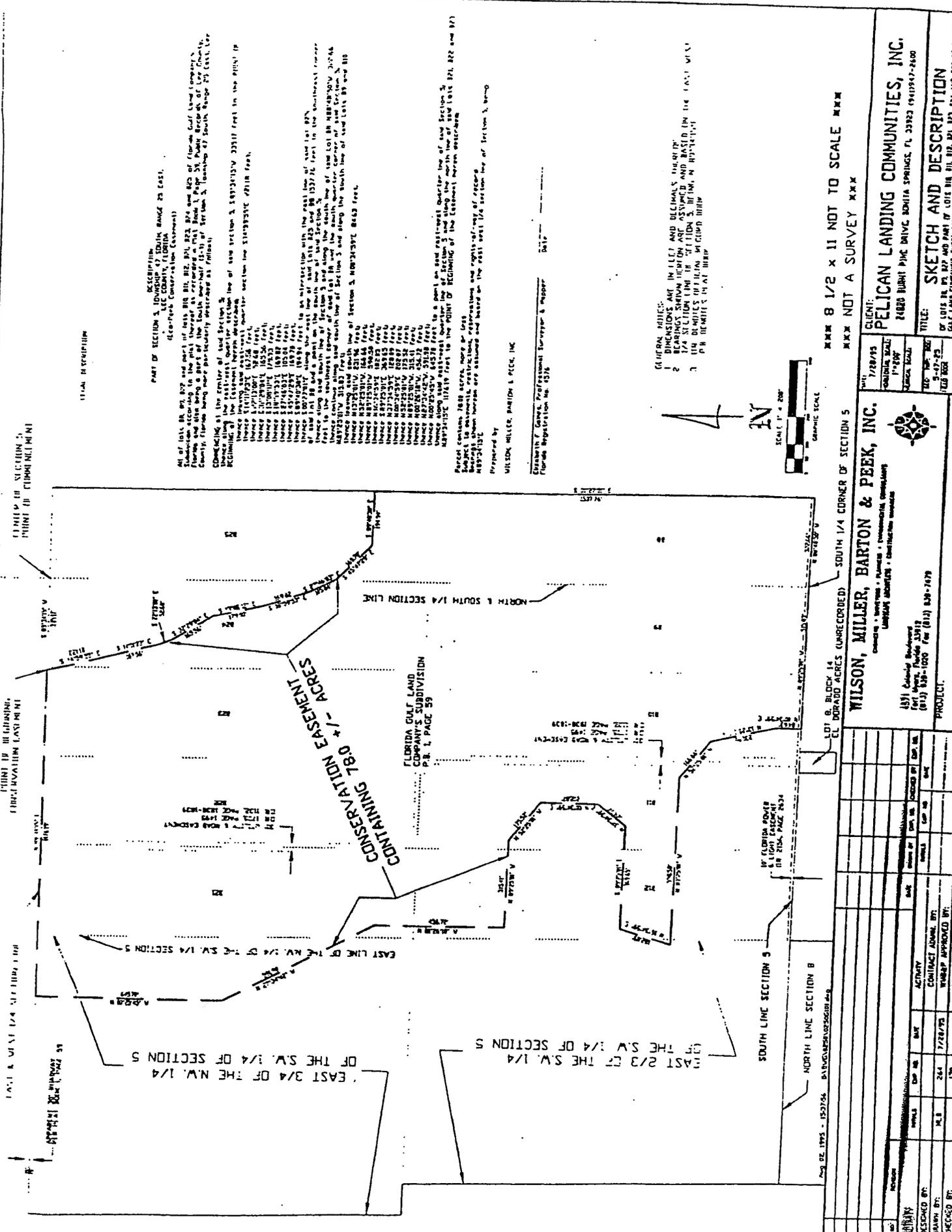
STATE OF FLORIDA  
COUNTY OF Leon

The foregoing instrument was acknowledged before me this 22<sup>nd</sup> day of September, 1995, by William C. Sumner and [Signature], as Asst. Executive Director and Secretary, respectively, of Florida Game and Fresh Water Fish Commission. They are personally known to me and did not take an oath.

Jimmie C. Bowie  
Notary Public  
Print: JIMMIE C. BOWIE  
Commission No.: \_\_\_\_\_  
My Commission Expires \_\_\_\_\_



i:\wcn\consease.doc



GENERAL NOTES:

1. DIMENSIONS ARE IN FEET AND DECIMALS THEREOF.
2. BEARINGS SHOWN IN THIS PLAT ARE ASSUMED TO BE TRUE.
3. ALL DISTANCES SHOWN IN THIS PLAT ARE ASSUMED TO BE TRUE.

PREPARED BY:  
WILSON MILLER, BARTON & PEEK, INC.

DATE: 10/15/75

PROJECT: PELICAN LANDING COMMUNITIES, INC.

CLIENT: PELICAN LANDING COMMUNITIES, INC.

24800 BURNT PINE DRIVE, BOHITA SPRINGS, FL 32922 (941) 967-4600

TOWNSHIP 47 SOUTH, RANGE 14 WEST, COUNTY 11 WEST, FLORIDA

SECTION 5, T. 47S., R. 14W., S. 11W., FLORIDA

PLAT A

SCALE: 1" = 200'

GRAPHIC SCALE

SECTION 5

SECTION B

SECTION 1/4

FLORIDA GULF LAND COMPANY'S SUBDIVISION P.B. 1, PAGE 59

CONSERVATION EASEMENT CONTAINING 780 +/- ACRES

EAST 3/4 OF THE S.W. 1/4 OF SECTION 5

EAST 2/3 OF THE S.W. 1/4 OF SECTION 5

EAST 1/3 OF THE S.W. 1/4 OF SECTION 5

SOUTH LINE SECTION 5

NORTH LINE SECTION B

SECTION 5

SECTION B

SECTION 1/4

SECTION 5

FLORIDA GULF LAND COMPANY'S SUBDIVISION P.B. 1, PAGE 59

CONSERVATION EASEMENT CONTAINING 780 +/- ACRES

EAST 3/4 OF THE S.W. 1/4 OF SECTION 5

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EAST 1/3 OF THE S.W. 1/4 OF SECTION 5

SOUTH LINE SECTION 5

NORTH LINE SECTION B

SECTION 5

SECTION B

SECTION 1/4

SECTION 5

FLORIDA GULF LAND COMPANY'S SUBDIVISION P.B. 1, PAGE 59

CONSERVATION EASEMENT CONTAINING 780 +/- ACRES

EAST 3/4 OF THE S.W. 1/4 OF SECTION 5

EAST 2/3 OF THE S.W. 1/4 OF SECTION 5

EAST 1/3 OF THE S.W. 1/4 OF SECTION 5

SOUTH LINE SECTION 5

NORTH LINE SECTION B

SECTION 5

SECTION B

SECTION 1/4

SECTION 5

FLORIDA GULF LAND COMPANY'S SUBDIVISION P.B. 1, PAGE 59

CONSERVATION EASEMENT CONTAINING 780 +/- ACRES

EAST 3/4 OF THE S.W. 1/4 OF SECTION 5

EAST 2/3 OF THE S.W. 1/4 OF SECTION 5

EAST 1/3 OF THE S.W. 1/4 OF SECTION 5

SOUTH LINE SECTION 5

NORTH LINE SECTION B

SECTION 5

SECTION B

SECTION 1/4

SECTION 5



FLORIDA GAME AND FRESH WATER FISH COMMISSION

JULIE K. MORRIS  
Sarasota

QUINTON L. HEDGEPETH, DDS  
Miami

MRS. GILBERT W. HUMPHREY  
Micosukee

THOMAS B. KIRI  
Lakeland

ALLAN L. EGBERT, Ph.D., Executive Director  
WILLIAM C. SUMNER, Assistant Executive Director

OFFICE OF ENVIRONMENTAL SERVICES  
BRADLEY J. HARTMAN, Director  
FARRIS BRYANT BUILDING  
620 South Meridian Street  
Tallahassee, FL 32399-16  
(904) 488-66  
SUNCOM 278-66  
FAX (904) 922-56  
TDD (904) 488-95

August 29, 1995

Mr. Terrence S. Dolan  
Westinghouse Bayside Communities, Inc.  
24820 Burnt Pine Drive  
Bonita Springs, FL 33923

Re: Gopher Tortoise Incidental Take  
Permit #LEE-9, Lee County

Dear Mr. Dolan:

Enclosed is permit LEE-9 for the incidental taking of gopher tortoises, their eggs and their burrows within the development boundaries specified. The application for this permit was complete as of August 28, 1995.

Please contact Ms. Kim Dryden at (941) 639-3515 if you have any questions regarding this permit.

Sincerely,

*Bradley J. Hartman, for*

Bradley J. Hartman, Director  
Office of Environmental Services

BJH/tgw  
ENV 3-2/5  
Enclosure  
gtpermit.ltr

cc: Lee County Planning Department  
Mr. Mike Kemmerer, South Region, GFC  
Major Buckhalter, South Region, GFC  
Ms. Kim Dryden, OES, GFC  
Mr. Tim Durham, Wilson, Miller, Barton & Peek  
Mr. Don Wood, Division of Wildlife, GFC

0044 E0134

95 OCT 18 PM 11:20

**APPENDIX C**

**Photographs of Xeric Oak Scrub Habitat to be Retained in Existing Eco-Park**



Exhibit C-1. Representative nature of xeric oak habitat (FLUCCS #421) to be retained in existing Eco-Park.



Exhibit C-2. Representative nature of xeric oak habitat (FLUCCS #421) to be retained in existing Eco-Park.



Exhibit C-3    Representative nature of xeric oak habitat with dense shrub layer (FLUCCS #4211) to be retained in existing Eco-Park.

**APPENDIX D**

**Photographs of Xeric Oak and Pine Flatwoods/Palmetto Prairie Habitat  
of the Proposed Deletion Parcel**

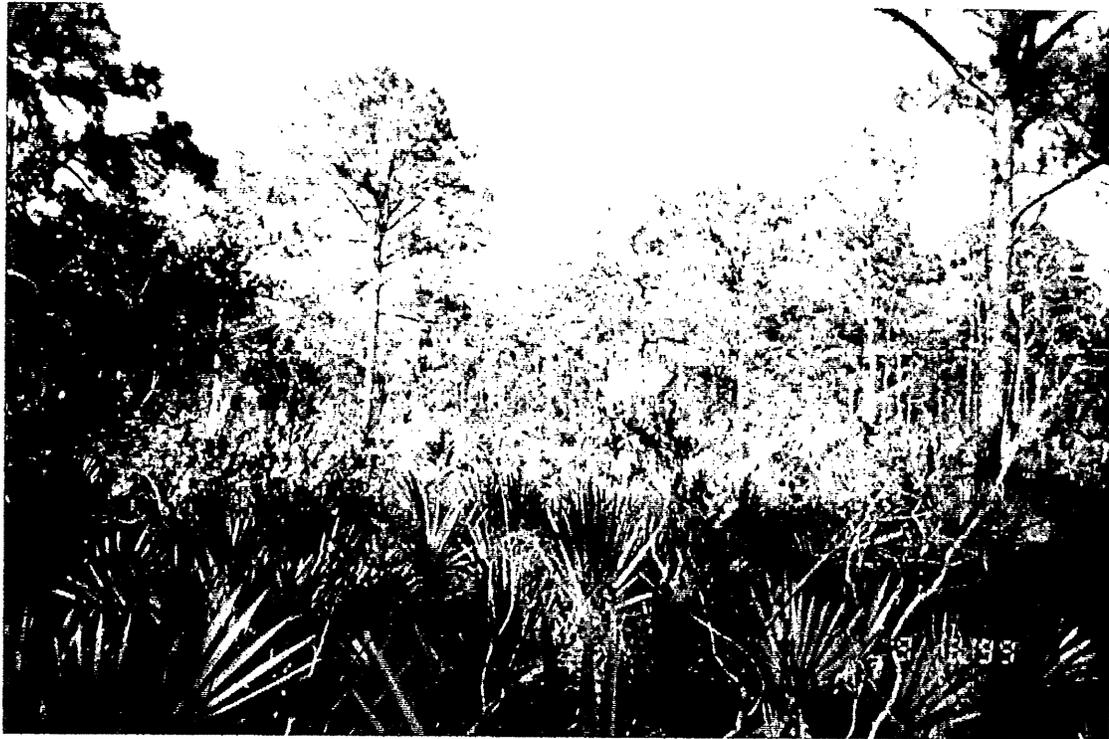


Exhibit D-1. Representative nature of xeric oak habitat (FLUCCS #421) of the parcel proposed to be deleted from the Eco-Park.



Exhibit D-2. Representative nature of xeric oak habitat (FLUCCS #421) of the parcel proposed to be deleted from the Eco-Park.



Exhibit D-3 Representative nature of pine flatwoods/palmetto prairie habitat (FLUCCS #411/321) of the parcel proposed to be deleted from the Eco-Park.



Exhibit D-4. Representative nature of pine flatwoods/palmetto prairie habitat (FLUCCS #411/321) of the parcel proposed to be deleted from the Eco-Park.

**APPENDIX E**

**Photographs of Selected Habitats of the Proposed Addition Parcel**



Exhibit E-1. Representative nature of xeric oak (FLUCCS #421) habitat in areas proposed to be added to the Eco-Park (Skebe tract).



Exhibit E-2. Representative nature of pine flatwoods (FLUCCS #411E1) habitat in areas proposed to be added to the Eco-Park (Skebe tract).



Exhibit E-3. Representative nature of pine flatwoods (FLUCCS #411E2) habitat in areas proposed to be added to the Eco-Park (Skebe tract).



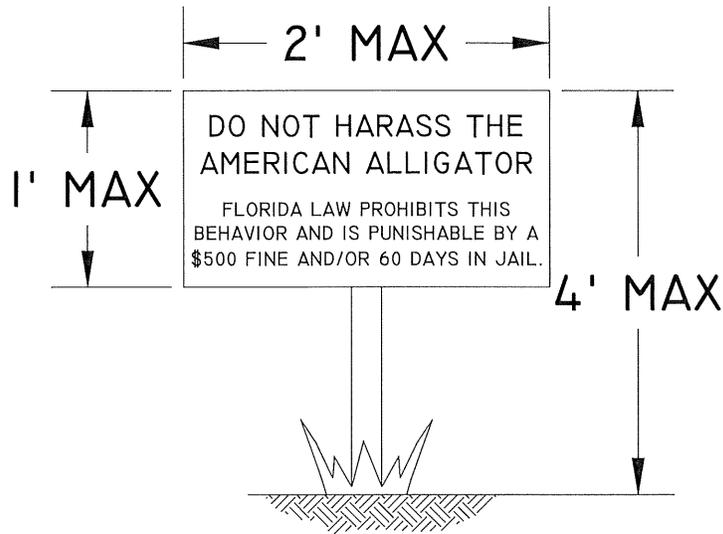
Exhibit E-4. Representative nature of cypress habitat (FLUCCS #621) of Halfway Creek in areas proposed to be added to the Eco-Park.



Exhibit E-5. Representative nature of main channel of Halfway Creek in areas proposed to be added to the Eco-Park (Skebe tract).

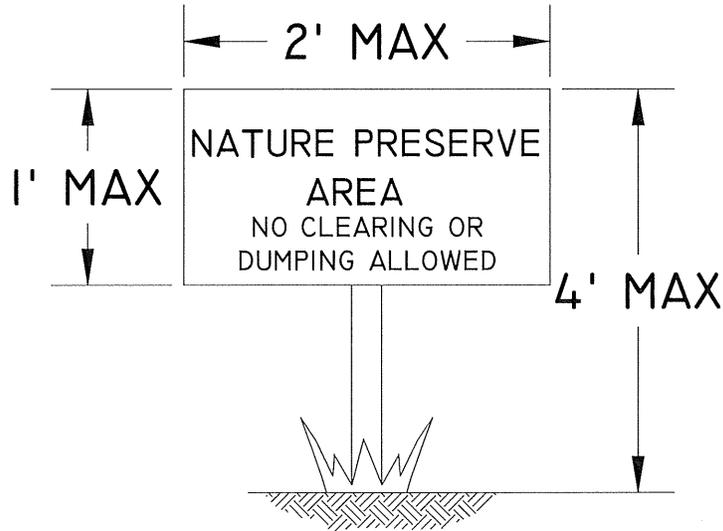
**APPENDIX E**

**AMERICAN ALLIGATOR MANAGEMENT AND PRESERVE SIGNAGE**



TYPICAL AMERICAN  
ALLIGATOR SIGNAGE

N.T.S.



TYPICAL  
PRESERVE SIGNAGE

N.T.S.

J:\2020\2018R2501\2021\INDIG PRESERVE AND PROTECTED SPECIES MGMT PLAN\APPENDIX E ALLIGATOR AND PRESERVE SIGNAGE.DWG TAE BX114 MAR 22, 2022 - 8:04AM PLOTTED BY: PAULF

DRAWN BY	DATE
R.F.	09/27/21
REVIEWED BY	DATE
S.J.	09/27/21
REVISED	DATE



**APPENDIX F**

**AMERICAN ALLIGATOR INFORMATIONAL PAMPHLET**

- Never feed alligators – it's dangerous and illegal. When fed, alligators can overcome their natural wariness and learn to associate people with food. When this happens, some of these alligators have to be removed and killed.
- Dispose of fish scraps in garbage cans at boat ramps and fish camps. Do not throw them into the water. Although you are not intentionally feeding alligators when you do this, the result can be the same.
- Seek immediate medical attention if you are bitten by an alligator. Alligator bites can result in serious infections.
- Observe and photograph alligators only from a distance. Remember, they're an important part of Florida's natural history as well as an integral component of aquatic ecosystems.



Tim Donovan

Call 866-FWC-GATOR (392-4286) to report nuisance alligators.



Janice Plain

Call 866-FWC-GATOR (392-4286) to report nuisance alligators.

**Regional offices**  
Northwest Region, Panama City  
850-265-3676

North Central Region, Lake City  
386-758-0525

Northeast Region, Ocala  
352-732-1225

Southwest Region, Lakeland  
863-648-3200

South Region, West Palm Beach  
561-625-5122

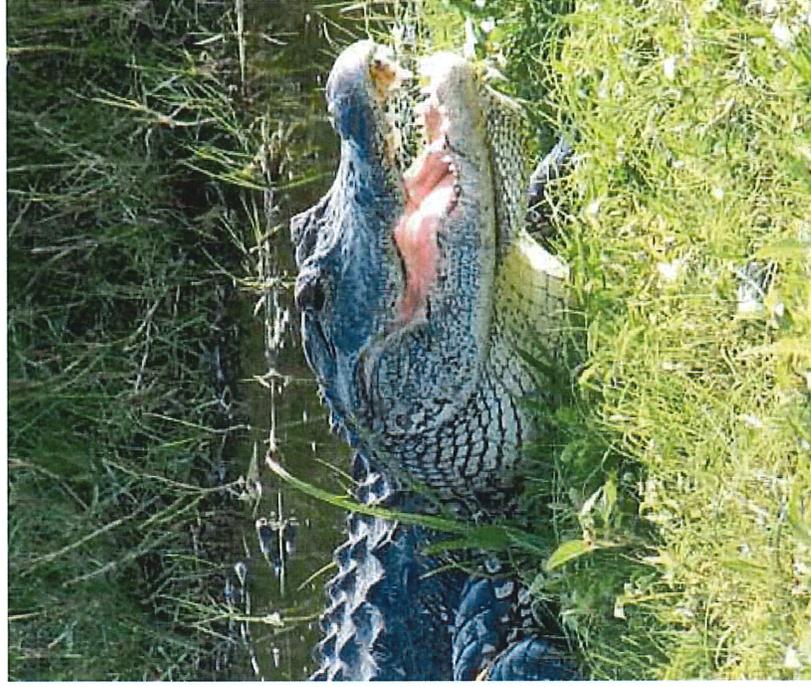


The FWC prohibits discrimination by race, color, nationality, age, sex or handicap. If you believe you have been discriminated against in any program, activity or facility of this agency, write to: Florida Fish and Wildlife Conservation Commission, 620 South Meridian Street, Tallahassee, FL 32399-1600; or to: Office of Human Relations, USFWS, Department of Interior, Washington, D.C. 20240.

printed on recycled paper

50K 07/10

# A guide to living with Alligators



Jamie Feddersen



Florida Fish and Wildlife Conservation Commission

MyFWC.com



Lizabeth West

Do not swim outside of posted swimming areas or in waters that may be inhabited by alligators.

### Living with alligators

In Florida, the growing number of people living and recreating near water has led to a steady rise in the number of alligator-related complaints. The majority of these complaints relate to alligators being where they simply aren't wanted. Because of these complaints, the Florida Fish and Wildlife Conservation Commission's Statewide Nuisance Alligator Program permits the killing of approximately 7,000 nuisance alligators each year. Using this approach, and through increased public awareness, the rate of alligator bites on people has remained constant despite the increased potential for alligator-human interactions as Florida's human population has grown.

Alligators are an important part of Florida's landscape and play a valuable role in the ecology of our state's wetlands. Alligators are predators and help keep other aquatic animal populations in balance. A better understanding of the facts and information presented in this brochure will help ensure that people and alligators can continue to coexist.

Visit [MyFWC.com/Gators](http://MyFWC.com/Gators) for more information about alligators and the latest nuisance alligator program statistics.

### Alligators and people

Alligators are a fundamental part of Florida's marshes, swamps, rivers and lakes, and they are found in all 67 counties. Florida continues to experience human population growth. Many new residents seek waterfront homes, resulting in increased interactions between people and alligators.

Although many Floridians accept living with alligators nearby, the potential for conflict exists. Because of their predatory nature, alligators may target pets and livestock as prey. Unfortunately, people also are occasionally bitten. Since 1948, Florida has averaged about five unprovoked bites per year. During that period, a little more than 300 unprovoked bites to people have been documented in Florida, with 22 resulting in deaths.

In the past 10 years, the Florida Fish and Wildlife Conservation Commission has received an average of nearly 16,000 alligator-related complaints per year. Most of these complaints deal with alligators occurring in places such as backyard ponds, canals, ditches and streams, but other conflicts occur when alligators wander into garages, swimming pools and golf course ponds. Sometimes, alligators come out of the water to bask in the sun or move between wetlands. In many cases, if left alone, these alligators will eventually move on to areas away from people.

### Safety tips

- Generally, alligators less than four feet in length are not large enough to be dangerous unless handled. However, if you encounter any alligator that you believe poses a threat to people, pets or property, call the Nuisance Alligator Hotline at 866-FWC-GATOR (392-4286). Please be aware, nuisance alligators are harvested, not relocated.



A young alligator wanders onto a porch in a residential neighborhood.

Tim Donovan



- Be aware of the possibility of alligators when you are in or near fresh or brackish water. Bites may occur when people do not pay close enough attention to their surroundings when working or recreating near water.
- Do not swim outside of posted swimming areas or in waters that might be inhabited by large alligators.
- Alligators are most active between dusk and dawn. Therefore, avoid swimming at night.
- Dogs and cats are similar in size to the natural prey of alligators. Don't allow pets to swim, exercise or drink in or near waters that may contain alligators. Dogs often attract an alligator's interest, so do not swim with your dog.
- Leave alligators alone. State law prohibits killing, harassing or possessing alligators. Handling even small alligators can result in injury.

(continued)

**APPENDIX G**

**AERIAL WITH SITE PLAN AND GOPHER TORTOISE  
BURROW LOCATIONS**



SCALE: 1" = 600'

NOT PART OF THIS INDIGENOUS PRESERVE AND PROTECTED SPECIES MANAGEMENT PLAN

**LEGEND:**

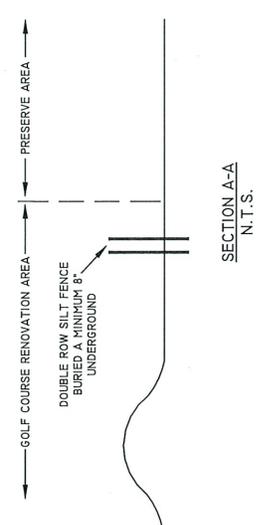
- APPROXIMATE LOCATION OF GOPHER TORTOISE BURROW
- PRESERVE AREA
- DOUBLE ROW SILT FENCE

**NOTES:**

AERIAL PHOTOGRAPHS WERE ACQUIRED THROUGH THE LEE COUNTY PROPERTY APPRAISER'S OFFICE WITH A FLIGHT DATE OF JANUARY - MARCH 2021.

PROPERTY BOUNDARY PER WALDRUP ENGINEERING, P.A. DRAWING NO. ACAD-ACAD-704203E01.DWG DATED AUGUST 6, 2021.

SITE PLAN PER WALDRUP ENGINEERING, P.A. DRAWING NO. 70420301BASE (2021-09-17).DWG DATED SEPTEMBER 17, 2021.



REVISIONS	DATE	DRAWN BY	DATE	DESCRIPTION
Added silt fence	12/21/21	R.F.	11/29/21	
		S.J.	11/29/21	
		S.J.	11/29/21	

13620 Metropolis Avenue Suite 200 Ft. Myers, FL 33912 Phone (239) 274-0067 Fax (239) 274-0069	<b>PASSARELLA</b> Consulting & ASSOCIATES <sup>2</sup>	<b>RAPTOR BAY GOLF COURSE RENOVATION</b> AERIAL WITH SITE PLAN AND GOPHER TORTOISE BURROW LOCATIONS	DRAWING NO. 20LBR3290
			SHEET NO. APPENDIX G

**APPENDIX H**

**WADING BIRD INFORMATIONAL PAMPHLET**

Action to be taken if you observe someone harassing a wading bird:

Promptly notify the FWCC  
1-888-404-FWCC

Tips for living with wading birds

- Do not feed wading birds.
- Keep out of vegetated areas surrounding lakes and marshes.
- Keep pets leashed to avoid coming into contact with wading birds.
- Properly dispose of fishing line to avoid bird entanglement.

WADING  
BIRD  
INFORMATIONAL  
PAMPHLET



RAPTOR BAY  
GOLF COURSE  
RENOVATION

Prepared By:



**PASSARELLA**  
& ASSOCIATES

13620 Metropolis Avenue, Suite 200  
Fort Myers, Florida 33912  
(239) 274-0067

## **Description:**

Wading birds are a diverse group of birds which utilize shallow marsh areas as foraging and breeding habitats. They are typically characterized as having long necks, legs and bills, which allows them to feed in shallow water. Wading birds can be found in Florida year round. Examples of wading birds include: great egrets, great blue herons, white ibis', little blue herons and snowy egrets.

## **Habitat:**

Wading birds inhabit all counties in the state of Florida and are most common in the shallow marsh or wetland areas throughout the state. They can also be found in both coastal and inland areas, salt marshes, swamps, ponds, drainage canals, and ditches. Wading birds breed and nest in colonies which consist of various species of other wading birds. Breeding generally occurs just prior to or during the wet season. Stick nests are built in trees or bushes near wetland areas and above the water line.

Wading birds feed in shallow water areas where prey is most concentrated. They feed by spearing prey with their bills or by straining small species out of the water and sediment. Prey may include small fish, invertebrates or other aquatic organisms. Wading birds have also been known to consume snakes, frogs and small rodents.

## **Protection:**

Most wading birds are listed as species of special concern by the State of Florida. Some species such as wood storks are listed as endangered by both the State of Florida and the U.S. Fish and Wildlife Service. It is unlawful for anyone to disturb or take nests or eggs, feed, injure, harm, harass, or kill any wading birds species. Persons who knowingly violate the law may be subject to fines and/or jail time.

If wading birds form a nesting colony on the property in the future, avoid activities within 330 feet of the colony during the nesting season (March 1 to August 1).

**APPENDIX I**

**BALD EAGLE MANAGEMENT PLAN FOR NEST LE-28A**

**RAPTOR BAY GOLF COURSE RENOVATION  
BALD EAGLE MANAGEMENT PLAN  
FOR BALD EAGLE NEST LE-28A  
LEE COUNTY, FLORIDA**

**July 2022**

Prepared For:

***LBRaptor, LLC***  
*2210 Vanderbilt Beach Road, Suite 1300*  
*Naples, Florida 34109*  
*(239) 449-1550*

Prepared By:

***Passarella & Associates, Inc.***  
*13620 Metropolis Avenue, Suite 200*  
*Fort Myers, Florida 33912*  
*(239) 274-0067*

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## 1.0 INTRODUCTION

This Bald Eagle Management Plan (BEMP) has been prepared for Bald Eagle (*Haliaeetus leucocephalus*) Nest LE-28A located on the Raptor Bay Golf Course Renovation project (Project). The Project site is located in Sections 5 and 8, Township 47 South, Range 25 East, Lee County (Exhibit 1). The Project site totals 306.89± acres and is located north of Coconut Road, 1.5± miles west of U.S. 41 and 2.28± miles south of Corkscrew Road. More specifically, the site is bordered to the north by West Bay Club; to the south by El Dorado Acres and Meadowbrook residential developments and Coconut Road; to the east by a Florida Power & Light (FPL) easement, existing conservation lands, and Fountain Lakes and Marsh Landing residential developments; and to the west by existing conservation lands, the Raptor Bay Golf Club, and Hyatt Residence Club.

A BEMP was previously prepared by Wilson Miller, Inc. on March 7, 2000 for Nest LE-28A which depicted the eagle nest tree and two protection zones (Exhibit 2). The two zones consisted of the Primary Protection Zone (PPZ), which ranged from 750 feet to 1,200 feet from the nest tree and the Secondary Protection Zone (SPZ), which ranged from 750 feet to 1,300 feet from the PPZ.

This BEMP has been prepared to update the PPZ and SPZ for Nest LE-28A to 330 and 660 feet, respectively, as currently accepted by Lee County the U.S. Fish and Wildlife Service (USFWS), and the Florida Fish and Wildlife Conservation Commission (FWCC). Additionally, this BEMP is intended to facilitate construction of the Project (i.e., golf course renovation activities) while providing sufficient measures to minimize the potential for adverse impacts to nesting bald eagles. The golf course renovation activities are currently underway in accordance with Lee County Development Order (DO) No. DOS2021-00137.

Nest LE-28A and its proposed protection zones (i.e., 330 and 660 feet) are contained entirely within the Project's conservation area. Therefore, no development activities will occur within 660 feet of Nest LE-28A. Approval of this BEMP will allow the Project's golf course renovation activities to continue throughout the year, as needed.

## 2.0 HABITAT INVENTORY AND MAPPING

Vegetation and land cover mapping for the Project was updated by Passarella & Associates, Inc. (PAI) in August 2021 using a Lee County 2021 rectified aerial. Groundtruthing of the vegetative communities was conducted using the Florida Land Use, Cover and Forms Classification System (FLUCFCS) Level III (Florida Department of Transportation 1999). Level IV FLUCFCS was utilized to denote disturbance and hydrologic conditions. "E" codes were used to identify levels of exotic and invasive vegetation (e.g., Brazilian pepper (*Schinus terebinthifolia*) and melaleuca (*Melaleuca quinquenervia*)). AutoCAD 3D 2021 software was used to determine the acreage of each mapping area, produce summaries, and generate the FLUCFCS map for the Project. An aerial with FLUCFCS and SFWMD wetlands is included as Exhibit 3. According to the FLUCFCS map, the on-site land uses and vegetation communities consist primarily of golf course, pine flatwoods, pine, scrubby flatwoods, melaleuca, shallow ponds, cypress, mixed wetland forest, and freshwater marsh.

A total of 22 land use types were identified on the Project site and are described below.

Golf Course (FLUCFCS Code 182)

This land use type includes the existing Raptor Bay golf course.

Pine Flatwoods, Disturbed (0-24% Exotics) (FLUCFCS Code 4119 E1)

The canopy of this habitat type includes slash pine (*Pinus elliottii*), melaleuca, and scattered cabbage palm (*Sabal palmetto*) and earleaf acacia (*Acacia auriculiformis*). The sub-canopy contains slash pine, melaleuca, twining snoutbean (*Rhynchosia tomentosa*), wax myrtle (*Morella cerifera*), myrsine (*Myrsine cubana*), saltbush (*Baccharis halimifolia*), saw palmetto (*Serenoa repens*), dahoon holly (*Ilex cassine*), gallberry (*Ilex glabra*), Brazilian pepper, muscadine grapevine (*Vitis rotundifolia*), cassia (*Senna pendula*), and scattered cabbage palm and earleaf acacia. The ground cover is dominated by saw palmetto.

Pine Flatwoods, Disturbed (25-49% Exotics) (FLUCFCS Code 4119 E2)

This habitat type is similar to FLUCFCS Code 4119 E1, but with 25 to 49 percent melaleuca in the canopy and sub-canopy.

Pine Flatwoods, Disturbed (50-75% Exotics) (FLUCFCS Code 4119 E3)

This habitat type is similar to FLUCFCS Code 4119 E2, but with 50 to 75 percent melaleuca in the canopy and sub-canopy.

Pine Flatwoods, Disturbed (76-100% Exotics) (FLUCFCS Code 4119 E4)

The canopy of this habitat type is similar to FLUCFCS Code 4119 E3 but contains 76 to 100 percent melaleuca in the canopy and sub-canopy.

Pine, Disturbed (0-24% Exotics) (FLUCFCS Code 4159 E1)

The canopy of this habitat type contains slash pine and scattered earleaf acacia and melaleuca. The sub-canopy contains slash pine, melaleuca, earleaf acacia, and carrotwood (*Cupaniopsis anacardioides*). The ground cover contains bracken fern (*Pteridium aquilinum*), deer-tongue (*Carphephorus paniculatus*), muscadine grapevine, and bushy bluestem (*Andropogon glomeratus*).

Pine, Disturbed (25-49% Exotics) (FLUCFCS Code 4159 E2)

This habitat type is similar to FLUCFCS Code 4159 E1, but with 25 to 49 percent melaleuca and earleaf acacia in the canopy and sub-canopy and cogongrass (*Imperata cylindrica*) in the ground cover.

Pine, Disturbed (50-75% Exotics) (FLUCFCS Code 4159 E3)

This habitat type is similar to FLUCFCS Code 4159 E2 but contains 50 to 75 percent Brazilian pepper in the sub-canopy and scattered caesarweed (*Urena lobata*) and spermacoce (*Spermacoce verticillata*) in the ground cover.

Scrubby Flatwoods, Disturbed (0-24% Exotics) (FLUCFCS Code 4169 E1)

The canopy of this habitat type contains scattered slash pine and sand live oak (*Quercus geminata*). The sub-canopy contains myrtle oak (*Quercus myrtifolia*), Chapman's oak (*Quercus chapmanii*), sand live oak, dahoon holly, rosemary (*Ceratiola ericoides*), gallberry, staggerbush (*Lyonia*

*fruticosa*), fetterbush (*Lyonia lucida*), tarflower (*Bejaria racemosa*), saw palmetto, and widely scattered earleaf acacia. The ground cover contains saw palmetto, muscadine grapevine, prickly pear (*Opuntia* sp.), pawpaw (*Asimina* sp.), and wiregrass (*Aristida stricta*).

Scrubby Flatwoods, Disturbed (25-49% Exotics) (FLUCFCS Code 4169 E2)

This habitat type is similar to FLUCFCS Code 4169 E1 but contains 25 to 49 percent earleaf acacia in the canopy and sub-canopy.

Melaleuca, Hydric (FLUCFCS Code 4241)

The canopy of this habitat type contains melaleuca, dahoon holly, and widely scattered slash pine. The sub-canopy contains melaleuca, Brazilian pepper, dahoon holly, earleaf acacia, slash pine, saw palmetto, and myrsine. The ground cover contains swamp fern (*Telmatoblechnum serrulatum*), royal fern (*Osmunda regalis*), Japanese climbing fern (*Lygodium japonicum*), rosy camphorweed (*Pluchea baccharis*), gulfdune paspalum (*Paspalum monostachyum*), beaksedge (*Rhynchospora microcarpa*), and scattered wiregrass and saw palmetto.

Live Oak, Disturbed (0-24% Exotics) (FLUCFCS Code 4279 E1)

The canopy of this habitat type includes live oak (*Quercus virginiana*) and cabbage palm. The sub-canopy contains cabbage palm, saw palmetto, myrsine, and dahoon holly. The ground cover is open.

Hardwood/Conifer Mixed, Disturbed (0-24% Exotics) (FLUCFCS Code 4349 E1)

The canopy of this habitat type consists of slash pine, live oak, and cabbage palm. The sub-canopy contains saw palmetto. The ground cover is open.

Shallow Pond (FLUCFCS Code 525)

The canopy, sub-canopy, and ground cover of this land use type are mostly open, with the edges containing spikerush (*Eleocharis* sp.), sand cordgrass (*Spartina bakeri*), cattail (*Typha* sp.), pickerelweed (*Pontederia cordata*), arrowhead (*Sagittaria lancifolia*), and leather fern (*Acrostichum* sp.).

Mixed Wetland Hardwoods, Disturbed (0-24% Exotics) (FLUCFCS Code 6179 E1)

The canopy of this habitat type consists of scattered red maple (*Acer rubrum*), Carolina willow (*Salix caroliniana*), and bald cypress (*Taxodium distichum*). The sub-canopy contains buttonbush (*Cephalanthus occidentalis*), Carolina willow, red maple, and pond apple (*Annona glabra*). The ground cover contains swamp fern, maidencane (*Panicum hemitomon*), West Indian marsh grass (*Hymenachne amplexicaulis*), and climbing hempvine (*Mikania scandens*).

Exotics Wetland Hardwoods (FLUCFCS Code 619)

The canopy and sub-canopy of this habitat type contain Brazilian pepper, cassia, and widely scattered cabbage palm. The ground cover is mostly open with Brazilian pepper sprouts.

Cypress, Disturbed (0-24% Exotics) (FLUCFCS Code 6219 E1)

The canopy of this habitat type includes bald cypress, scattered cabbage palm, and widely scattered melaleuca. The sub-canopy contains bald cypress, wax myrtle, buttonbush, pond apple, and scattered Brazilian pepper. The ground cover contains swamp fern, sawgrass (*Cladium*

*jamaicense*), little blue maidencane (*Amphicarpum muhlenbergianum*), and widely scattered West Indian marsh grass.

Cypress, Disturbed (76-100% Exotics) (FLUCFCS Code 6219 E4)

This habitat type is similar to FLUCFCS Code 6219 E1 but contains 76 to 100 percent melaleuca in the canopy and sub-canopy.

Mixed Wetland Forest, Disturbed (25-49% Exotics) (FLUCFCS Code 6309 E2)

The canopy of this habitat type contains cabbage palm, bald cypress, Carolina willow, red maple, oak (*Quercus* sp.), and melaleuca. The sub-canopy contains bald cypress, cabbage palm, Carolina willow, buttonbush, and scattered pop ash (*Fraxinus caroliniana*) and Brazilian pepper. The ground cover contains swamp fern, maidencane, sawgrass, and red ludwigia (*Ludwigia repens*).

Mixed Wetland Forest, Disturbed (76-100% Exotics) (FLUCFCS Code 6309 E4)

This habitat type is similar to FLUCFCS Code 6309 E2 but contains 76 to 100 percent melaleuca in the canopy and sub-canopy.

Freshwater Marsh, Disturbed (0-24% Exotics) (FLUCFCS Code 6419 E1)

The canopy and sub-canopy of this habitat type contain Carolina willow and pond apple on the edges. The ground cover contains cattail, sawgrass, fireflag (*Thalia geniculata*), leather fern, and maidencane.

Disturbed Land (FLUCFCS Code 740)

The canopy of this habitat type includes Brazilian pepper, cabbage palm, buttonwood (*Conocarpus erectus*), Norfolk Island pine (*Araucaria heterophylla*), and scattered earleaf acacia and slash pine. The sub-canopy contains slash pine, cabbage palm, Brazilian pepper, buttonwood, earleaf acacia, Guinea grass (*Panicum maximum*), Norfolk Island pine, false willow (*Baccharis angustifolia*), castor-bean (*Ricinus communis*), and widely scattered saw palmetto. The ground cover contains areas of open sand with dog fennel (*Eupatorium capillifolium*), rustweed (*Polyprenum procumbens*), jointweed (*Polygonella polygama*), caesarweed, rosemary, slash pine, bermudagrass (*Cynodon dactylon*), cogongrass, limpograss (*Hemarthria altissima*), wild bush bean (*Macroptilium lathyroides*), wedelia (*Sphagneticola trilobata*), sweetbroom (*Scoparia dulcis*), beggarticks (*Bidens alba*), ragweed (*Ambrosia artemisiifolia*), bushy bluestem, water pennywort (*Hydrocotyle umbellata*), peppervine (*Nekemias arborea*), saltgrass (*Distichlis spicata*), and scattered saw palmetto.

### **3.0 BALD EAGLE BIOLOGY AND PROTECTION**

The following information on the biology of the bald eagle is excerpted from the South Florida Multi-Species Recovery Plan (U.S. Fish and Wildlife Service (USFWS) 1999).

Bald eagles are considered a water-dependent species typically found near estuaries, large lakes, reservoirs, major rivers, and some seacoast habitats (Robards and King 1966, King *et al.* 1972, Weekes 1974, Whitfield *et al.* 1974, Gerrard *et al.* 1975, Grier 1977, Anthony and Isaacs 1989, Wood *et al.* 1989). Their distribution is influenced by the availability of suitable nest and perch

sites near large and open water bodies, typically with high amounts of water-to-land edge. Bald eagles demonstrate a remarkable ability to tolerate perturbations to their habitat throughout their range.

Their adaptability to a variety of habitat conditions makes any generalizations about habitat requirements and nesting behavior difficult. Though variable, eagles have basic habitat requirements that must be met in order to successfully reproduce and survive during the winter or non-nesting season. Florida bald eagle nests are constructed in dominant or co-dominant living pines (*Pinus* spp.) or bald cypress (*Taxodium distichum*) and are often located in the ecotone between forest and marsh or water (McEwan and Hirth 1979). Approximately ten percent of eagle nests are located in dead pine trees, while two to three percent occur in other species such as Australian pine (*Casuarina equisetifolia*) and live oak (*Quercus virginiana*). The stature of nest trees decreases from north to south (Wood 1987, Wood *et al.* 1989); and in extreme Southwest Florida, eagles nest in black mangroves (*Avicennia germinans*) and red mangroves (*Rhizophora mangle*), half of which are snags (Curnutt and Robertson 1994). Nest trees in South Florida are smaller and shorter than reported elsewhere; however, comparatively they are the largest trees available (Wood *et al.* 1989, Hardesty 1991). The small size of nest trees in South Florida relative to other nest sites throughout the eagle's range is due to the naturally smaller stature of slash pine (*Pinus elliotti*), loblolly pine (*P. taeda*), longleaf pine (*P. palustris*), and sand pine (*P. clausa*) in South Florida and to the lack of pines in extreme Southern Florida.

Bald eagles are monogamous, and annual courtship behavior reinforces pair bonds (Palmer 1988). Pair bond formation includes dramatic pursuit flights, high soaring, talon locking, and cartwheeling (Johnsgard 1990). Eagles may also fly around the perimeter of their nesting areas, visually communicating their presence and further establishing their territories. Pair bond behavior, as well as territory establishment and defense, probably occur concurrently throughout much of the eagle's range. Successful pair bond ultimately leads to nest site selection and nest construction for newly formed pairs or established pairs without nests. Pairs that have previously nested may repair established nests or construct an alternate nest concurrent with copulation.

Nesting activities generally begin in early September in South Florida, with egg-laying occurring as early as late October and peaking in the latter part of December. Incubation may be initiated from as early as October through as late as March, depending upon latitude. Clutches usually consist of one or two eggs, but occasionally three or four are laid. Incubation takes approximately 35 days and fledging occurs within 10 to 12 weeks of hatching. Parental care may extend 4 to 6 weeks after fledging, even though young eagles are fully developed and may not remain at the nest after fledging (USFWS 1989).

The Florida Fish and Wildlife Conservation Commission (FWCC) documented 88 active bald eagle nesting territories in Florida during their initial surveys of this species in 1973; by 1987, that number had increased to 391 active territories when the USFWS implemented the Habitat Management Guidelines for the Bald Eagle in the Southeast Region (Guidelines) (USFWS 1987). By 1999, the 1,000-breeding pair recovery goal for Florida had been achieved and had increased to 1,511 breeding pairs by 2012 (Brush *et al.* 2012). Peterson and Robertson (1978) reported that historic numbers of breeding pairs of bald eagles in Florida were likely "in excess of 1,000 breeding pairs."

The bald eagle was a federally and state listed “threatened” species that had been protected since the mid-1970s under the Endangered Species Act of 1973 and Chapter 68A-27.004, Florida Administrative Code. Management and recovery efforts for the species generally have included actions to improve reproductive success and survival by 1) reducing levels of persistent organochlorine pesticides, such as Dichlorodiphenyltrichloroethane (i.e., DDT), occurring in the environment; and 2) habitat protection. Habitat protection measures in Florida primarily have focused on the protection of nesting territories through the implementation of the 1987 Guidelines. Recovery goals for the bald eagle have been achieved as a result of these and related management actions throughout the United States, and the USFWS subsequently published a proposed rule in July 1999 to remove the bald eagle in the lower 48 states from the list of threatened or endangered wildlife. The bald eagle was subsequently delisted by the federal government in August 2007 and by the State of Florida in April 2008. The Bald and Golden Eagle Protection Act and Migratory Bird Treaty Act provide continued federal protection for bald eagles. State Rule 68A-16.002 establishes rules for the continued protection and conservation of eagles in Florida.

#### **4.0 DESCRIPTION OF LE-28A**

##### **4.1 Location and Landscape Information**

Nest LE-28A is located in a large slash pine tree immediately west of Halfway Creek (Exhibit 3). The nest tree is surrounded by dense scrub oak and forested wetland habitats with varying degrees of exotic infestation. Both the nest tree and protection zones (330 and 660 feet) are located within the proposed conservation area (Exhibit 4). The proposed conservation area contains an abundance of trees that could potentially be utilized for perching and/or nesting by bald eagles.

The site is bordered to the north by West Bay Club; to the south by El Dorado Acres and Meadowbrook residential developments and Coconut Road; to the east by an FPL easement, existing conservation lands, and Fountain Lakes and Marsh Landing residential developments; and to the west by existing conservation lands, the Raptor Bay Golf Club, and Hyatt Residence Club. The location of Nest LE-28A, the eagle nest protection zones, and the surrounding land uses are depicted on Exhibit 4.

##### **4.2 Nesting History**

Based on Wilson Miller’s 2000 BEMP, Nest LE-28A was first observed in 1987 and served to replace Nest LE-28, which was last used during the 1986-1987 nesting season. The eagle pair also utilized a nest (LE-28B) located approximately 3,700 feet west-southwest of LE-28A. Nest LE-28B was last active during the 1992-1993 nesting season. A survey conducted by the Florida Game and Fresh Water Fish Commission during the 1997-1998 nesting season identified Nest LE-28B as “nest down” (nest came apart and there is no longer any nest material in the nest tree).

Site observations conducted by PAI in February and March 2022 confirmed that Nest LE-28A was inactive.

## **5.0 PROPOSED SITE PLAN AND EAGLE PROTECTION ZONES**

The Project's site plan consists of the reconfiguration of the existing golf course with associated parking and infrastructure. The site plan is depicted on Exhibit 4.

The USFWS and FWCC recognize 330- and 660-foot protection zones around an active eagle nest (Exhibit 4). Additionally, Lee County's Eagle Ordinance (08-25) states that no construction (structures or site work) may occur within 660 feet of an eagle nest without an approved BEMP. Both the 330- and 660-foot protection zones of Nest LE-28A are within the proposed conservation area. Therefore, no development activities will occur within 660 feet of Nest LE-28A. However, DO No. DOS2021-00137 requires that the Project's conservation areas be maintained free of exotic vegetation. This includes the conservation areas within the 330- and 660-foot eagle protection zones.

## **6.0 BALD EAGLE MANAGEMENT PLAN**

This BEMP serves to revise the existing plan prepared by Wilson Miller in 2000, to reduce the protection zones to the current Lee County, USFWS, and FWCC standards (i.e., 330 and 660 feet). Additionally, this BEMP is intended to facilitate construction of the Project while providing sufficient measures to minimize the potential for adverse impacts to nesting bald eagles that could occur as a result of the proposed development activities. As a management instrument, the BEMP is only applicable to the Project. It is the responsibility of the property owner to retain and implement this plan for as long as it is required, including educating others (e.g., contractors, future owners, tenants, etc.) about the specific requirements of this BEMP and the state and federal eagle protection laws. Any amendment to this management plan shall require review and approval by the Eagle Technical Advisory Committee or any successor body.

Specific elements of the BEMP are as follows:

1. Exotic vegetation removal within 660 feet of the nest tree shall be completed during the non-nesting season (i.e., May 16 through September 30).
2. The use of chemicals which are known to be toxic to wildlife shall be prohibited at all times in close proximity to the nest tree and within the on-site preserve areas. Chemicals used for the purpose of controlling invasive exotic plants shall be prohibited around the base of the nest tree.

## **7.0 REFERENCES**

Anthony, R.G. and F.B. Isaacs. 1989. Characteristics of bald eagle nest sites in Oregon. *Journal of Wildlife Management* 53(1): 148-159.

Brush, Janell M., K. Rogers, and E. Leone. 2012. Annual Report 2011-2012. Fish and Wildlife Research Institute, Wildlife Research Section, Avian Research Subsection; Gainesville, Florida.

- Curnutt, J.L and W.B. Robertson, Jr. 1994. Bald eagle nest site characteristics in south Florida. *Journal of Wildlife Management* 58(2):218-221.
- Florida Department of Transportation. 1999. Florida Land Use, Cover and Forms Classification System. Procedure No. 550-010-001-a. Third Edition.
- Florida Fish and Wildlife Conservation Commission. 2017. A Species Action Plan for the Bald Eagle.
- Gerrard, J.M., P.N. Gerrard, W.J. Maher, and D.W.A. Whitfield. 1975. Factors influencing nest site selection of bald eagles in northern Saskatchewan and Manitoba. *Blue Jay* 33(3): 169-176.
- Grier, J.W. 1977. Quadrat sampling of a nesting population of bald eagles. *Journal of Wildlife Management* 41:438-443.
- Hardesty, J.L. 1991. Conservation of coastal nesting bald eagles in Florida: history, demography, and habitat use. Unpublished Masters Thesis, University of Florida; Gainesville, Florida.
- Johnsgard, P.A. 1990. Hawks, Eagles, and Falcons of North America. Smithsonian Institution Press; Washington, D.C.
- King, J., F. Robards, and C. Lensink. 1972. Census of the bald eagle breeding population in southeast Alaska. *Journal of Wildlife Management* 36:1292-1295.
- McEwan, L.C. and D.H. Hirth. 1979. Southern bald eagle productivity and nest site selection. *Journal of Wildlife Management* 43:585-594.
- Palmer, R.S. 1988. Handbook of North American Birds, Volume 4. Yale University Press; New Haven, Connecticut.
- Peterson, D.W. and W.B. Robertson, Jr. 1978. Threatened southern bald eagle. Pages 27-30 *in*: H.W. Kale II, ed. Rare and endangered biota of Florida: volume two, birds. University Presses Florida; Gainesville, Florida.
- Robards, R.C. and J. G. King. 1966. Nesting and productivity of bald eagles, southeast Alaska, 1966. U.S Fish and Wildlife Service; Juneau, Alaska.
- U.S. Fish and Wildlife Service. 1999. Multi-Species Recovery Plan for South Florida. U.S. Fish and Wildlife Service, Vero Beach, Florida.
- U.S. Fish and Wildlife Service. 1989. Southeastern states bald eagle recovery plan, U.S. Fish and Wildlife Service; Atlanta, Georgia.

- U.S. Fish and Wildlife Service. 1987. Habitat Management Guidelines for the Bald Eagle in the Southeast Region.
- U.S. Fish and Wildlife Service. 2007. Bald Eagle Monitoring Guidelines
- U.S. Fish and Wildlife Service. 2007. National Bald Eagle Management Guidelines.
- Weekes, F.M. 1974. A survey of bald eagle nesting attempts in southern Ontario, 1969-1973. *Canadian Field Naturalist* 88(4):415-419.
- Whitfield, D.W.A., J.M. Gerrard, W.J. Maher, and D.W. Davis. 1974. Bald eagle nesting habitat, density and reproduction in central Saskatchewan and Manitoba. *Canada Field Naturalist* 88(4):399-407.
- Wood, P.B., T.C. Edwards, and M.W. Collopy. 1989. Characteristics of bald eagle nesting habitat in Florida. *Journal of Wildlife Management* 53(2): 441-449.
- Wood, P.B. 1987. Distribution, ownership status, and habitat characteristics of bald eagle nest sites in Florida. Final report Nongame Wildlife Project 85-020, Florida Game and Fresh Water Fish Commission; Tallahassee, Florida.

**EXHIBIT 1**

**PROJECT LOCATION MAP**



**EXHIBIT 2**

**BALD EAGLE MANAGEMENT PLAN BY WILSON MILLER, INC.  
MARCH 2000**

# Wilson Miller

## BALD EAGLE MANAGEMENT PLAN FOR NEST LE-28A

**Pelican Landing DRI  
Section 5, Township 47 South, Range 25 East  
Lee County, Florida**

Prepared for:

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March 7, 2000

*Planners Engineers Ecologists Surveyors  
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**BALD EAGLE MANAGEMENT PLAN  
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## 1.0. Introduction and Project History

Pelican Landings is a 2,580-acre Development of Regional Impact (DRI) located approximately three miles north of the Lee/Collier County line. The DRI property is bounded on the west by Estero Bay, on the north by the West Bay Club residential development, on the east by U.S. 41, and on the south by Spring Creek. The original Development Order for the Pelican Landing DRI was issued by Lee County on August 29, 1994 and has been amended several times. The latest amendment is the Fifth Development Order Amendment issued by Lee County on September 21, 1998.

The Pelican Landing DRI contains a 78-acre xeric scrub/pine flatwood upland preservation area known as the "Eco-Park". Figure 1 provides a location map for the Pelican Landing Eco-Park. The Eco-Park was established pursuant to a gopher tortoise incidental take permit issued by the Florida Game and Fresh Water Fish Commission (Permit #Lee-9 issued August 28, 1995) to mitigate for impacts to the gopher tortoise and xeric scrub habitat located within the Pelican Landing DRI. It was strategically chosen since at that time it contained the majority of the xeric oak habitat on the entire undeveloped portion of Pelican Landing. A conservation easement for the 78-acre tract was granted to the Florida Game and Fresh Water Fish Commission and was recorded in the public records of Lee County on October 18, 1995. The incidental take permit contains provisions for perpetual management of the Eco-Park to maintain appropriate vegetative density and composition. Condition #5 of the permit addresses conditions placed on the use and management of the Eco-Park with regard to eagle nesting activities. An active bald eagle's nest is present in the Eco-Park of the Pelican Landing DRI. The eagle nest is recognized by U.S. Fish and Wildlife Service (USFWS) as nest #LE-28A. Conditions of the Development Order for the Pelican Landing DRI require that a management plan be implemented for this nest.

A bald eagle management plan (BEMP) was drafted for nest LE-28A in 1994 (Heald and Associates, Inc. 1994a; Appendix A) and was submitted to the USFWS for review, comment, and approval. The original plan proposed a 1,300-foot setback between the nest and any proposed construction and a 2,500-foot secondary protection zone where construction would be seasonally restricted. Under the 1994 plan, the closest proposed construction was a two-lane road west of the nest that would terminate near the northern property boundary of the project site, and single-story single-family homes on large lots to the west of the road. Via a letter from David Ferrell (USFWS) to Dan Trescott (Southwest Florida Regional Planning Council) dated January 31, 1994, the USFWS made a preliminary determination that 1,300 and 2,500 feet represented adequate primary and secondary protection zones for Nest LE-28A. Prior to making a final determination, the USFWS requested that a study be conducted during the nesting season to determine flight lines and identify any trees frequently used for roosting. The study was conducted by Eric Heald & Associates (Heald, 1994b) during the period of January through May, 1994 and indicated that 84% of all flights recorded inbound or outbound fell within the northern (n=15 of 44), northwestern (n=13), and western (n=9) quadrants.

On August 8, 1995, a meeting was held with Jane Tutton (USFWS) and a revised BEMP was submitted to the USFWS. In consideration of the density of site vegetation and effective visual screening of the eagle's nest, a Primary Protection Zone (PPZ) of 500 feet and a Secondary Protection Zone (SPZ) ranging from 1,200 feet on the southwest to 2,175 feet on the south was proposed. An August 16, 1995 letter from Craig Johnson (USFWS) to Tim Durham (WilsonMiller) indicated the USFWS's concurrence that the revised plan was adequate and appropriate for the nest. A subsequent letter dated October 11, 1995, sent by Craig Johnson (USFWS) to Tim Durham (WilsonMiller) for clarification purposes, superseded the August 16, 1995 letter and indicated that a PPZ of 1,200 feet and an SPZ of 2,500 feet would be required.

The purpose of this document is to provide a revised management plan for eagle nest LE-28A (hereafter referred to as the "Plan") and request technical assistance from the USFWS for review, comment, and approval of the revised Plan. The previous management plan was based on the original configuration of the Eco-Park, the boundary of which was determined by property boundaries and/or preliminary/conceptual subdivision plans for adjacent lands. Now that WCI Communities, Inc. (WCI) has refined the required area and uses of adjacent lands, it has become apparent that a modification to the Eco-Park boundary is needed. Proposed revisions have been made to the original Plan due to the acquisition or planned acquisition of adjacent parcels, changes in the site development plan, and the desire to utilize an ecosystem approach in reconfiguring the Eco-Park. WilsonMiller is currently coordinating with the Florida Fish and Wildlife Conservation Commission (FFWCC) to gain approval for the proposed reconfiguration of the Eco-Park boundary as described herein. Thus, we are requesting that the USFWS provide approval of the Plan pending approval of the Eco-Park boundary configuration by the FFWCC. Upon approval by the USFWS, the revised Plan would supersede the 1994 plan in its entirety.

The revised plan is consistent with existing USFWS management guidelines for the bald eagle as well as the original 1994 plan. The proposed plan maintains a PPZ of 1,200 feet and an SPZ of 2,500 feet (1,300 feet outward from PPZ) in the directions most utilized by inbound and outbound eagle flight paths. In the direction of seldom utilized flight paths, the PPZ is 750 feet and the SPZ is 1,500' (750' outward from the PPZ) in accordance with bald eagle management guidelines. It should be noted that the revised plan results in a numerous benefits to the eagle compared to the original plan. Details regarding these benefits are provided in Section 4.4 of this report.

## 2.0 Nest Location/History

Figure 2 shows the location of nest LE-28A with respect to the existing boundary of the Pelican Landing Eco-Park. Nest LE-28A is located on the northwest side of a large slash pine (*Pinus elliottii*) tree immediately west of Halfway Creek. From most angles, the nest is effectively screened from view beyond a distance of 200 to 600 feet by pines, dense scrub oak, and tall fetterbush (*Lyonia* spp.). Heald (1994b) indicated that the primary perch tree for the eagles is located approximately 400 feet west of the nest tree.

Nest LE-28A was first observed in 1987 and served to replace nest LE-28, which was last used during the 1986/1987 breeding season. The eagle pair also utilized a nest (LE-28B) located approximately 3,700 feet west-southwest of LE-28A. Nest LE-28B was last active during the 1992/1993 breeding season. A survey conducted by the Florida Game and Fresh Water Fish Commission during the 1997/1998 breeding season identified nest LE-28B as "nest down" (nest came apart and there is no longer any nest material in the nest tree).

## 3.0 Results of Flight Pattern Surveys

At the request of the USFWS, a flight pattern study of eagles nesting in LE-28A was conducted from January to May 1994. A report summarizing the results of this study (Heald, 1994b) is provided in Appendix A. The study concluded that 34%, 30%, and 20% of recorded flights were to or from the northern, northwestern, or western directions, respectively. Based on the flight study, it is presumed that the eagles feed primarily in Estero Bay. Other research conducted KBN Engineering and Applied Sciences, Inc. (1995) indicated that the eagle pair utilizing nest LE-28A were frequently seen perching

on trees next to homes and roads along Kings Road and Williams Road, foraging in sewage treatment ponds of the Fountain Lakes development, feeding on road kills along U.S. 41, and perching in trees in the vicinity of the Coconut Point fish camp. Thus, it appears that the eagles are opportunistic feeders and have become accustomed to human activity.

#### **4.0 Habitat Management/Nest Protection Strategies**

##### *4.1 Objectives*

The overall objectives of the Plan are as follows:

- To protect the integrity of the bald eagle nest LE-28A.
- To minimize detrimental human-related impacts on the bald eagles utilizing nest LE-28A, particularly during the nesting season (generally from October 1 through May 15 but specific to individual nests depending on the time of commencement of mating and fledging of young).
- To define compatible land uses and development in areas in close proximity to the active nest.

These objectives, and the methods proposed to attain them, are consistent with the guidelines issued by the USFWS Southeast Region as found in "*Habitat Management Guidelines for the Bald Eagle in the Southeast Region*" (USFWS, 1987). These guidelines recommend the establishment of primary and secondary protection/management zones around eagle nest trees. The following methods and management techniques are hereby proposed for each of these zones in order to achieve Plan objectives.

##### *4.2 Primary Protection Zone (PPZ)*

The PPZ will extend outward radially from the nest tree a distance ranging from 750' to 1,200'. Figure 3 shows the configuration of the PPZ and the habitat types present. The purpose of the PPZ will be to provide a natural zone in the immediate vicinity of the nest tree that will remain free of development, and where passive activities potentially detrimental to nesting will be restricted.

The following activities will be prohibited within the PPZ:

- Residential, commercial, and industrial development
- Tree cutting, except as absolutely needed to construct the golf cart bridge across Halfway Creek and golf cart paths leading to the bridge.
- Logging, mining, filling, and excavation.
- Use of non-approved chemicals toxic to wildlife.
- Habitat management practices during the active nesting season, including burning.
- Unauthorized human activities potentially detrimental to bald eagle nesting.
- Passive recreational use of the golf cart bridge across Halfway Creek, and golf cart paths leading to the bridge, during the eagle nesting season, except for uses related strictly to golfing.

The following activities will not be considered detrimental when conducted in the PPZ during the non-nesting season:

- Construction or use of passive recreational facilities, including benches, jogging/hiking trails, or similar uses consistent with the Eco-Park management plan. In accordance with the Eco-Park habitat management plan, passive recreational facilities will be located no closer than 500' from nest LE-28A.
- Construction of the golf cart bridge across Halfway Creek, and golf cart paths leading to the bridge.

- Habitat management activities, including removal of exotic and nuisance vegetation and prescribed burning. Prior to any prescribed burning, the nest tree and perch trees will be protected by hand raking or clearing to minimize fuel in the vicinity of the tree.

Habitat management in the PPZ will be in accordance with the Eco-Park management plan approved by the Florida Game and Fresh Water Fish Commission. Appendix B provides a summary of the habitat management methods for the Eco-Park. Management activities in the PPZ will occur only during the non-nesting season.

#### 4.3 Secondary Protection Zone (SPZ)

The SPZ will extend a distance varying from 750' to 1,300' outward from the PPZ and will serve to provide a buffer for the PPZ. Figure 3 shows the configuration of the PPZ and the habitat types present. Development in the SPZ will be consistent with USFWS guidelines so as to minimize activities potentially detrimental to the PPZ. The majority of development in the SPZ will be golf course to be constructed during the non-nesting season. A relatively small portion (2 acres) of the outer zone of the SPZ in the western region of the site (Figure 3) is proposed for timeshare units that will have a maximum height of 45' above flood elevation. Considering that: a) this height is below the height of the existing tree canopy of this region of the site, b) the timeshare units are at least 2,370' removed from the nest tree, and c) the preserved freshwater slough and other native vegetation to be retained to the east will provide an effective visual screen, it is unlikely that the timeshare units will affect eagle nesting or foraging behavior. At its closest point the golf course is 1,250' from the nest tree, which is well beyond the line of sight distance of the tree and should also not affect eagle behavior.

The following activities will be prohibited within the SPZ unless otherwise approved by the USFWS:

- Development of commercial and industrial sites.
- Development of high density housing and multi-story buildings.
- Road or canal construction that would facilitate access to the nest.
- Use of non-approved chemicals toxic to wildlife.
- Heavy construction during the nesting season, including operation of heavy machinery, land clearing, earthmoving, blasting, excavation, installation of major utilities, and burning.

The following activities will not be considered detrimental when conducted in the SPZ during the nesting season:

- Normal habitat management practices, excluding prescribed burning.
- Passive pedestrian recreational use (e.g., hiking, bird watching, fishing, etc.).
- Construction of pedestrian pathways using non-motorized equipment, and erecting interpretive/educational signage.
- Golfing activity and operation of golf carts in golf course areas.
- Activities normally associated with golf course maintenance operations, except as noted in the above prohibitions.
- Finishing work (*i.e.*, all interior work, hanging windows and doors, stucco-ing exterior walls, and activities of similar nature) on those portions of the two timeshare units located in the SPZ, provided that the vertical construction of the units (*i.e.*, construction of exterior walls and roof) is conducted during the non-nesting season.

Habitat management in the SPZ will be in accordance with the Eco-Park management plan approved by the Florida Game and Fresh Water Fish Commission. Appendix B provides a summary of the habitat management methods for the Eco-Park. Management activities in the SPZ can occur at any

time of the year, with the exception that prescribed burning and methods involving excessive noise will be restricted during the active nesting season.

#### 4.4 *Other Management/Protection Strategies Benefiting the Eagle*

Other management/protection strategies that will be used as measures to protect eagle nest LE-28A, provide a net benefit to eagles utilizing nest LE-28A, and provide a net benefit to eagle conservation in general will include the following:

**4.4.1 *Increased Size of Pelican Landing DRI Eco-Park:*** The size of the Pelican Landing Eco-Park, within which nest LE-28A is located, is proposed to be substantially increased by the proposed project. Changes to the Eco-Park from its current configuration incorporate an ecosystem approach by including a variety of upland and wetland habitat types (as opposed to only several upland habitat types in the existing Eco-Park). The proposed reconfiguration includes all of that portion of Halfway Creek located in the project area and thereby serves to provide a buffer to the east of nest LE-28A that was not previously under ownership. The proposed changes will increase the size of the Eco-Park by approximately 84% (66-acre± net increase) and insure the continued protection and success of nest LE-28A.

**4.4.2 *Preservation of Habitat in Secondary Protection Zone:*** The project has incorporated a significant amount of habitat preservation in the SPZ to insure the continued success of eagles utilizing nest LE-28A. Of the land located in the SPZ, 102 of 159 acres (64%) will remain in a natural state (SPZ areas in Eco-Park) or mostly-natural state (golf course rough and inter-hole areas where selective removal of vegetation will occur but where majority of canopy will be retained). On a site-wide basis, a total of 56% of the existing habitat will be retained in a natural or semi-natural state, the majority of which will be enhanced via the removal of exotic vegetation. Figure 3 shows the location of areas to be preserved in the project.

**4.4.3 *Creation of Foraging Habitat:*** As part of the project, foraging habitat for the eagle, as well as wading birds, will be created both within and outside of the SPZ by excavating surface water management lakes and creating freshwater marshes (Figure 3). Created lakes and marshes within the SPZ occupy 11 acres or 7% of the SPZ, and on a site-wide basis occupy 9% of the land area. Many of the marshes to be created are located adjacent to the lakes and will serve to establish a more natural appearance to, and function of, the lakes. The marshes also serve as pretreatment areas to 'polish' surface water runoff prior to entering the lake. Such pretreatment is not required by existing SFWMD regulations, but is being incorporated into the site design to enhance the quality of the created systems. In most areas, the marshes are separated from golf course areas by upland areas that will remain in a mostly-natural state, providing additional pretreatment of runoff and further mimicking a natural lake system.

**4.4.4 *Restoration of Freshwater Slough:*** The north-south trending freshwater slough located in the western region of the project (Figure 3) will be enhanced as part of this project. Approximately one-third of this slough is located in the SPZ. The slough is currently dominated (>75% coverage) by exotic and nuisance species. Exotic/nuisance species will be removed from the slough, thus increasing habitat quality. In many areas of the slough, planting of native wetland species will occur to further enhance the quality of this area. Preservation and enhancement of the slough will also serve to provide a buffer between the eagle nest and development to the west of the slough.

**4.4.5 *Retaining Canopy, Perch, and Roost Trees:*** The site design incorporates the retainage of a substantial amount of the existing canopy. Areas that will remain natural or mostly-natural and thus will retain the majority of their existing canopy comprise 64% of the SPZ and 56% of the overall project site. Preservation of the existing canopy of the site will insure the continued presence of suitable perch and roost trees, as well as provide for suitable screening between the eagle nest and land uses

in the SPZ. In golf course and other development areas, potential perch/roost trees that are of specimen value (e.g., largest trees in stand, trees with open crowns and stout lateral limbs) will be field located/flagged and incorporated into the field design whenever possible. The shores of excavated lakes will also be meandered where necessary to preserve individual canopy trees of moderate to high value, as well as to provide a more natural character to the lake system.

4.4.6 Minimization of Number of Buildings in Secondary Protection Zone: The existing BEMP for nest LE-28A provides for single-family residential units and an associated access road in a portion of the SPZ. As part of the revised site plan proposed herein, these residential units have been eliminated and replaced with golf course, a land use more compatible with eagle nest protection. Under the proposed site plan, only two buildings of substantial size (excluding minor buildings such as golf course halfway houses) occur in the SPZ. These units are timeshare buildings that are approximately 2,370' removed from the eagle nest and comprise only 1% of the SPZ. Minimization of buildings in the SPZ will serve to further enhance the success of eagles utilizing nest LE-28A.

4.4.7 Minimization of Building Height Outside of Secondary Protection Zone: In the western region of the project between the SPZ and the western property line, building heights will be limited to a maximum height of 45' above flood elevation. This height is below the height of the existing tree canopy of this area and thus will not affect eagle nesting or foraging behavior. Although such height restrictions are not mandatory based on past USFWS determinations regarding nest LE-28A, they will be instituted as a measure to insure that the degree of access that the eagles' currently have to their primary foraging destination, Estero Bay, is maintained and is not hindered by the project.

4.4.8 Establishment of Educational Programs: Educational programs will be established for local homeowners and site users (golfers, Hyatt resort guests, other people utilizing the Eco-Park). The objectives of such programs will be to :a) inform citizens of local, state, and federal laws protecting eagles and other wildlife, b) identify ways for citizens to protect eagles from disturbance, and c) inform citizens of the habitat management plan for the Pelican Landing Eco-Park.

#### 4.5 Proposed Post-Development Conditions and Eco-Park Configuration

Figure 3 shows the proposed post-development conditions and configuration of the Pelican Landing Eco-Park. It should be noted that the Eco-Park boundary has been modified (on paper only) compared to the 1994 BEMP. The boundary reconfiguration is due to the acquisition or planned acquisition of adjacent parcels, changes in the site development plan, and the desire to utilize an ecosystem approach in configuring the Eco-Park. *[All of the preceding moved to Section 4.1.1]*

WilsonMiller is currently coordinating with the FFWCC to gain approval for the proposed reconfiguration of the Eco-Park boundary. Also, the parcel located to the east of the existing Eco-Park ("Skebe" parcel) is currently under contract but has not yet been acquired. Thus, post-development conditions proposed herein are tentative pending approval of the reconfiguration by the FFWCC and the subsequent acquisition of the Skebe parcel. Upon approval of the proposed Eco-Park boundary reconfiguration by the FFWCC, the existing conservation easement for the Eco-Park will be revised to conform to the new boundary.

WCI Communities, Inc. reserves the right to modify the Plan, consistent with USFWS management recommendations and upon concurrence by the USFWS, as the needs of the project change, and as the location or status of the nest changes.

## 5.0 References

Florida Department of Transportation. 1985. Florida Land Use, Cover and Forms Classification System. Procedure No. 550-010-001-a, Second Edition. 81 pp.

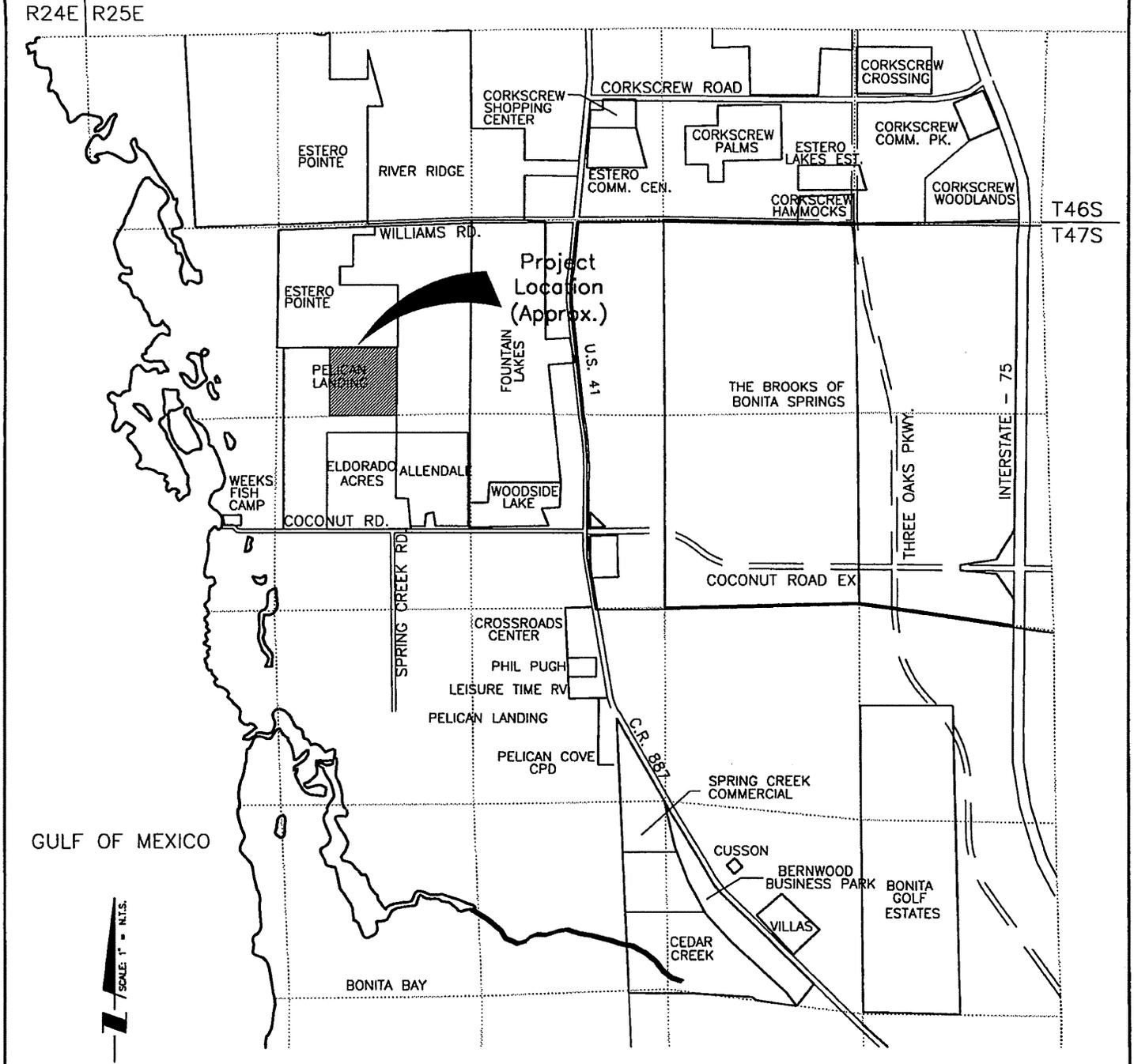
Heald and Associates, Inc., 1994a. Management Plan for the Southern Bald Eagle in the Vicinity of the Pelican Landing DRI, Lee County, Florida. 3 p. + attachments.

Heald and Associates, Inc., 1994b. Observations from January-May 1994 on the Flight Patterns of Southern Bald Eagles from Nest Tree LE 28A on the "L&L Tract", Pelican Landing, Lee County, Florida. 7 p.

KBN Engineering and Applied Sciences, Inc., 1995. Bald Eagle Management Plan for Nest LE-28A; Estero Pointe Project. 20 p.

U.S. Fish and Wildlife Service. 1987. Habitat Management Guidelines for the Bald Eagle in the Southeastern Region. U. S. Department of the Interior. 9 pp.

# LOCATION MAP



PROJECT: *Pelican Landing DRI Bald Eagle Management Plan*

APPLICANT: *WCI Communities, Inc.*

## WilsonMiller

*Planners • Engineers • Ecologists • Surveyors • Landscape Architects • Transportation Consultants*

*WilsonMiller, Inc.*

*Naples • Fort Myers • Sarasota • Bradenton • Tampa*

*3200 Bailey Lane, Suite 200 • Naples, Florida 34105-8507 • Phone 941-649-4040 • Fax 941-643-5716 • Web-Site www.wilsonmiller.com*

WilsonMiller, Inc. - FL L&E LC-000070

FLA. REG. #		
COUNTY:	<i>LEE</i>	DATE: <i>Sept. 21, '99</i>
SEC:	<i>4,5,8,9 47S</i>	REV NO:
TWP:	<i>25E</i>	
PROJECT NO.	<i>F0250-024-006</i>	
DRWN BY/EMP NO.	<i>M.W.L./1260</i>	FILE NO: <i>C-0250-31</i>
		SHEET NO: <i>1</i> OF <i>4</i>



**LEGEND**

[Pattern]	PROPOSED ECO-PARK
[Pattern]	PROPOSED WETLAND PRESERVE IN ECO-PARK
[Pattern]	PROPOSED WETLAND PRESERVE
[Pattern]	MAN-MADE LAKES
[Pattern]	GOLF COURSE ROUGH AREAS WHERE MAJORITY OF SANDY WILL BE RETAINED
[Pattern]	MAN-MADE MARSHES



APPROXIMATE USFWS-APPROVED EAGLE PROTECTION ZONES FOR ADJACENT WEST BAY CLUB DEVELOPMENT

SCALE: 1" = 500'

**Wilson Miller**  
 Planners • Engineers • Ecologists • Surveyors  
 Landscape Architects • Transportation Consultants  
 Wisconsin, Inc.  
 2000 Bay View Lane, Suite 200, Madison, Wisconsin 53705  
 Phone: 608-261-4000 • Fax: 608-261-5716 • Web: www.wilsonmiller.com

**PLANNING 3**  
 Proposed Configuration of Eco-Park, Eagle Protection Zones, and Adjacent Development

Prepared by: K.L.E./J.M.S.  
 Drawn by: K.L.E./J.M.S.  
 Checked by:  
 Approved by:  
 Date: Sept. 21, '99  
 Scale: 1" = 500'  
 P/N: 0250-021-006-0000  
 T/S: C-0250-31

Sheet 3 of 4

SEE SHEET 4 OF 4 FOR  
 FLUCCS LEGEND

## Pelican Landing Eco-Park FLUCCS Legend

FLUCCS	FLUCCS Description
321	Palmetto prairie
411	Pine flatwoods
411E1	Pine flatwoods, 10-24% exotics
411E2	Pine flatwoods, 25-49% exotics
411E3	Pine flatwoods, 50-75% exotics
411/321	Pine flatwoods/Palmetto prairie
415	Scrubby flatwoods
416H	Pine flatwoods/Graminoid understory-hydric
421	Xeric oak
4201	Mesic oak, high density shrub layer
4211	Xeric oak, high density shrub layer
422	Brazilian pepper
422H	Brazilian pepper-hydric
423E1	Pine-cabbage palm-oaks, 10-24% exotics
424	Melaleuca
424H	Melaleuca-hydric
427	Live oak
427E2	Live oak, 25-49% exotics
427E3	Live oak, 50-75% exotics
428E3	Cabbage palm, 50-75% exotics
513	Ditch
524	Lakes less than 10 acres which are dominant features
600	Shrub wetland
616	Inland pond
617E4	Mixed wetland hardwoods
621	Cypress
6412	Cattail
643	Wet prairie
740	Disturbed land
743	Spoil area

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			SHEET NO:
			4 of 4

**APPENDIX A**

**1994 Version of Bald Eagle Management Plan (Heald, 1994a, 1994b)**

*Heald and Associates, Inc.*

7550 S.W. 136 Street  
Miami, Florida 33156  
305-253-5343

Management Plan for the Southern Bald Eagle  
in the Vicinity of  
The Pelican Landing DRI, Lee County, Florida  
(Revised to Reflect Renewed Nesting Activity)

Prepared for  
Westinghouse Bayside Communities, Inc.

by  
Dr. Eric J. Heald, Ph.D.  
Heald and Associates, Inc.

May, 1994

### Introduction

Nest-building by bald eagles is known to have occurred at 5 locations (trees) within or in the vicinity of the Pelican Landing DRI project boundaries over the past decade. Some confusion has existed in connection with the locations and official designations of these (see sections of ADA, ADA Sufficiency Response, and pertinent correspondence appended to Draft Management Plan, June 1993).

The nest trees (sites, territories) are listed by Florida Game and Fish Commission (FGFC) as follows, and their current status is described:

#### LE 08

The nest no longer exists, having disintegrated over the past several years. The nest tree, a cypress, remains, and a pair of eagles was sighted at the tree during a December 3, 1992 overflight by FGFC.

#### LE 08A

This nest is no longer in existence (FGFC, Dec., 1993). It was occupied by great-horned owls during the 1991-1992 and 1992-1993 breeding seasons. It is addressed in a Lee County Rezoning Resolution (#Z-88-034) for San Marino Pines (March 18, 1988) in which a 900' buffer zone was established in a semi-circle to the west of the nest tree.

#### LE 28

Only a few twigs remain. It has been unoccupied since the 1986/1987 breeding season.

#### LE28A

The nest is located in a large pine tree on the western margin of Half-way Creek. It was occupied during the 1990-1991 breeding season, and was reported by Mr. Paul Schultz (FGFC) as occupied in December, 1993. A field representative of United States Fish and Wildlife Services (USFWS) inspected the preserve area and the newly-occupied nest tree (LE-28A) in January, 1994. On January 31, 1994 USFWS signified approval of the Management Plan (see enclosed letter from Mr. Peter Plage to Mr. Dan Trescott), and requested a study to determine flight lines during the current nesting season. This has been conducted (copy appended).

#### LE-28B

This recently constructed nest was occupied during the 1992-1993 breeding season and contained an unfledged eaglet at the time of FGFC overflight on March 14, 1993. The eaglet was no longer in evidence on overflights conducted by Heald and Associates on May 3

and May 20, 1993. It was not used during the 1993-1994 breeding season (Schultz, FGFC, Pers. Comm.).

#### Management Strategies

Nest tree ('territory') 28A on the western margin of Half-way Creek lies within approximately 120 contiguous acres of upland and wetland communities to be preserved within the Pelican Landing Development. It is located almost at the northern boundary of the project. A proposed two lane access road to single family homesites lies, at its closest point, approximately 1300' from the tree. The nest tree, and other potential nest, roost, or perch trees in close proximity within the preserve, will remain available for any future nesting activities. The birds presumably feed primarily in the Estero Bay system which they reach either by flying over the proposed single-road alignment of single family residences and the existing fish camp, or by flying over undeveloped uplands and wetlands immediately north and northwest of the nest tree (see appended copy of recorded flight patterns).

USFWS has determined that the primary zone should be established at a radius of  $\pm 1300'$  from the nest tree. Human activities within the preserve will be limited to pedestrian pathways, with interpretive/educational signage. Pathways will not impinge upon a 750' radius around the nest tree, which is well-screened by dense oaks. The nest tree and all other potential nest trees within the preserve will be monitored twice a month from October through April for a period of five years to determine if nesting is occurring. If the nest is occupied, access to all pathways within the  $\pm 1300'$  primary zone will be prohibited until nesting activities are reliably reported to have ceased. Appropriate signs will be installed at the barricaded path entrances. No habitat management activities, such as selective clearing or prescribed burning, will be conducted during the active nesting season and no construction of road or residences will be permitted within a 2500' radius of the nest tree during this period.

Bayside Improvement District will own the preserve area, known as the Pelican Landing Eco-Park, and will be responsible for all management and maintenance, in accordance with the approved Development Order.

Nest tree 28B lies off the property, approximately 1800-2000' west of the northwest boundary of the project. The birds feed primarily in the extensive Estero Bay system to the west of the nest tree. Approximately 80 acres of uplands plus approximately 42 acres of freshwater wetlands within the northwestern portion of the project will be preserved; and are thus available as potential additional feeding sites. Scattered large pines within the upland preserve will also remain available as potential nesting sites. Since applicant does not own the nest tree site or the lands surrounding it, further management practices are not feasible. Monitoring of potential nest trees within the preserve area will be

conducted as described above (28A), and appropriate measures will be taken to comply as far as practical with established guidelines if the birds relocate onto the subject property.

The remaining nest trees or territories (28, 08 and 08A) are located north and east of the project site. The birds, should they resume residence or nesting, will be unaffected by project activities. Extensive wetland areas preserved to the south within the project will remain available as potential feeding areas. Florida Game and Fish Commission and U.S. Fish and Wildlife Service will be consulted on appropriate actions if the eagles are reported to relocate to trees closer to the project than at present.

**Attachments**

Observations From January - May, 1994  
on the Flight Patterns of Southern Bald Eagles  
from Nest Tree LE 28A on the "L&L Tract",  
Pelican Landing, Lee County, Florida

Prepared for  
Westinghouse Bayside Communities, Inc.

by  
Dr. Eric J. Heald, Ph.D.  
Heald and Associates, Inc.

May, 1994

### Introduction

As an integral part of a Development of Regional Impact (DRI), Westinghouse Bayside communities (WBC) in 1992 designated a contiguous area of ±120 acres, including ±78 acres of xeric oak scrub and pine flatwoods, for preservation. This area, known as the "L&L Tract" and latterly as the "Pelican Landing Eco-Park", lies north of Coconut Road in Southern Lee County and constitutes a portion of the Planned Community of Pelican Landing (Figure 1). The preserved tract includes several large slash pines, one of which contains the nest of a southern bald eagle. The nest tree, designated LE-28A by Florida Game and Fish Commission (FGFC) was occupied during the breeding season of 1990-1991 and was not used during the subsequent two seasons.

In accordance with requests by several regulatory agencies during the Application for Development Approval review process, a Management Plan for the southern bald eagle was prepared and submitted for review to U.S. Fish and Wildlife Service (USFWS) in June 1993. While the Management Plan was under review the nest was reported by FGFC in December, 1993 to be occupied by a pair of eagles (Paul Schultz, FGFC; Pers. Comm.). It is assumed, though not confirmed, that the eagle pair currently occupying this nest utilized nest LE 28B during the 192-1993 breeding season. In January 1994, USFWS, while approving the Management Plan as submitted, requested that prevalent flight patterns of the birds occupying nest LE-28A be documented to assist further review. At the request of WBC, Dr. Eric Heald of Heald and Associates (H&A) conducted the field observations reported below.

### Methods

The slash pine containing the nest stands immediately adjacent to the western margin of Halfway Creek (Figure 2) and from most angles is effectively screened from view beyond a distance of 200' to 600' by pines, dense scrub oak and tall *Lyonia* spp. During mid-late January, 1994 several potential observation stations were tried before a satisfactory station (see Figure 2) was chosen. With the exception of two flights recorded on January 19, 1994 all observations were conducted from this station. Observations were conducted on 25 separate days between January 19 and May 19. Table 1 gives dates, hours of observation, basic climatic conditions and miscellaneous observations.

Activities at or in the immediate vicinity of the nest were observed through binocular field-glasses. Outbound flights were monitored with or without field-glasses until visual contact was lost. The efficacy of tracking varied according to pattern of flight on departure from nest tree, direction of flight, and altitude assumed by the bird during flight. Inbound flights (returns) were sometimes not detected until the bird was within 200' of the nest tree, and are thus considered a less reliable indication of flight patterns.

**FIGURE 1**  
**Location of the "L&L Tract".**

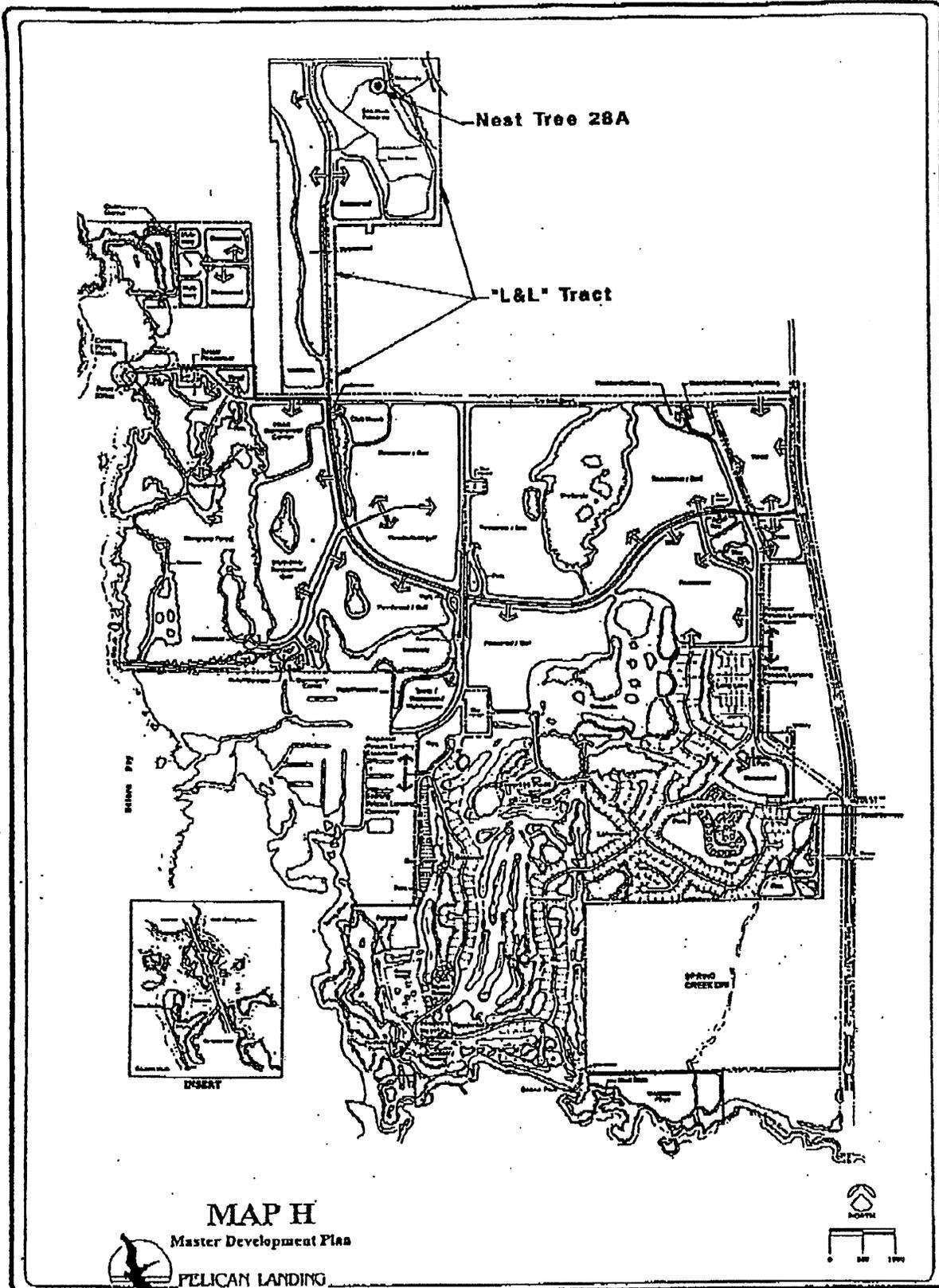
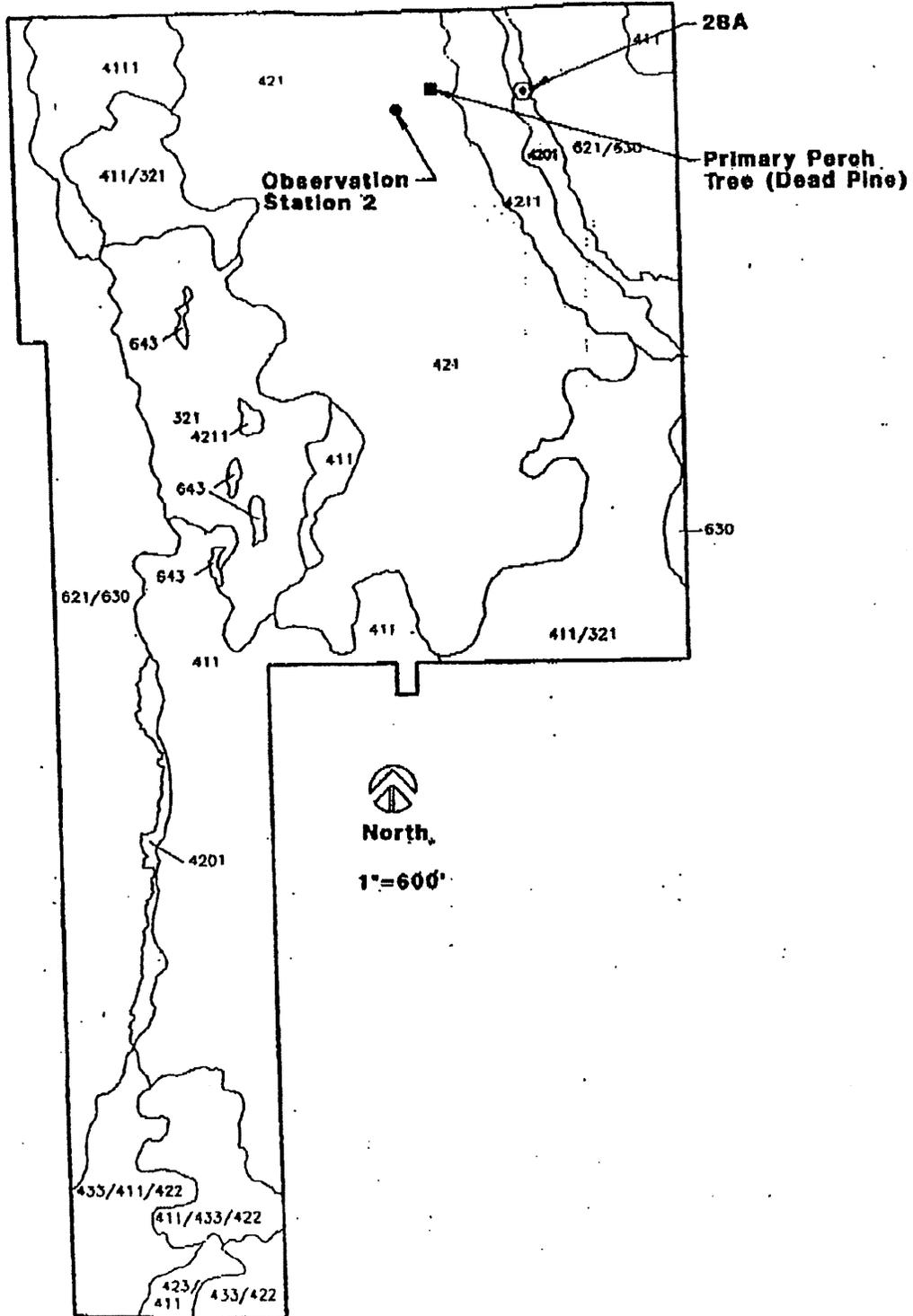


TABLE 1. Observations January 19 to May 19 1994

DATE	TIME		FLIGHTS		SKY	APPROX WIND (approx)			COMMENTS
	ARR	DEP	OUT	IN**		TEMP	DIR	MPH	
1/19	930	1630	2	-	Clear	70	NE	<5	4 stations occupied
1/31	1420	1730	1	-	Pt. Cloudy	70	ENE	<5	Station on Figure 2
2/01	0800	1140	2	1	Pt. Cloudy	65	E	5	-
2/01	1425	1720	1	1	Cloudy	65	E	<5	-
2/02	1300	1700	-	-	Cloudy	50	NE	<5	Drizzle/rain
2/03	1030	1515	1	1	Clear	50	SE	10	Cold
2/08	1600	1800	1	1	Pt. Cloudy	75	SW	10	-
2/09	0800	1540	1	-	Clear	75	SW	15	-
2/10	0730	1005	-	1	Clear	70	SE	0-10	Gusty Winds
2/18	1410	1615	1	-	Cloudy	65	ENE	10	-
2/17	0800	1000	-	-	Pt. Cloudy	70	E	20	Very windy
2/22	1550	1705	-	-	Pt. Cloudy	75	SE	5	-
2/23	1520	1900	2	1	Clear	80	SW	5-20	Gusty winds; eaglet observed
2/24	0800	1730	2	2	Cloudy	70	NONE	NONE	Eaglet observed
3/08	1100	1330	1	-	Pt. Cloudy	80	NE	5	Eaglet observed
3/09	0700	1100	-	-	Pt. Cloudy	75	ENE	5-10	-
3/12	1600	1745	4	2	Clear	75	E	10-15	Eaglet observed
3/13	1130	1610	4	2	Clear	80	SE	<5	Eaglet exercising wings
3/14	1000	1250	4	2	Cloudy	75	NONE	NONE	Eaglet on edge of nest
3/15	1130	1520	1	2	Clear	80	E	<5	Eaglet - edge of nest; exercising wings
3/28	1300	1435	-	-	Clear	80	NE	15-20	Eaglet on adjacent branch
4/01	1500	1755	1	-	Clear	80	SW	5	Eaglet - edge of nest; exercising wings
4/07	1600	1735	-	-	Clear	75	W	<5	Eaglet in nest
4/13	1215	1430	-	-	Pt. Cloudy	80	WSW	15	Eaglet moving between branches
5/18	1605	1755	-	-	Clear	85	SE	<5	No birds at nest
5/19	0940	1130	-	-	Pt. Cloudy		ESE	<5	No birds at nest

\*\* If sighted further than approximately 500' from nest tree

**FIGURE 2**  
**FLUCCS Vegetation Map Showing Location of Nest Tree**  
**LE 28A, Observation Station, and Perch Tree.**



### Observations

Figure 3 and Table II reflect behavior on 44 observed flights between January 19 and May 19. Flight directions in Figure 3 are portrayed within 45° compass quadrants centered upon N, NW, NE, etc. The observed number of flights in either direction within a specific quadrant is indicated along each vector arrow. Inbound flights are only recorded if the bird was sighted and tracked from sufficient distance from the nest tree to be considered a reliable indicator of the direction of approach.

Although no distinction is made in Figure 3 between the flight patterns of male and female birds, the detailed flight patterns of the two sexes differed significantly. The larger bird, presumably the male, frequently flew to an almost dead pine approximately 400' WNW of the nest tree (Figure 2) and there remained for 1-5 minutes before departing westward or northward. The (smaller) female was never observed to do this. Further, all 6 flights recorded in the northeast to south quadrants were made by the female bird.

Flight activity observed from January 19th to May 19th comprised 44 events/flights. A single chick hatched in mid-February, at which point flight activity increased significantly. Although increased in frequency, flights from mid-February onward did not deviate appreciably from previously observed directional patterns.

From mid-March to mid-April, the eaglet was frequently observed exercising wing muscles and hopping between branches, but was never observed in flight. The nest was not visited from mid-April to mid-May, by which time it appeared empty.

As Table II shows, 84% of all flights recorded inbound or outbound fell within the northern, northwestern and western quadrants. The single flight to the southwest was in pursuit of a black vulture or a turkey vulture by the male bird. The female initially gave chase but returned to the nest tree from approximately  $\frac{1}{2}$  mile out.

### Conclusions

Almost 85% of all recorded flights were to or from the northwest quadrant. Only 6% lay within quadrants which would lead to existing or proposed Pelican Landing development. The findings thus support the USFWS conclusion that the proposed development would have no appreciable impact on nesting activities at nest tree LE-28A.

**FIGURE 3**  
**Recorded Flights to and from Nest Tree. Number**  
**of Flights Depicted on each Vector Arrow.**

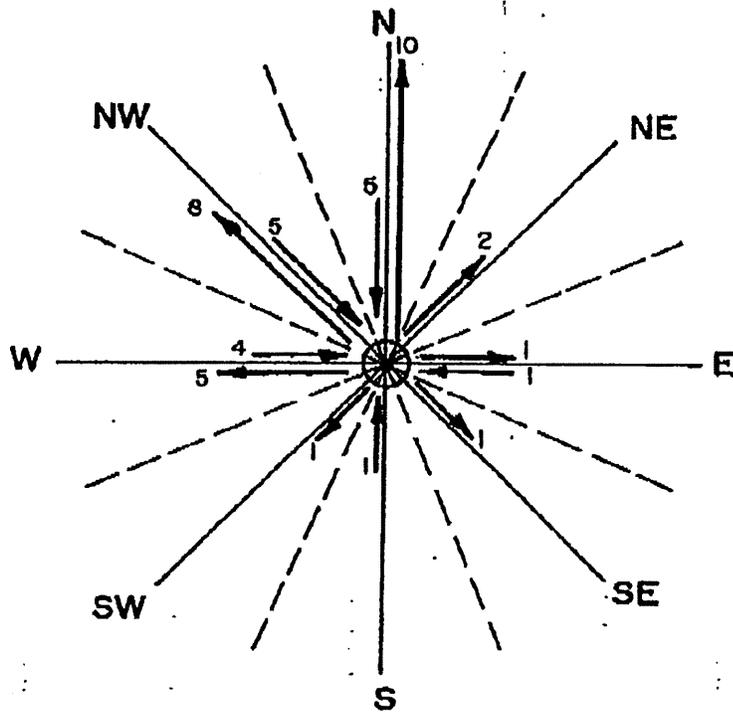


TABLE II. Summation of Observed Flight Directions, Jan. 19 - May 19, 1994

DIRECTION	NO. OF FLIGHTS		TOTAL	% OF TOTAL
	OUT	IN**		
N	10	5	15	34.1
NE	2	-	2	4.5
E	1	1	2	4.5
SE	1	-	1	2.3
S	-	1	1	2.3
SW	1	-	1	2.3
W	5	4	9	20.5
NW	8	5	13	29.5

\*\* If sighted further than 500' from nest tree.

**APPENDIX B**

**Pelican Landing DRI Eco-Park Habitat Management Methods**

## PELICAN LANDING DRI ECO-PARK HABITAT MANAGEMENT METHODS

### Introduction

The (existing) Pelican Landing DRI "Eco-Park" encompasses approximately 78 acres in the northeast corner of the DRI property. The Eco-Park consists of 65 acres of high quality xeric oak/scrub habitat and 13 acres of pine flatwoods and was established primarily as a gopher tortoise (*Gopherus polyphemus*) preserve. A bald eagle's nest (nest #LE-28A) is present near the northeast corner of the Eco-Park. The majority of the Eco-Park lies within protection zones surrounding this nest and special consideration has been given to minimize disturbance to the nest from habitat management practices.

The Eco-Park is bordered by a cypress/hardwood wetland system (Halfway Creek) to the east, native uplands and wetlands to the west, and residential subdivisions to the north and south. The Eco-Park has been placed under a conservation easement granted to the Florida Game and Fresh Water Fish Commission (now the Florida Fish and Wildlife Conservation Commission - FFWCC) and is managed as outlined below.

Maintenance of the Eco-Park is acknowledged to be an important component of assuring the long term viability of scrub habitat, the existing gopher tortoise population, and the bald eagle's nest. The legal entity responsible for the maintenance of the Eco-Park will be WCI Communities, Inc., or its assignee.

### Management Methods

The following is a summary of the management methods to be employed in the Eco-Park:

1. Maintenance activities will be conducted in perpetuity and will involve a combination of mechanical treatment, selective hand clearing, and/or prescribed burning. Mechanical treatment methods would include mowing and bush hogging which would be conducted when daytime temperatures are below 75 degrees F (periods of reduced tortoise activity). Hand pruning or clearing of midstory vegetation could occur as necessary to control overgrowth. Removal of all or parts of larger trees may be performed in order to increase or maintain sunlight penetration to ground level, except in the Primary Protection Zone of the bald eagle nest. No maintenance activities will be conducted within the Primary Protection Zone of eagle nest LE-28A during the active nesting season.

Preferred maintenance practices per habitat type are as follows.

#### A. *Xeric Scrub*

- Hand-trim to a height of 6-9 feet at 5-year intervals or as deemed necessary.
- Excessive layers of shrubby growth will be removed by hand at 3-year intervals if necessary.
- Prescribed burns may be conducted at 8-year intervals if judged feasible and necessary. Any burning will be conducted by an experienced control-burn contractor. Burning will adhere to applicable regulatory guidelines and will be coordinated with the appropriate Fire District and the State of Florida Division of Forestry. Steps taken to protect the eagle nest or perch trees will include hand raking or clearing to minimize fuel in the vicinity of the tree prior to burning.

- No mowing or raking will be performed in xeric scrub areas.
- No burning will take place during the eagle nesting season in either the Primary or Secondary Protection Zones surrounding the eagle nest.

*B. Pine Flatwoods and Other Upland Habitat Types*

- Bush hogging and/or mowing at 3-year intervals if judged necessary to maintain a minimum of 30% total ground area clear of saw palmetto or other shrubs.
- Prescribed burning will be conducted as in xeric scrub habitat, but at an approximate 3-year interval if judged feasible and necessary.
- Exotic/nuisance plant species will be removed by hand.

*C. Wetland Habitats*

- Wetland habitats will be initially maintained by removing exotic and nuisance plant species (primarily melaleuca, Brazilian pepper, and downy rose myrtle). Hand removal will be utilized whenever feasible. In certain areas of heavy infestation, mechanical clearing may be necessary. Any mechanical clearing will first be approved by the FFWCC and will be conducted so as to minimize disturbance to eagles during the active nesting season.
  - Following initial removal of exotic/nuisance species, wetland habitats will be maintained in perpetuity to suppress re-infestation and maintain exotic/nuisance plant species abundance at low levels. Ongoing control of undesirable species will be via directed herbicide applications, physical uprooting, or a combination of these methods.
  - During prescribed burning of upland areas of the Eco-Park, appropriate steps will be taken to insure that site wetlands are not unduly damaged by fire (e.g., installing fire breaks, back-burning, executing burns under climatic conditions when wetland vulnerability to fire is minimized, etc.).
2. Maintenance activities will be initiated upon recording of the conservation easement for the Eco-Park and every other year thereafter.
  3. A locally based nuisance-wildlife expert will be engaged as necessary to remove feral hogs from the Eco-Park.
  4. If deemed necessary by FFWCC, native plant species of value to gopher tortoises will be used to supplement existing vegetation. Species used would include, but not be limited to, dwarf live oak, gopher apple, buckthorn, lyonia, gallberry, tarflower, and prickly pear cactus.
  5. Prior to scheduled maintenance activities (every other year), a site walk and habitat evaluation will be performed by a qualified biologist to determine maintenance requirements. Potential need for supplemental foraging plant material plantings will also be evaluated.
  6. Brochures containing information on gopher tortoise and bald eagle habitat, behavior and protection measures will be developed and made available to local homeowners and site users (golfers, Hyatt resort guests, other people utilizing the Eco-Park).

7. Recreational activities will be restricted to specific pedestrian trails. These will be established subject to FFWCC approval during final site planning. No designated picnic areas, biking trails, horse trails or interpretive facilities (other than approved signs, vita trails, and bird viewing blinds) will be allowed. The vita trails will not be paved, hardened or made impermeable. The location and design of all facilities will be reviewed and approved prior to construction by the FFWCC. Educational signage will be placed along the trails.
8. Human access will be restricted by appropriate signage within the primary zone of the eagle nest during the nesting season. During the non-nesting season, pedestrian trails or other human use will be restricted to a minimum of 500' from the nest tree. The trail will be barricaded off by a cable across the path.
9. Exotic vegetation (primarily melaleuca, Brazilian pepper and downy rose myrtle) will be removed from protection areas in perpetuity.

**EXHIBIT 3**

**AERIAL WITH FLUCFCS AND BALD EAGLE NEST**



**EXHIBIT 4**

**AERIAL WITH SITE PLAN, BALD EAGLE NEST,  
CONSERVATION AREA, AND SURROUNDING LAND USES**



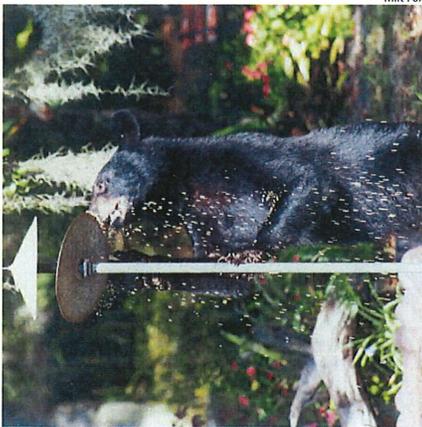
- LEGEND:**
- CONSERVATION AREA (143.95 AC ±)
  - BALD EAGLE NEST
  - 330' RADIUS
  - 660' RADIUS

**NOTES:**  
 AERIAL PHOTOGRAPHS WERE ACQUIRED THROUGH THE LEE COUNTY PROPERTY APPRAISER'S OFFICE WITH A FLIGHT DATE OF JANUARY - MARCH 2021.  
 PROPERTY BOUNDARY PER WALDROP ENGINEERING, P.A. DRAWING NO. ACAD-ACAD-7042030BASE.DWG DATED AUGUST 6, 2021.  
 SITE PLAN PER WALDROP ENGINEERING, P.A. DRAWING NO. 7042030BASE (2021-09-17) DWG DATED SEPTEMBER 17, 2021.  
 \*INCLUDES FUTURE GOLF CART PATH AND BRIDGE.

DRAWING NO. 20LBR3290		DRAWING NO. 20LBR3290	
SHEET NO. EXHIBIT 4		SHEET NO. EXHIBIT 4	
<b>PASSARELLA &amp; ASSOCIATES</b> <small>INCORPORATED</small>			
<b>RAPTOR BAY GOLF COURSE RENOVATION</b> <b>AERIAL WITH SITE PLAN, BALD EAGLE NEST, CONSERVATION AREA,</b> <b>AND SURROUNDING LAND USES</b>			
DATE	DESIGNED BY	DATE	DATE
	R.F.	06/29/21	06/29/21
DATE	DESIGNED BY	DATE	DATE
	B.T.	06/29/21	06/29/21
DATE	DESIGNED BY	DATE	DATE
	S.J.	06/29/21	06/29/21
13620 Metropolis Avenue Suite 200 Ft. Myers, FL 33912 Phone (239) 274-0067 Fax (239) 274-0069			

**APPENDIX J**

**FLORIDA BLACK BEAR INFORMATIONAL PAMPHLET**



Milt Fox

### Discouraging bears from visiting your home

Properly storing or securing residential garbage and other attractants is a proven method of discouraging bears and preventing bear conflicts around homes, farms and neighborhoods. The following items attract bears and should be protected by an electric fence, wildlife resistant container, or stored in a secure place, such as a garage or sturdy shed:

- Trash and recycling containers
- Bird and squirrel feeders
- Game feeders
- Pet foods and bowls
- Barbeque grills and smokers
- Pets and small livestock
- Livestock feed
- Compost piles
- Beehives
- Fruit and nut-bearing trees and shrubs

Funds from the "Conserve Wildlife" license plate help support efforts to reduce human-bear conflicts. Buy one today at your local tax collector's office or online at [BuyAPlate.com](http://BuyAPlate.com).

### Secure common bear attractants

- Use electric fencing to protect gardens, compost piles, apiaries, fruit trees and livestock.
- Store garbage and recyclables in bear-resistant containers or in a secure area until the morning of pick up.
- Feed pets indoors or bring food dishes (even if empty) inside before dark.
- Store pet and livestock feed in bear-resistant containers or inside a secure area.
- Remove bird and wildlife feeders. Ensure the area is free of all seed, corn, or other wild animal feed.
- Keep gardens and fruiting trees and shrubs tidy. Remove rotten fruit and harvest ripe nuts, fruits and vegetables.
- Clean meat smokers and barbeque grills with a degreasing detergent. Properly dispose of food remnants after each use.

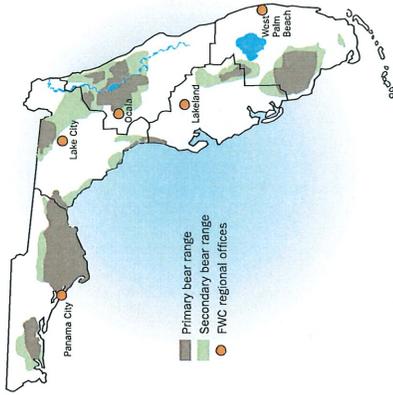
Learn more about black bears with the Florida Black Bear Curriculum Guide. The guide is designed to educate teachers and students in 3rd to 8th grade and offers a comprehensive series of lessons on Florida's black bear.

To get tips on how to secure bear attractants, watch videos about bears or how to install electric fencing, and learn more about bear-resistant containers, visit [MyFWC.com/Bear](http://MyFWC.com/Bear).



Rick Sinnott

### Bear range in Florida



# A guide to living in bear country



If you are experiencing bear problems, please contact the nearest FWC regional office.

- North Central, Lake City 386-758-0525
- Northeast, Ocala 352-732-1225
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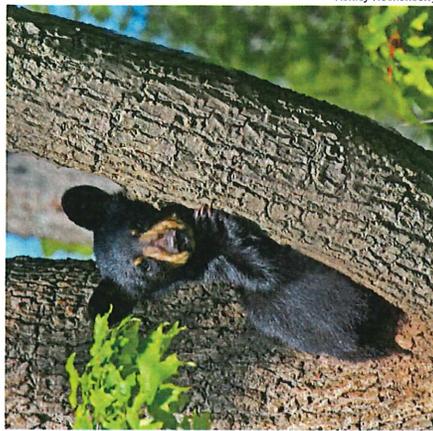


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### If you live in Florida, you should know

Florida black bear populations have been recovering from historically low numbers in most areas of the state. At the same time, the human population is rapidly expanding in and around bear range. As a result, bears and humans are encountering each other more than ever.

Calls to the Florida Fish and Wildlife Conservation Commission (FWC) about human-bear encounters have increased from 1,000 in 2001 to over 4,000 in 2010. The most common calls refer to bears in yards and getting into garbage.

The mere presence of a black bear does not represent a problem. In fact, living in bear country can provide unique and rewarding experiences for residents.

While feeding bears is illegal in Florida, bears are still often fed by humans, either intentionally or unintentionally. When black bears have access to pet food, garbage, birdseed, livestock feed or other human-provided items, they quickly learn to associate people with food. Bears that have become

too comfortable around people are more likely to be killed, either by vehicle collisions, illegal shooting, or as a result of bear management actions.

People ask why problem bears can't simply be relocated to a "wild area where they won't bother anyone." Unfortunately, areas large and remote enough for bears to avoid people are rare in Florida. Also, most relocated bears typically leave the new area, either to return to their original home or to leave an area already occupied by other bears. Some bears will wander through unfamiliar areas and cross busy roads, creating a danger to the bear and to motorists. In addition, bears remaining in the relocation area often exhibit the same, unwanted behavior, thus shifting the problem to a new location. As a result, relocation is not a desirable or effective solution to bear conflicts. Wildlife biologists can provide technical advice to residents who live in bear country to help them take actions to discourage bears from becoming a problem. The FWC is committed to addressing the safety concerns of residents and visitors while ensuring the long-term well-being of black bears.

### If a bear comes into your yard

If you encounter a black bear at close range, remain standing upright, back up slowly and speak to the bear in a calm, assertive voice.

- Do not intentionally feed or attract bears. If a bear is eating something on your property, take note of what it is and secure it after the bear has left the area.



Charles Towne



Ashley Hockenberry

- Never approach or surprise a bear. Keep as much distance between you and the bear as possible.
- Make sure you are in a secure area and the bear has a clear escape route to leave the area - then yell, bang pots and pans, or use an air horn to scare the bear away.
- Do not turn your back, play dead or run from a black bear. Back away slowly into a house, car or building.
- Report any bear threatening the safety of humans, pets or livestock, or causing property damage to the FWC (see back panel).
- Warning! It is illegal to injure or kill black bears under Florida state law. If you are found guilty, you could face fines and/or jail time.

Climbing trees is a bear's natural escape route. If the bear climbs a tree, keep people and pets away. The bear will come down the tree and leave when it feels safe, usually after dark.

### Did you know?

Black bears are shy animals and generally not aggressive towards people. When a bear stands on its hind legs, it is merely trying to get a better view, rather than acting in a threatening way. Black bears may huff, snap their jaws, swat the ground or "bluff charge" when cornered, threatened or caught stealing food. Stand your ground and then slowly back away. Always respect bears - they are large and powerful wild animals and can act unpredictably. Bears used to getting food from humans may lose their natural fear of people and are more likely to damage property or become a safety threat.

### The bear facts

Black bears are the only species of bear in Florida and once roamed the entire state.

- FWC biologists estimate there are 2,500-3,000 black bears in Florida.
- Florida bears are generally black with a brown muzzle and may have a white chest marking called a blaze.
- Adult black bears typically weigh between 150 to 400 pounds; males are usually larger than females.
- Female bears have their first litter at about 3 1/2 years of age and generally have one to three cubs every other year.
- In Florida, the breeding season runs from June to August and cubs are born in late January or early February.
- Bears of all ages are excellent climbers and will climb trees when they are frightened or looking for food (e.g., acorns).
- About 80 percent of a black bear's diet comes from plants (e.g., fruits, nuts, berries), 15 percent from insects (e.g., termites, ants, yellow jackets) and 5 percent from meat (e.g., opossums, armadillos, carrion).

**It is illegal to intentionally place food or garbage out that attracts bears and causes conflicts. Anything that attracts dogs, cats or raccoons also will attract bears!**



**RAPTOR BAY GOLF COURSE RENOVATION  
BALD EAGLE MANAGEMENT PLAN  
FOR BALD EAGLE NEST LE-28A  
LEE COUNTY, FLORIDA**

**July 2022**

Prepared For:

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Exhibit "E"

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## 1.0 INTRODUCTION

This Bald Eagle Management Plan (BEMP) has been prepared for Bald Eagle (*Haliaeetus leucocephalus*) Nest LE-28A located on the Raptor Bay Golf Course Renovation project (Project). The Project site is located in Sections 5 and 8, Township 47 South, Range 25 East, Lee County (Exhibit 1). The Project site totals 306.89± acres and is located north of Coconut Road, 1.5± miles west of U.S. 41 and 2.28± miles south of Corkscrew Road. More specifically, the site is bordered to the north by West Bay Club; to the south by El Dorado Acres and Meadowbrook residential developments and Coconut Road; to the east by a Florida Power & Light (FPL) easement, existing conservation lands, and Fountain Lakes and Marsh Landing residential developments; and to the west by existing conservation lands, the Raptor Bay Golf Club, and Hyatt Residence Club.

A BEMP was previously prepared by Wilson Miller, Inc. on March 7, 2000 for Nest LE-28A which depicted the eagle nest tree and two protection zones (Exhibit 2). The two zones consisted of the Primary Protection Zone (PPZ), which ranged from 750 feet to 1,200 feet from the nest tree and the Secondary Protection Zone (SPZ), which ranged from 750 feet to 1,300 feet from the PPZ.

This BEMP has been prepared to update the PPZ and SPZ for Nest LE-28A to 330 and 660 feet, respectively, as currently accepted by Lee County the U.S. Fish and Wildlife Service (USFWS), and the Florida Fish and Wildlife Conservation Commission (FWCC). Additionally, this BEMP is intended to facilitate construction of the Project (i.e., golf course renovation activities) while providing sufficient measures to minimize the potential for adverse impacts to nesting bald eagles. The golf course renovation activities are currently underway in accordance with Lee County Development Order (DO) No. DOS2021-00137.

Nest LE-28A and its proposed protection zones (i.e., 330 and 660 feet) are contained entirely within the Project's conservation area. Therefore, no development activities will occur within 660 feet of Nest LE-28A. Approval of this BEMP will allow the Project's golf course renovation activities to continue throughout the year, as needed.

## 2.0 HABITAT INVENTORY AND MAPPING

Vegetation and land cover mapping for the Project was updated by Passarella & Associates, Inc. (PAI) in August 2021 using a Lee County 2021 rectified aerial. Groundtruthing of the vegetative communities was conducted using the Florida Land Use, Cover and Forms Classification System (FLUCFCS) Level III (Florida Department of Transportation 1999). Level IV FLUCFCS was utilized to denote disturbance and hydrologic conditions. "E" codes were used to identify levels of exotic and invasive vegetation (e.g., Brazilian pepper (*Schinus terebinthifolia*) and melaleuca (*Melaleuca quinquenervia*)). AutoCAD 3D 2021 software was used to determine the acreage of each mapping area, produce summaries, and generate the FLUCFCS map for the Project. An aerial with FLUCFCS and SFWMD wetlands is included as Exhibit 3. According to the FLUCFCS map, the on-site land uses and vegetation communities consist primarily of golf course, pine flatwoods, pine, scrubby flatwoods, melaleuca, shallow ponds, cypress, mixed wetland forest, and freshwater marsh.

A total of 22 land use types were identified on the Project site and are described below.

Golf Course (FLUCFCS Code 182)

This land use type includes the existing Raptor Bay golf course.

Pine Flatwoods, Disturbed (0-24% Exotics) (FLUCFCS Code 4119 E1)

The canopy of this habitat type includes slash pine (*Pinus elliottii*), melaleuca, and scattered cabbage palm (*Sabal palmetto*) and earleaf acacia (*Acacia auriculiformis*). The sub-canopy contains slash pine, melaleuca, twining snoutbean (*Rhynchosia tomentosa*), wax myrtle (*Morella cerifera*), myrsine (*Myrsine cubana*), saltbush (*Baccharis halimifolia*), saw palmetto (*Serenoa repens*), dahoon holly (*Ilex cassine*), gallberry (*Ilex glabra*), Brazilian pepper, muscadine grapevine (*Vitis rotundifolia*), cassia (*Senna pendula*), and scattered cabbage palm and earleaf acacia. The ground cover is dominated by saw palmetto.

Pine Flatwoods, Disturbed (25-49% Exotics) (FLUCFCS Code 4119 E2)

This habitat type is similar to FLUCFCS Code 4119 E1, but with 25 to 49 percent melaleuca in the canopy and sub-canopy.

Pine Flatwoods, Disturbed (50-75% Exotics) (FLUCFCS Code 4119 E3)

This habitat type is similar to FLUCFCS Code 4119 E2, but with 50 to 75 percent melaleuca in the canopy and sub-canopy.

Pine Flatwoods, Disturbed (76-100% Exotics) (FLUCFCS Code 4119 E4)

The canopy of this habitat type is similar to FLUCFCS Code 4119 E3 but contains 76 to 100 percent melaleuca in the canopy and sub-canopy.

Pine, Disturbed (0-24% Exotics) (FLUCFCS Code 4159 E1)

The canopy of this habitat type contains slash pine and scattered earleaf acacia and melaleuca. The sub-canopy contains slash pine, melaleuca, earleaf acacia, and carrotwood (*Cupaniopsis anacardioides*). The ground cover contains bracken fern (*Pteridium aquilinum*), deer-tongue (*Carphephorus paniculatus*), muscadine grapevine, and bushy bluestem (*Andropogon glomeratus*).

Pine, Disturbed (25-49% Exotics) (FLUCFCS Code 4159 E2)

This habitat type is similar to FLUCFCS Code 4159 E1, but with 25 to 49 percent melaleuca and earleaf acacia in the canopy and sub-canopy and cogongrass (*Imperata cylindrica*) in the ground cover.

Pine, Disturbed (50-75% Exotics) (FLUCFCS Code 4159 E3)

This habitat type is similar to FLUCFCS Code 4159 E2 but contains 50 to 75 percent Brazilian pepper in the sub-canopy and scattered caesarweed (*Urena lobata*) and spermacoce (*Spermacoce verticillata*) in the ground cover.

Scrubby Flatwoods, Disturbed (0-24% Exotics) (FLUCFCS Code 4169 E1)

The canopy of this habitat type contains scattered slash pine and sand live oak (*Quercus geminata*). The sub-canopy contains myrtle oak (*Quercus myrtifolia*), Chapman's oak (*Quercus chapmanii*), sand live oak, dahoon holly, rosemary (*Ceratiola ericoides*), gallberry, staggerbush (*Lyonia*

*fruticosa*), fetterbush (*Lyonia lucida*), tarflower (*Bejaria racemosa*), saw palmetto, and widely scattered earleaf acacia. The ground cover contains saw palmetto, muscadine grapevine, prickly pear (*Opuntia* sp.), pawpaw (*Asimina* sp.), and wiregrass (*Aristida stricta*).

Scrubby Flatwoods, Disturbed (25-49% Exotics) (FLUCFCS Code 4169 E2)

This habitat type is similar to FLUCFCS Code 4169 E1 but contains 25 to 49 percent earleaf acacia in the canopy and sub-canopy.

Melaleuca, Hydric (FLUCFCS Code 4241)

The canopy of this habitat type contains melaleuca, dahoon holly, and widely scattered slash pine. The sub-canopy contains melaleuca, Brazilian pepper, dahoon holly, earleaf acacia, slash pine, saw palmetto, and myrsine. The ground cover contains swamp fern (*Telmatoblechnum serrulatum*), royal fern (*Osmunda regalis*), Japanese climbing fern (*Lygodium japonicum*), rosy camphorweed (*Pluchea baccharis*), gulfdune paspalum (*Paspalum monostachyum*), beaksedge (*Rhynchospora microcarpa*), and scattered wiregrass and saw palmetto.

Live Oak, Disturbed (0-24% Exotics) (FLUCFCS Code 4279 E1)

The canopy of this habitat type includes live oak (*Quercus virginiana*) and cabbage palm. The sub-canopy contains cabbage palm, saw palmetto, myrsine, and dahoon holly. The ground cover is open.

Hardwood/Conifer Mixed, Disturbed (0-24% Exotics) (FLUCFCS Code 4349 E1)

The canopy of this habitat type consists of slash pine, live oak, and cabbage palm. The sub-canopy contains saw palmetto. The ground cover is open.

Shallow Pond (FLUCFCS Code 525)

The canopy, sub-canopy, and ground cover of this land use type are mostly open, with the edges containing spikerush (*Eleocharis* sp.), sand cordgrass (*Spartina bakeri*), cattail (*Typha* sp.), pickerelweed (*Pontederia cordata*), arrowhead (*Sagittaria lancifolia*), and leather fern (*Acrostichum* sp.).

Mixed Wetland Hardwoods, Disturbed (0-24% Exotics) (FLUCFCS Code 6179 E1)

The canopy of this habitat type consists of scattered red maple (*Acer rubrum*), Carolina willow (*Salix caroliniana*), and bald cypress (*Taxodium distichum*). The sub-canopy contains buttonbush (*Cephalanthus occidentalis*), Carolina willow, red maple, and pond apple (*Annona glabra*). The ground cover contains swamp fern, maidencane (*Panicum hemitomon*), West Indian marsh grass (*Hymenachne amplexicaulis*), and climbing hempvine (*Mikania scandens*).

Exotics Wetland Hardwoods (FLUCFCS Code 619)

The canopy and sub-canopy of this habitat type contain Brazilian pepper, cassia, and widely scattered cabbage palm. The ground cover is mostly open with Brazilian pepper sprouts.

Cypress, Disturbed (0-24% Exotics) (FLUCFCS Code 6219 E1)

The canopy of this habitat type includes bald cypress, scattered cabbage palm, and widely scattered melaleuca. The sub-canopy contains bald cypress, wax myrtle, buttonbush, pond apple, and scattered Brazilian pepper. The ground cover contains swamp fern, sawgrass (*Cladium*

*jamaicense*), little blue maidencane (*Amphicarpum muhlenbergianum*), and widely scattered West Indian marsh grass.

Cypress, Disturbed (76-100% Exotics) (FLUCFCS Code 6219 E4)

This habitat type is similar to FLUCFCS Code 6219 E1 but contains 76 to 100 percent melaleuca in the canopy and sub-canopy.

Mixed Wetland Forest, Disturbed (25-49% Exotics) (FLUCFCS Code 6309 E2)

The canopy of this habitat type contains cabbage palm, bald cypress, Carolina willow, red maple, oak (*Quercus* sp.), and melaleuca. The sub-canopy contains bald cypress, cabbage palm, Carolina willow, buttonbush, and scattered pop ash (*Fraxinus caroliniana*) and Brazilian pepper. The ground cover contains swamp fern, maidencane, sawgrass, and red ludwigia (*Ludwigia repens*).

Mixed Wetland Forest, Disturbed (76-100% Exotics) (FLUCFCS Code 6309 E4)

This habitat type is similar to FLUCFCS Code 6309 E2 but contains 76 to 100 percent melaleuca in the canopy and sub-canopy.

Freshwater Marsh, Disturbed (0-24% Exotics) (FLUCFCS Code 6419 E1)

The canopy and sub-canopy of this habitat type contain Carolina willow and pond apple on the edges. The ground cover contains cattail, sawgrass, fireflag (*Thalia geniculata*), leather fern, and maidencane.

Disturbed Land (FLUCFCS Code 740)

The canopy of this habitat type includes Brazilian pepper, cabbage palm, buttonwood (*Conocarpus erectus*), Norfolk Island pine (*Araucaria heterophylla*), and scattered earleaf acacia and slash pine. The sub-canopy contains slash pine, cabbage palm, Brazilian pepper, buttonwood, earleaf acacia, Guinea grass (*Panicum maximum*), Norfolk Island pine, false willow (*Baccharis angustifolia*), castor-bean (*Ricinus communis*), and widely scattered saw palmetto. The ground cover contains areas of open sand with dog fennel (*Eupatorium capillifolium*), rustweed (*Polypremum procumbens*), jointweed (*Polygonella polygama*), caesarweed, rosemary, slash pine, bermudagrass (*Cynodon dactylon*), cogongrass, limpograss (*Hemarthria altissima*), wild bush bean (*Macroptilium lathyroides*), wedelia (*Sphagneticola trilobata*), sweetbroom (*Scoparia dulcis*), beggarticks (*Bidens alba*), ragweed (*Ambrosia artemisiifolia*), bushy bluestem, water pennywort (*Hydrocotyle umbellata*), peppervine (*Nekemias arborea*), saltgrass (*Distichlis spicata*), and scattered saw palmetto.

### 3.0 BALD EAGLE BIOLOGY AND PROTECTION

The following information on the biology of the bald eagle is excerpted from the South Florida Multi-Species Recovery Plan (U.S. Fish and Wildlife Service (USFWS) 1999).

Bald eagles are considered a water-dependent species typically found near estuaries, large lakes, reservoirs, major rivers, and some seacoast habitats (Robards and King 1966, King *et al.* 1972, Weekes 1974, Whitfield *et al.* 1974, Gerrard *et al.* 1975, Grier 1977, Anthony and Isaacs 1989, Wood *et al.* 1989). Their distribution is influenced by the availability of suitable nest and perch

sites near large and open water bodies, typically with high amounts of water-to-land edge. Bald eagles demonstrate a remarkable ability to tolerate perturbations to their habitat throughout their range.

Their adaptability to a variety of habitat conditions makes any generalizations about habitat requirements and nesting behavior difficult. Though variable, eagles have basic habitat requirements that must be met in order to successfully reproduce and survive during the winter or non-nesting season. Florida bald eagle nests are constructed in dominant or co-dominant living pines (*Pinus* spp.) or bald cypress (*Taxodium distichum*) and are often located in the ecotone between forest and marsh or water (McEwan and Hirth 1979). Approximately ten percent of eagle nests are located in dead pine trees, while two to three percent occur in other species such as Australian pine (*Casuarina equisetifolia*) and live oak (*Quercus virginiana*). The stature of nest trees decreases from north to south (Wood 1987, Wood *et al.* 1989); and in extreme Southwest Florida, eagles nest in black mangroves (*Avicennia germinans*) and red mangroves (*Rhizophora mangle*), half of which are snags (Curnutt and Robertson 1994). Nest trees in South Florida are smaller and shorter than reported elsewhere; however, comparatively they are the largest trees available (Wood *et al.* 1989, Hardesty 1991). The small size of nest trees in South Florida relative to other nest sites throughout the eagle's range is due to the naturally smaller stature of slash pine (*Pinus elliotti*), loblolly pine (*P. taeda*), longleaf pine (*P. palustris*), and sand pine (*P. clausa*) in South Florida and to the lack of pines in extreme Southern Florida.

Bald eagles are monogamous, and annual courtship behavior reinforces pair bonds (Palmer 1988). Pair bond formation includes dramatic pursuit flights, high soaring, talon locking, and cartwheeling (Johnsgard 1990). Eagles may also fly around the perimeter of their nesting areas, visually communicating their presence and further establishing their territories. Pair bond behavior, as well as territory establishment and defense, probably occur concurrently throughout much of the eagle's range. Successful pair bond ultimately leads to nest site selection and nest construction for newly formed pairs or established pairs without nests. Pairs that have previously nested may repair established nests or construct an alternate nest concurrent with copulation.

Nesting activities generally begin in early September in South Florida, with egg-laying occurring as early as late October and peaking in the latter part of December. Incubation may be initiated from as early as October through as late as March, depending upon latitude. Clutches usually consist of one or two eggs, but occasionally three or four are laid. Incubation takes approximately 35 days and fledging occurs within 10 to 12 weeks of hatching. Parental care may extend 4 to 6 weeks after fledging, even though young eagles are fully developed and may not remain at the nest after fledging (USFWS 1989).

The Florida Fish and Wildlife Conservation Commission (FWCC) documented 88 active bald eagle nesting territories in Florida during their initial surveys of this species in 1973; by 1987, that number had increased to 391 active territories when the USFWS implemented the Habitat Management Guidelines for the Bald Eagle in the Southeast Region (Guidelines) (USFWS 1987). By 1999, the 1,000-breeding pair recovery goal for Florida had been achieved and had increased to 1,511 breeding pairs by 2012 (Brush *et al.* 2012). Peterson and Robertson (1978) reported that historic numbers of breeding pairs of bald eagles in Florida were likely "in excess of 1,000 breeding pairs."

The bald eagle was a federally and state listed “threatened” species that had been protected since the mid-1970s under the Endangered Species Act of 1973 and Chapter 68A-27.004, Florida Administrative Code. Management and recovery efforts for the species generally have included actions to improve reproductive success and survival by 1) reducing levels of persistent organochlorine pesticides, such as Dichlorodiphenyltrichloroethane (i.e., DDT), occurring in the environment; and 2) habitat protection. Habitat protection measures in Florida primarily have focused on the protection of nesting territories through the implementation of the 1987 Guidelines. Recovery goals for the bald eagle have been achieved as a result of these and related management actions throughout the United States, and the USFWS subsequently published a proposed rule in July 1999 to remove the bald eagle in the lower 48 states from the list of threatened or endangered wildlife. The bald eagle was subsequently delisted by the federal government in August 2007 and by the State of Florida in April 2008. The Bald and Golden Eagle Protection Act and Migratory Bird Treaty Act provide continued federal protection for bald eagles. State Rule 68A-16.002 establishes rules for the continued protection and conservation of eagles in Florida.

#### **4.0 DESCRIPTION OF LE-28A**

##### **4.1 Location and Landscape Information**

Nest LE-28A is located in a large slash pine tree immediately west of Halfway Creek (Exhibit 3). The nest tree is surrounded by dense scrub oak and forested wetland habitats with varying degrees of exotic infestation. Both the nest tree and protection zones (330 and 660 feet) are located within the proposed conservation area (Exhibit 4). The proposed conservation area contains an abundance of trees that could potentially be utilized for perching and/or nesting by bald eagles.

The site is bordered to the north by West Bay Club; to the south by El Dorado Acres and Meadowbrook residential developments and Coconut Road; to the east by an FPL easement, existing conservation lands, and Fountain Lakes and Marsh Landing residential developments; and to the west by existing conservation lands, the Raptor Bay Golf Club, and Hyatt Residence Club. The location of Nest LE-28A, the eagle nest protection zones, and the surrounding land uses are depicted on Exhibit 4.

##### **4.2 Nesting History**

Based on Wilson Miller’s 2000 BEMP, Nest LE-28A was first observed in 1987 and served to replace Nest LE-28, which was last used during the 1986-1987 nesting season. The eagle pair also utilized a nest (LE-28B) located approximately 3,700 feet west-southwest of LE-28A. Nest LE-28B was last active during the 1992-1993 nesting season. A survey conducted by the Florida Game and Fresh Water Fish Commission during the 1997-1998 nesting season identified Nest LE-28B as “nest down” (nest came apart and there is no longer any nest material in the nest tree).

Site observations conducted by PAI in February and March 2022 confirmed that Nest LE-28A was inactive.

## 5.0 PROPOSED SITE PLAN AND EAGLE PROTECTION ZONES

The Project's site plan consists of the reconfiguration of the existing golf course with associated parking and infrastructure. The site plan is depicted on Exhibit 4.

The USFWS and FWCC recognize 330- and 660-foot protection zones around an active eagle nest (Exhibit 4). Additionally, Lee County's Eagle Ordinance (08-25) states that no construction (structures or site work) may occur within 660 feet of an eagle nest without an approved BEMP. Both the 330- and 660-foot protection zones of Nest LE-28A are within the proposed conservation area. Therefore, no development activities will occur within 660 feet of Nest LE-28A. However, DO No. DOS2021-00137 requires that the Project's conservation areas be maintained free of exotic vegetation. This includes the conservation areas within the 330- and 660-foot eagle protection zones.

## 6.0 BALD EAGLE MANAGEMENT PLAN

This BEMP serves to revise the existing plan prepared by Wilson Miller in 2000, to reduce the protection zones to the current Lee County, USFWS, and FWCC standards (i.e., 330 and 660 feet). Additionally, this BEMP is intended to facilitate construction of the Project while providing sufficient measures to minimize the potential for adverse impacts to nesting bald eagles that could occur as a result of the proposed development activities. As a management instrument, the BEMP is only applicable to the Project. It is the responsibility of the property owner to retain and implement this plan for as long as it is required, including educating others (e.g., contractors, future owners, tenants, etc.) about the specific requirements of this BEMP and the state and federal eagle protection laws. Any amendment to this management plan shall require review and approval by the Eagle Technical Advisory Committee or any successor body.

Specific elements of the BEMP are as follows:

1. Exotic vegetation removal within 660 feet of the nest tree shall be completed during the non-nesting season (i.e., May 16 through September 30).
2. The use of chemicals which are known to be toxic to wildlife shall be prohibited at all times in close proximity to the nest tree and within the on-site preserve areas. Chemicals used for the purpose of controlling invasive exotic plants shall be prohibited around the base of the nest tree.

## 7.0 REFERENCES

- Anthony, R.G. and F.B. Isaacs. 1989. Characteristics of bald eagle nest sites in Oregon. *Journal of Wildlife Management* 53(1): 148-159.
- Brush, Janell M., K. Rogers, and E. Leone. 2012. Annual Report 2011-2012. Fish and Wildlife Research Institute, Wildlife Research Section, Avian Research Subsection; Gainesville, Florida.

- Curnutt, J.L and W.B. Robertson, Jr. 1994. Bald eagle nest site characteristics in south Florida. *Journal of Wildlife Management* 58(2):218-221.
- Florida Department of Transportation. 1999. Florida Land Use, Cover and Forms Classification System. Procedure No. 550-010-001-a. Third Edition.
- Florida Fish and Wildlife Conservation Commission. 2017. A Species Action Plan for the Bald Eagle.
- Gerrard, J.M., P.N. Gerrard, W.J. Maher, and D.W.A. Whitfield. 1975. Factors influencing nest site selection of bald eagles in northern Saskatchewan and Manitoba. *Blue Jay* 33(3): 169-176.
- Grier, J.W. 1977. Quadrat sampling of a nesting population of bald eagles. *Journal of Wildlife Management* 41:438-443.
- Hardesty, J.L. 1991. Conservation of coastal nesting bald eagles in Florida: history, demography, and habitat use. Unpublished Masters Thesis, University of Florida; Gainesville, Florida.
- Johnsgard, P.A. 1990. Hawks, Eagles, and Falcons of North America. Smithsonian Institution Press; Washington, D.C.
- King, J., F. Robards, and C. Lensink. 1972. Census of the bald eagle breeding population in southeast Alaska. *Journal of Wildlife Management* 36:1292-1295.
- McEwan, L.C. and D.H. Hirth. 1979. Southern bald eagle productivity and nest site selection. *Journal of Wildlife Management* 43:585-594.
- Palmer, R.S. 1988. Handbook of North American Birds, Volume 4. Yale University Press; New Haven, Connecticut.
- Peterson, D.W. and W.B. Robertson, Jr. 1978. Threatened southern bald eagle. Pages 27-30 *in*: H.W. Kale II, ed. Rare and endangered biota of Florida: volume two, birds. University Presses Florida; Gainesville, Florida.
- Robards, R.C. and J. G. King. 1966. Nesting and productivity of bald eagles, southeast Alaska, 1966. U.S Fish and Wildlife Service; Juneau, Alaska.
- U.S. Fish and Wildlife Service. 1999. Multi-Species Recovery Plan for South Florida. U.S. Fish and Wildlife Service, Vero Beach, Florida.
- U.S. Fish and Wildlife Service. 1989. Southeastern states bald eagle recovery plan, U.S. Fish and Wildlife Service; Atlanta, Georgia.

U.S. Fish and Wildlife Service. 1987. Habitat Management Guidelines for the Bald Eagle in the Southeast Region.

U.S. Fish and Wildlife Service. 2007. Bald Eagle Monitoring Guidelines

U.S. Fish and Wildlife Service. 2007. National Bald Eagle Management Guidelines.

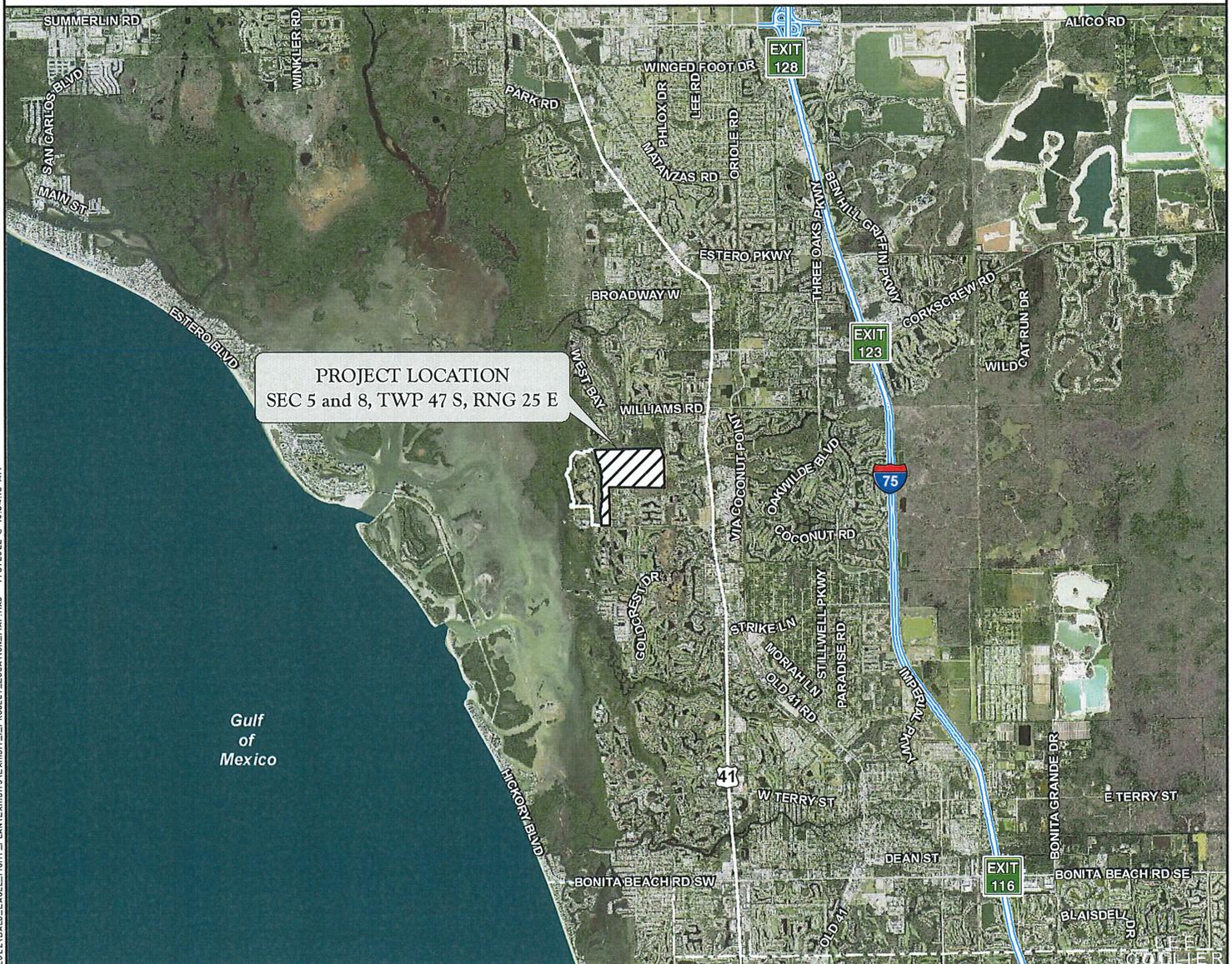
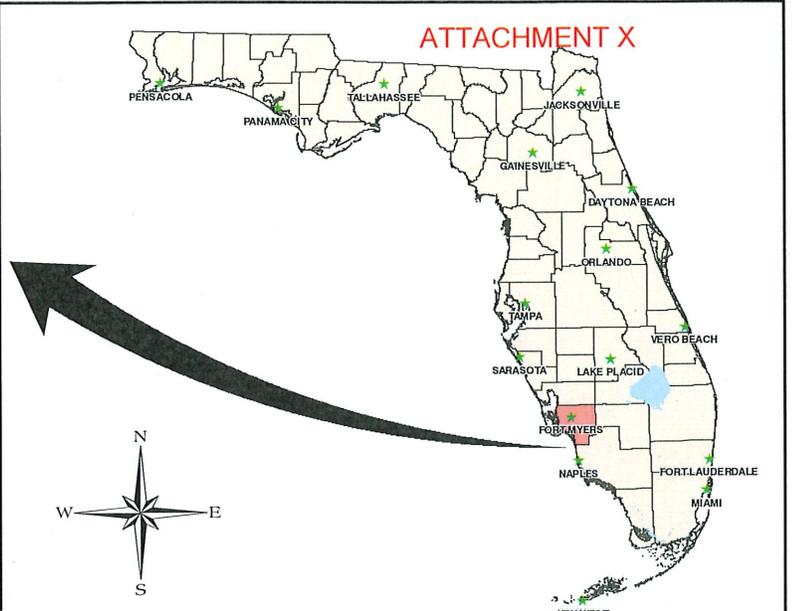
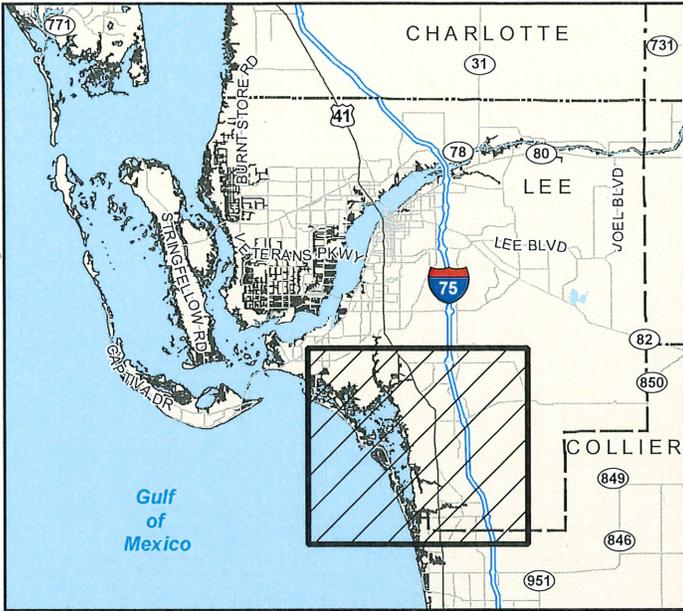
Weekes, F.M. 1974. A survey of bald eagle nesting attempts in southern Ontario, 1969-1973. Canadian Field Naturalist 88(4):415-419.

Whitfield, D.W.A., J.M. Gerrard, W.J. Maher, and D.W. Davis. 1974. Bald eagle nesting habitat, density and reproduction in central Saskatchewan and Manitoba. Canada Field Naturalist 88(4):399-407.

Wood, P.B., T.C. Edwards, and M.W. Collopy. 1989. Characteristics of bald eagle nesting habitat in Florida. Journal of Wildlife Management 53(2): 441-449.

Wood, P.B. 1987. Distribution, ownership status, and habitat characteristics of bald eagle nest sites in Florida. Final report Nongame Wildlife Project 85-020, Florida Game and Fresh Water Fish Commission; Tallahassee, Florida.

**EXHIBIT 1**  
**PROJECT LOCATION MAP**



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EXHIBIT 1. PROJECT LOCATION MAP  
RAPTOR BAY GOLF COURSE RENOVATION

DRAWN BY	DATE
P.F.	09/22/21
REVIEWED BY	DATE
S.J.	09/22/21
REVISED	DATE



**EXHIBIT 2**

**BALD EAGLE MANAGEMENT PLAN BY WILSON MILLER, INC.  
MARCH 2000**



**BALD EAGLE MANAGEMENT PLAN  
FOR NEST LE-28A**

**Pelican Landing DRI  
Section 5, Township 47 South, Range 25 East  
Lee County, Florida**

Prepared for:

**WCI Communities, Inc.**  
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Bonita Springs, Florida 34134  
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**DRI 940279**  
Prepared by:

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**RECEIVED**  
MAR 15 2000

Submitted to:

**ZONING COUNTER**

**U.S. Fish and Wildlife Service**  
3860 Tollgate Blvd., Suite 300  
Naples, Florida 34114  
941.353.2873 (phone)  
941.353.8640 (fax)

March 7, 2000

**BALD EAGLE MANAGEMENT PLAN  
FOR NEST LE-28A**

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March 7, 2000

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## 1.0. Introduction and Project History

Pelican Landings is a 2,580-acre Development of Regional Impact (DRI) located approximately three miles north of the Lee/Collier County line. The DRI property is bounded on the west by Estero Bay, on the north by the West Bay Club residential development, on the east by U.S. 41, and on the south by Spring Creek. The original Development Order for the Pelican Landing DRI was issued by Lee County on August 29, 1994 and has been amended several times. The latest amendment is the Fifth Development Order Amendment issued by Lee County on September 21, 1998.

The Pelican Landing DRI contains a 78-acre xeric scrub/pine flatwood upland preservation area known as the "Eco-Park". Figure 1 provides a location map for the Pelican Landing Eco-Park. The Eco-Park was established pursuant to a gopher tortoise incidental take permit issued by the Florida Game and Fresh Water Fish Commission (Permit #Lee-9 issued August 28, 1995) to mitigate for impacts to the gopher tortoise and xeric scrub habitat located within the Pelican Landing DRI. It was strategically chosen since at that time it contained the majority of the xeric oak habitat on the entire undeveloped portion of Pelican Landing. A conservation easement for the 78-acre tract was granted to the Florida Game and Fresh Water Fish Commission and was recorded in the public records of Lee County on October 18, 1995. The incidental take permit contains provisions for perpetual management of the Eco-Park to maintain appropriate vegetative density and composition. Condition #5 of the permit addresses conditions placed on the use and management of the Eco-Park with regard to eagle nesting activities. An active bald eagle's nest is present in the Eco-Park of the Pelican Landing DRI. The eagle nest is recognized by U.S. Fish and Wildlife Service (USFWS) as nest #LE-28A. Conditions of the Development Order for the Pelican Landing DRI require that a management plan be implemented for this nest.

A bald eagle management plan (BEMP) was drafted for nest LE-28A in 1994 (Heald and Associates, Inc. 1994a; Appendix A) and was submitted to the USFWS for review, comment, and approval. The original plan proposed a 1,300-foot setback between the nest and any proposed construction and a 2,500-foot secondary protection zone where construction would be seasonally restricted. Under the 1994 plan, the closest proposed construction was a two-lane road west of the nest that would terminate near the northern property boundary of the project site, and single-story single-family homes on large lots to the west of the road. Via a letter from David Ferrell (USFWS) to Dan Trescott (Southwest Florida Regional Planning Council) dated January 31, 1994, the USFWS made a preliminary determination that 1,300 and 2,500 feet represented adequate primary and secondary protection zones for Nest LE-28A. Prior to making a final determination, the USFWS requested that a study be conducted during the nesting season to determine flight lines and identify any trees frequently used for roosting. The study was conducted by Eric Heald & Associates (Heald, 1994b) during the period of January through May, 1994 and indicated that 84% of all flights recorded inbound or outbound fell within the northern (n=15 of 44), northwestern (n=13), and western (n=9) quadrants.

On August 8, 1995, a meeting was held with Jane Tutton (USFWS) and a revised BEMP was submitted to the USFWS. In consideration of the density of site vegetation and effective visual screening of the eagle's nest, a Primary Protection Zone (PPZ) of 500 feet and a Secondary Protection Zone (SPZ) ranging from 1,200 feet on the southwest to 2,175 feet on the south was proposed. An August 16, 1995 letter from Craig Johnson (USFWS) to Tim Durham (WilsonMiller) indicated the USFWS's concurrence that the revised plan was adequate and appropriate for the nest. A subsequent letter dated October 11, 1995, sent by Craig Johnson (USFWS) to Tim Durham (WilsonMiller) for clarification purposes, superseded the August 16, 1995 letter and indicated that a PPZ of 1,200 feet and an SPZ of 2,500 feet would be required.

The purpose of this document is to provide a revised management plan for eagle nest LE-28A (hereafter referred to as the "Plan") and request technical assistance from the USFWS for review, comment, and approval of the revised Plan. The previous management plan was based on the original configuration of the Eco-Park, the boundary of which was determined by property boundaries and/or preliminary/conceptual subdivision plans for adjacent lands. Now that WCI Communities, Inc. (WCI) has refined the required area and uses of adjacent lands, it has become apparent that a modification to the Eco-Park boundary is needed. Proposed revisions have been made to the original Plan due to the acquisition or planned acquisition of adjacent parcels, changes in the site development plan, and the desire to utilize an ecosystem approach in reconfiguring the Eco-Park. WilsonMiller is currently coordinating with the Florida Fish and Wildlife Conservation Commission (FFWCC) to gain approval for the proposed reconfiguration of the Eco-Park boundary as described herein. Thus, we are requesting that the USFWS provide approval of the Plan pending approval of the Eco-Park boundary configuration by the FFWCC. Upon approval by the USFWS, the revised Plan would supersede the 1994 plan in its entirety.

The revised plan is consistent with existing USFWS management guidelines for the bald eagle as well as the original 1994 plan. The proposed plan maintains a PPZ of 1,200 feet and an SPZ of 2,500 feet (1,300 feet outward from PPZ) in the directions most utilized by inbound and outbound eagle flight paths. In the direction of seldom utilized flight paths, the PPZ is 750 feet and the SPZ is 1,500' (750' outward from the PPZ) in accordance with bald eagle management guidelines. It should be noted that the revised plan results in a numerous benefits to the eagle compared to the original plan. Details regarding these benefits are provided in Section 4.4 of this report.

## 2.0 Nest Location/History

Figure 2 shows the location of nest LE-28A with respect to the existing boundary of the Pelican Landing Eco-Park. Nest LE-28A is located on the northwest side of a large slash pine (*Pinus elliottii*) tree immediately west of Halfway Creek. From most angles, the nest is effectively screened from view beyond a distance of 200 to 600 feet by pines, dense scrub oak, and tall fetterbush (*Lyonia* spp.). Heald (1994b) indicated that the primary perch tree for the eagles is located approximately 400 feet west of the nest tree.

Nest LE-28A was first observed in 1987 and served to replace nest LE-28, which was last used during the 1986/1987 breeding season. The eagle pair also utilized a nest (LE-28B) located approximately 3,700 feet west-southwest of LE-28A. Nest LE-28B was last active during the 1992/1993 breeding season. A survey conducted by the Florida Game and Fresh Water Fish Commission during the 1997/1998 breeding season identified nest LE-28B as "nest down" (nest came apart and there is no longer any nest material in the nest tree).

## 3.0 Results of Flight Pattern Surveys

At the request of the USFWS, a flight pattern study of eagles nesting in LE-28A was conducted from January to May 1994. A report summarizing the results of this study (Heald, 1994b) is provided in Appendix A. The study concluded that 34%, 30%, and 20% of recorded flights were to or from the northern, northwestern, or western directions, respectively. Based on the flight study, it is presumed that the eagles feed primarily in Estero Bay. Other research conducted KBN Engineering and Applied Sciences, Inc. (1995) indicated that the eagle pair utilizing nest LE-28A were frequently seen perching

on trees next to homes and roads along Kings Road and Williams Road, foraging in sewage treatment ponds of the Fountain Lakes development, feeding on road kills along U.S. 41, and perching in trees in the vicinity of the Coconut Point fish camp. Thus, it appears that the eagles are opportunistic feeders and have become accustomed to human activity.

#### **4.0 Habitat Management/Nest Protection Strategies**

##### *4.1 Objectives*

The overall objectives of the Plan are as follows:

- To protect the integrity of the bald eagle nest LE-28A.
- To minimize detrimental human-related impacts on the bald eagles utilizing nest LE-28A, particularly during the nesting season (generally from October 1 through May 15 but specific to individual nests depending on the time of commencement of mating and fledging of young).
- To define compatible land uses and development in areas in close proximity to the active nest.

These objectives, and the methods proposed to attain them, are consistent with the guidelines issued by the USFWS Southeast Region as found in "*Habitat Management Guidelines for the Bald Eagle in the Southeast Region*" (USFWS, 1987). These guidelines recommend the establishment of primary and secondary protection/management zones around eagle nest trees. The following methods and management techniques are hereby proposed for each of these zones in order to achieve Plan objectives.

##### *4.2 Primary Protection Zone (PPZ)*

The PPZ will extend outward radially from the nest tree a distance ranging from 750' to 1,200'. Figure 3 shows the configuration of the PPZ and the habitat types present. The purpose of the PPZ will be to provide a natural zone in the immediate vicinity of the nest tree that will remain free of development, and where passive activities potentially detrimental to nesting will be restricted.

The following activities will be prohibited within the PPZ:

- Residential, commercial, and industrial development
- Tree cutting, except as absolutely needed to construct the golf cart bridge across Halfway Creek and golf cart paths leading to the bridge.
- Logging, mining, filling, and excavation.
- Use of non-approved chemicals toxic to wildlife.
- Habitat management practices during the active nesting season, including burning.
- Unauthorized human activities potentially detrimental to bald eagle nesting.
- Passive recreational use of the golf cart bridge across Halfway Creek, and golf cart paths leading to the bridge, during the eagle nesting season, except for uses related strictly to golfing.

The following activities will not be considered detrimental when conducted in the PPZ during the non-nesting season:

- Construction or use of passive recreational facilities, including benches, jogging/hiking trails, or similar uses consistent with the Eco-Park management plan. In accordance with the Eco-Park habitat management plan, passive recreational facilities will be located no closer than 500' from nest LE-28A.
- Construction of the golf cart bridge across Halfway Creek, and golf cart paths leading to the bridge.

- Habitat management activities, including removal of exotic and nuisance vegetation and prescribed burning. Prior to any prescribed burning, the nest tree and perch trees will be protected by hand raking or clearing to minimize fuel in the vicinity of the tree.

Habitat management in the PPZ will be in accordance with the Eco-Park management plan approved by the Florida Game and Fresh Water Fish Commission. Appendix B provides a summary of the habitat management methods for the Eco-Park. Management activities in the PPZ will occur only during the non-nesting season.

#### 4.3 Secondary Protection Zone (SPZ)

The SPZ will extend a distance varying from 750' to 1,300' outward from the PPZ and will serve to provide a buffer for the PPZ. Figure 3 shows the configuration of the PPZ and the habitat types present. Development in the SPZ will be consistent with USFWS guidelines so as to minimize activities potentially detrimental to the PPZ. The majority of development in the SPZ will be golf course to be constructed during the non-nesting season. A relatively small portion (2 acres) of the outer zone of the SPZ in the western region of the site (Figure 3) is proposed for timeshare units that will have a maximum height of 45' above flood elevation. Considering that: a) this height is below the height of the existing tree canopy of this region of the site, b) the timeshare units are at least 2,370' removed from the nest tree, and c) the preserved freshwater slough and other native vegetation to be retained to the east will provide an effective visual screen, it is unlikely that the timeshare units will affect eagle nesting or foraging behavior. At its closest point the golf course is 1,250' from the nest tree, which is well beyond the line of sight distance of the tree and should also not affect eagle behavior.

The following activities will be prohibited within the SPZ unless otherwise approved by the USFWS:

- Development of commercial and industrial sites.
- Development of high density housing and multi-story buildings.
- Road or canal construction that would facilitate access to the nest.
- Use of non-approved chemicals toxic to wildlife.
- Heavy construction during the nesting season, including operation of heavy machinery, land clearing, earthmoving, blasting, excavation, installation of major utilities, and burning.

The following activities will not be considered detrimental when conducted in the SPZ during the nesting season:

- Normal habitat management practices, excluding prescribed burning.
- Passive pedestrian recreational use (e.g., hiking, bird watching, fishing, etc.).
- Construction of pedestrian pathways using non-motorized equipment, and erecting interpretive/educational signage.
- Golfing activity and operation of golf carts in golf course areas.
- Activities normally associated with golf course maintenance operations, except as noted in the above prohibitions.
- Finishing work (*i.e.*, all interior work, hanging windows and doors, stucco-ing exterior walls, and activities of similar nature) on those portions of the two timeshare units located in the SPZ, provided that the vertical construction of the units (*i.e.*, construction of exterior walls and roof) is conducted during the non-nesting season.

Habitat management in the SPZ will be in accordance with the Eco-Park management plan approved by the Florida Game and Fresh Water Fish Commission. Appendix B provides a summary of the habitat management methods for the Eco-Park. Management activities in the SPZ can occur at any

time of the year, with the exception that prescribed burning and methods involving excessive noise will be restricted during the active nesting season.

#### 4.4 *Other Management/Protection Strategies Benefiting the Eagle*

Other management/protection strategies that will be used as measures to protect eagle nest LE-28A, provide a net benefit to eagles utilizing nest LE-28A, and provide a net benefit to eagle conservation in general will include the following:

**4.4.1 *Increased Size of Pelican Landing DRI Eco-Park:*** The size of the Pelican Landing Eco-Park, within which nest LE-28A is located, is proposed to be substantially increased by the proposed project. Changes to the Eco-Park from its current configuration incorporate an ecosystem approach by including a variety of upland and wetland habitat types (as opposed to only several upland habitat types in the existing Eco-Park). The proposed reconfiguration includes all of that portion of Halfway Creek located in the project area and thereby serves to provide a buffer to the east of nest LE-28A that was not previously under ownership. The proposed changes will increase the size of the Eco-Park by approximately 84% (66-acre± net increase) and insure the continued protection and success of nest LE-28A.

**4.4.2 *Preservation of Habitat in Secondary Protection Zone:*** The project has incorporated a significant amount of habitat preservation in the SPZ to insure the continued success of eagles utilizing nest LE-28A. Of the land located in the SPZ, 102 of 159 acres (64%) will remain in a natural state (SPZ areas in Eco-Park) or mostly-natural state (golf course rough and inter-hole areas where selective removal of vegetation will occur but where majority of canopy will be retained). On a site-wide basis, a total of 56% of the existing habitat will be retained in a natural or semi-natural state, the majority of which will be enhanced via the removal of exotic vegetation. Figure 3 shows the location of areas to be preserved in the project.

**4.4.3 *Creation of Foraging Habitat:*** As part of the project, foraging habitat for the eagle, as well as wading birds, will be created both within and outside of the SPZ by excavating surface water management lakes and creating freshwater marshes (Figure 3). Created lakes and marshes within the SPZ occupy 11 acres or 7% of the SPZ, and on a site-wide basis occupy 9% of the land area. Many of the marshes to be created are located adjacent to the lakes and will serve to establish a more natural appearance to, and function of, the lakes. The marshes also serve as pretreatment areas to 'polish' surface water runoff prior to entering the lake. Such pretreatment is not required by existing SFWMD regulations, but is being incorporated into the site design to enhance the quality of the created systems. In most areas, the marshes are separated from golf course areas by upland areas that will remain in a mostly-natural state, providing additional pretreatment of runoff and further mimicking a natural lake system.

**4.4.4 *Restoration of Freshwater Slough:*** The north-south trending freshwater slough located in the western region of the project (Figure 3) will be enhanced as part of this project. Approximately one-third of this slough is located in the SPZ. The slough is currently dominated (>75% coverage) by exotic and nuisance species. Exotic/nuisance species will be removed from the slough, thus increasing habitat quality. In many areas of the slough, planting of native wetland species will occur to further enhance the quality of this area. Preservation and enhancement of the slough will also serve to provide a buffer between the eagle nest and development to the west of the slough.

**4.4.5 *Retaining Canopy, Perch, and Roost Trees:*** The site design incorporates the retainage of a substantial amount of the existing canopy. Areas that will remain natural or mostly-natural and thus will retain the majority of their existing canopy comprise 64% of the SPZ and 56% of the overall project site. Preservation of the existing canopy of the site will insure the continued presence of suitable perch and roost trees, as well as provide for suitable screening between the eagle nest and land uses

in the SPZ. In golf course and other development areas, potential perch/roost trees that are of specimen value (e.g., largest trees in stand, trees with open crowns and stout lateral limbs) will be field located/flagged and incorporated into the field design whenever possible. The shores of excavated lakes will also be meandered where necessary to preserve individual canopy trees of moderate to high value, as well as to provide a more natural character to the lake system.

4.4.6 Minimization of Number of Buildings in Secondary Protection Zone: The existing BEMP for nest LE-28A provides for single-family residential units and an associated access road in a portion of the SPZ. As part of the revised site plan proposed herein, these residential units have been eliminated and replaced with golf course, a land use more compatible with eagle nest protection. Under the proposed site plan, only two buildings of substantial size (excluding minor buildings such as golf course halfway houses) occur in the SPZ. These units are timeshare buildings that are approximately 2,370' removed from the eagle nest and comprise only 1% of the SPZ. Minimization of buildings in the SPZ will serve to further enhance the success of eagles utilizing nest LE-28A.

4.4.7 Minimization of Building Height Outside of Secondary Protection Zone: In the western region of the project between the SPZ and the western property line, building heights will be limited to a maximum height of 45' above flood elevation. This height is below the height of the existing tree canopy of this area and thus will not affect eagle nesting or foraging behavior. Although such height restrictions are not mandatory based on past USFWS determinations regarding nest LE-28A, they will be instituted as a measure to insure that the degree of access that the eagles' currently have to their primary foraging destination, Estero Bay, is maintained and is not hindered by the project.

4.4.8 Establishment of Educational Programs: Educational programs will be established for local homeowners and site users (golfers, Hyatt resort guests, other people utilizing the Eco-Park). The objectives of such programs will be to :a) inform citizens of local, state, and federal laws protecting eagles and other wildlife, b) identify ways for citizens to protect eagles from disturbance, and c) inform citizens of the habitat management plan for the Pelican Landing Eco-Park.

#### 4.5 Proposed Post-Development Conditions and Eco-Park Configuration

Figure 3 shows the proposed post-development conditions and configuration of the Pelican Landing Eco-Park. It should be noted that the Eco-Park boundary has been modified (on paper only) compared to the 1994 BEMP . The boundary reconfiguration is due to the acquisition or planned acquisition of adjacent parcels, changes in the site development plan, and the desire to utilize an ecosystem approach in configuring the Eco-Park. *[All of the preceding moved to Section 4.1.1]*

WilsonMiller is currently coordinating with the FFWCC to gain approval for the proposed reconfiguration of the Eco-Park boundary. Also, the parcel located to the east of the existing Eco-Park ("Skebe" parcel) is currently under contract but has not yet been acquired. Thus, post-development conditions proposed herein are tentative pending approval of the reconfiguration by the FFWCC and the subsequent acquisition of the Skebe parcel. Upon approval of the proposed Eco-Park boundary reconfiguration by the FFWCC, the existing conservation easement for the Eco-Park will be revised to conform to the new boundary.

WCI Communities, Inc. reserves the right to modify the Plan, consistent with USFWS management recommendations and upon concurrence by the USFWS, as the needs of the project change, and as the location or status of the nest changes.

## 5.0 References

Florida Department of Transportation. 1985. Florida Land Use, Cover and Forms Classification System. Procedure No. 550-010-001-a, Second Edition. 81 pp.

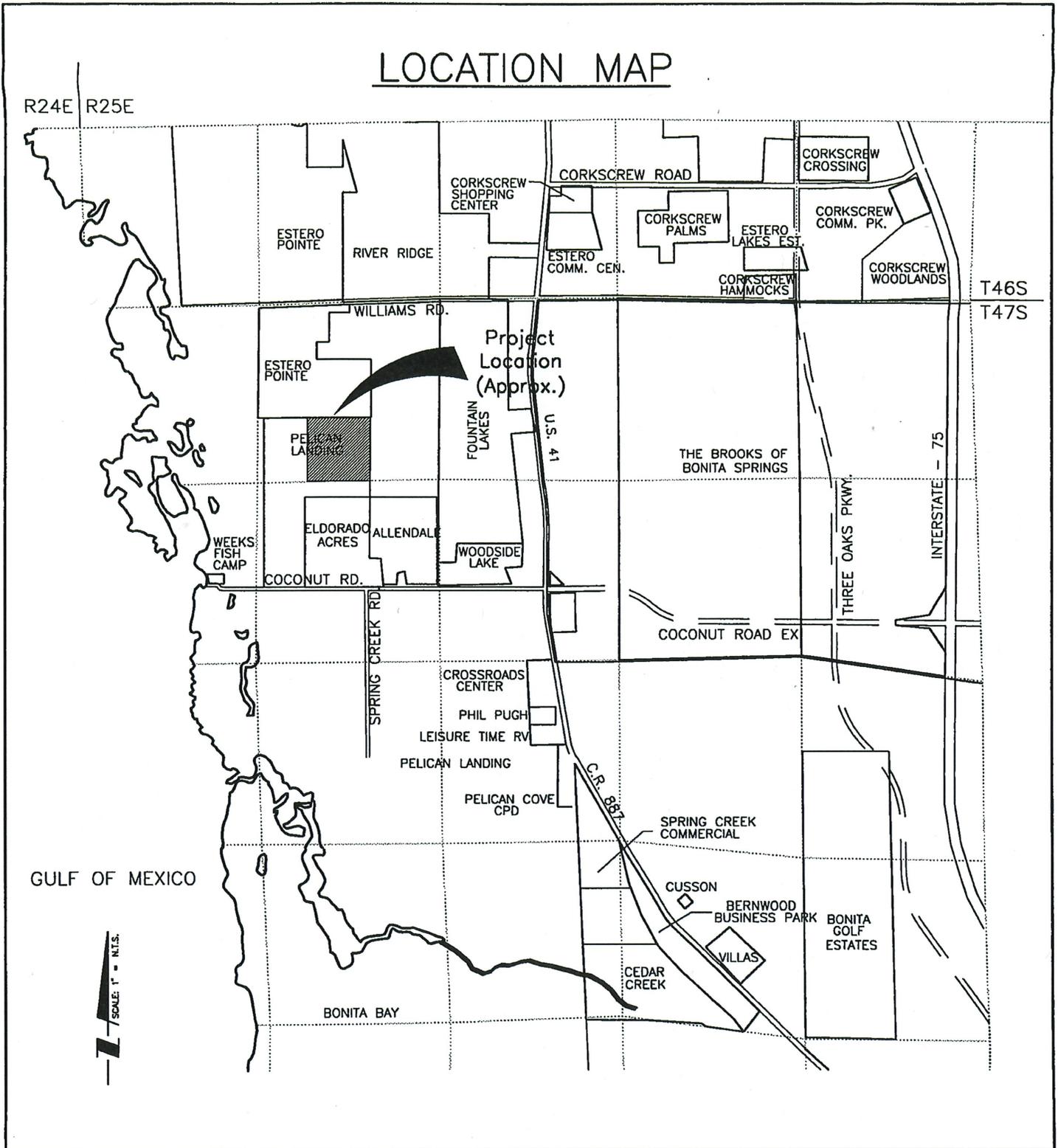
Heald and Associates, Inc., 1994a. Management Plan for the Southern Bald Eagle in the Vicinity of the Pelican Landing DRI, Lee County, Florida. 3 p. + attachments.

Heald and Associates, Inc., 1994b. Observations from January-May 1994 on the Flight Patterns of Southern Bald Eagles from Nest Tree LE 28A on the "L&L Tract", Pelican Landing, Lee County, Florida. 7 p.

KBN Engineering and Applied Sciences, Inc., 1995. Bald Eagle Management Plan for Nest LE-28A; Estero Pointe Project. 20 p.

U.S. Fish and Wildlife Service. 1987. Habitat Management Guidelines for the Bald Eagle in the Southeastern Region. U. S. Department of the Interior. 9 pp.

# LOCATION MAP



PROJECT: *Pelican Landing DRI Bald Eagle Management Plan*

APPLICANT: *WCI Communities, Inc.*

## **WilsonMiller**

Planners • Engineers • Ecologists • Surveyors • Landscape Architects • Transportation Consultants

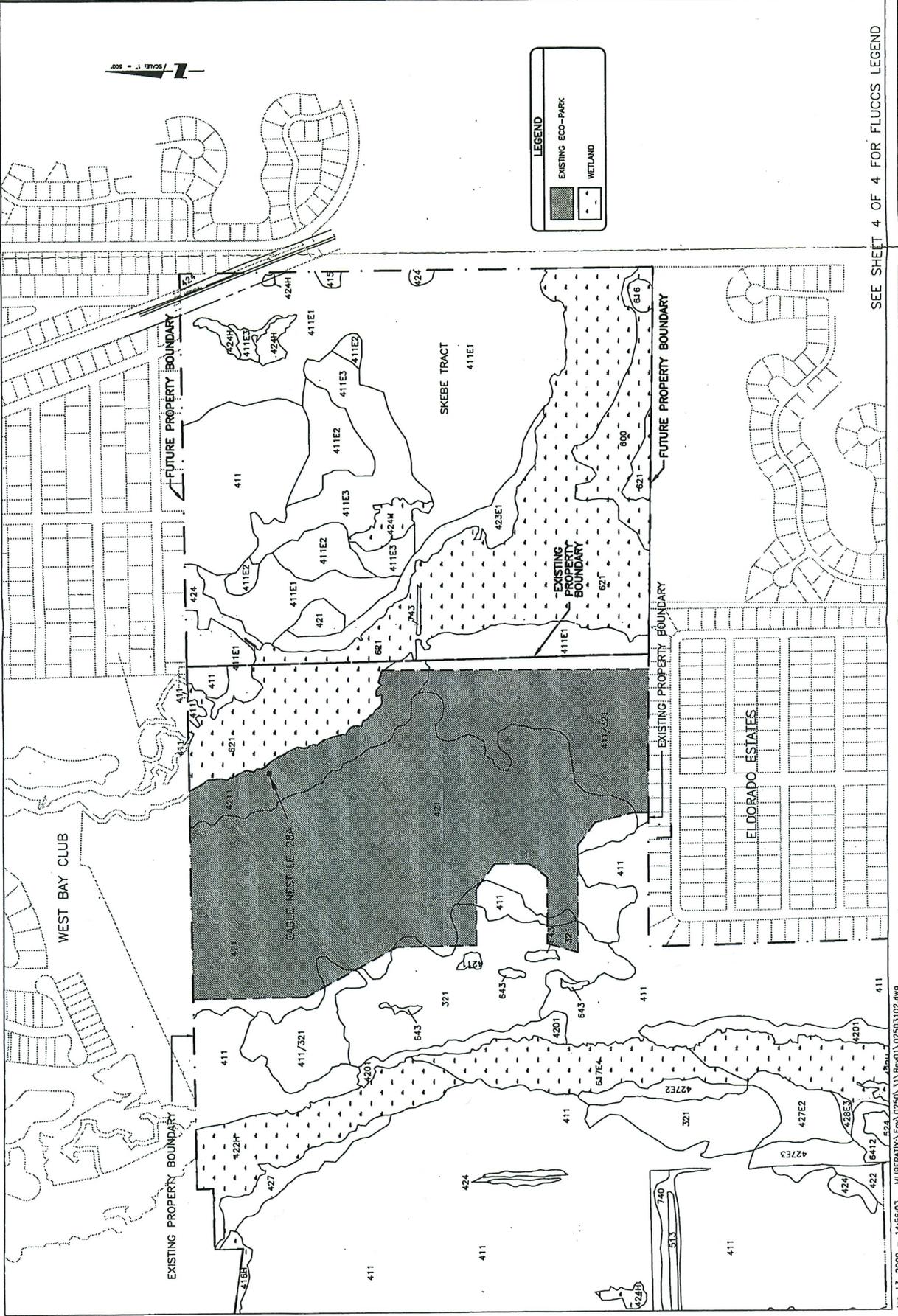
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FLA. REG. #		DATE: <i>Sept. 21, '99</i>
COUNTY: <i>LEE</i>	TWP: <i>47S</i>	REV NO:
SEC: <i>4,5,8,9</i>	RGE: <i>25E</i>	FILE NO: <i>C-0250-31</i>
PROJECT NO. <i>F0250-024-006</i>		SHEET NO: <i>1</i> OF <i>4</i>
DRWN BY/EMP NO. <i>M.W.L./1260</i>		

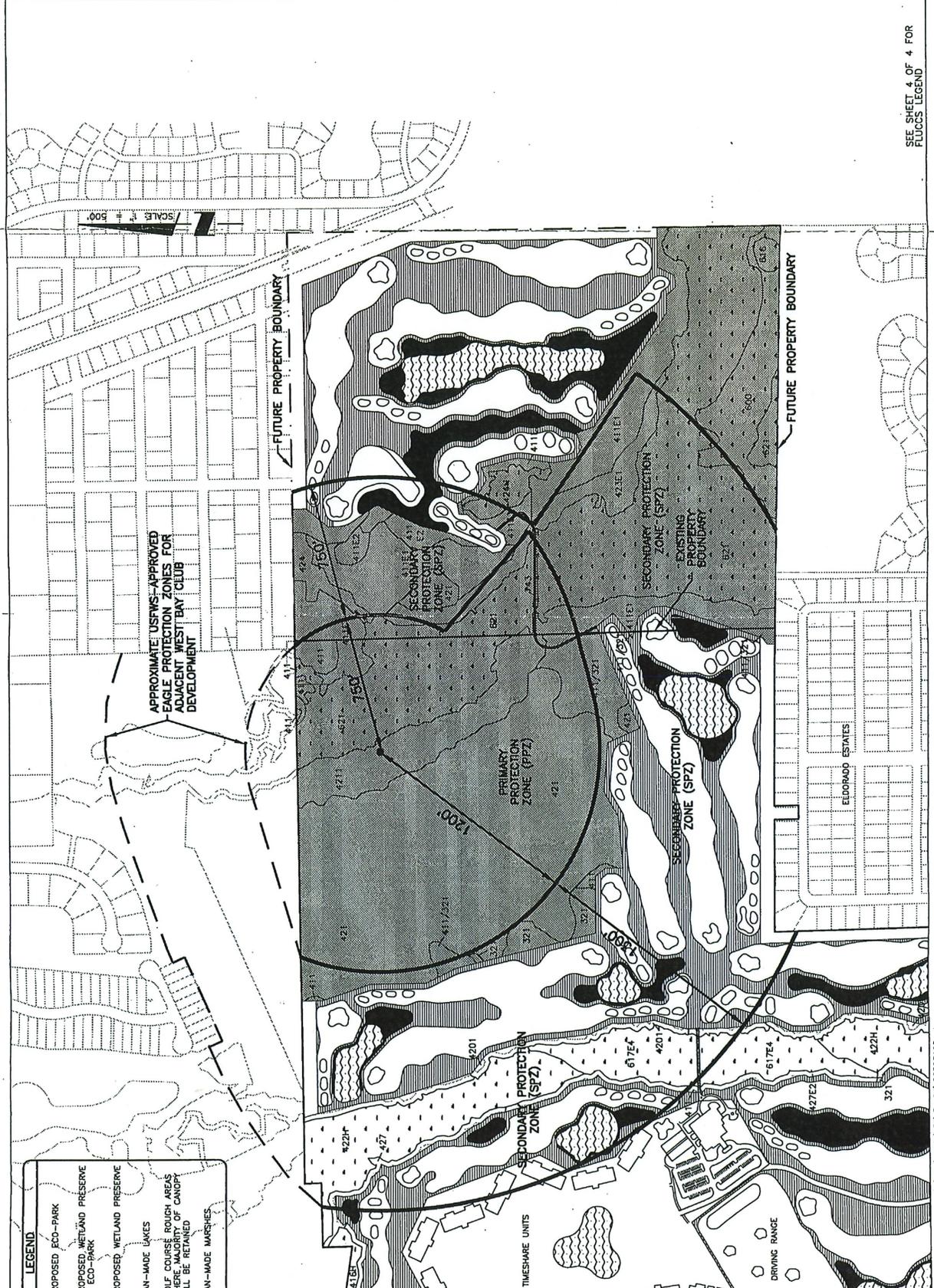
**FIGURE 2**  
**Existing Eco-Park**  
**and Associated Habitats**



SEE SHEET 4 OF 4 FOR FLUCCS LEGEND

**LEGEND**

[Pattern: Diagonal lines /]	PROPOSED ECO-PARK
[Pattern: Diagonal lines \]	PROPOSED WETLAND PRESERVE IN ECO-PARK
[Pattern: Dotted]	PROPOSED WETLAND PRESERVE
[Pattern: Horizontal lines]	MAN-MADE LAKES
[Pattern: Vertical lines]	GOLF COURSE ROUGH AREAS WHERE MAJORITY OF CANOPY WILL BE RETAINED
[Pattern: Stippled]	MAN-MADE MARSHES



SCALE 1" = 500'

APPROXIMATE USFWS-APPROVED EAGLE PROTECTION ZONES FOR ADJACENT WEST BAY CLUB DEVELOPMENT

FUTURE PROPERTY BOUNDARY

FUTURE PROPERTY BOUNDARY

ELDONROAD ESTATES

TIMESHARE UNITS

DRIVING RANGE

SEE SHEET 4 OF 4 FOR FLUCCS LEGEND

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**FIGURE 3**  
 Proposed Configuration of Eco-Park, Eagle Protection Zones, and Adjacent Development

Prepared by: K.E.L./J.S.  
 Drawn by: K.E.L./J.S.  
 Checked by:  
 Approved by:  
 Date: Sept. 21, 2000  
 Scale: 1" = 500'  
 File # : C-2250-3  
 Sheet 3 of 4

ATTACHMENT X

## Pelican Landing Eco-Park FLUCCS Legend

FLUCCS	FLUCCS Description
321	Palmetto prairie
411	Pine flatwoods
411E1	Pine flatwoods, 10-24% exotics
411E2	Pine flatwoods, 25-49% exotics
411E3	Pine flatwoods, 50-75% exotics
411/321	Pine flatwoods/Palmetto prairie
415	Scrubby flatwoods
416H	Pine flatwoods/Graminoid understory-hydric
421	Xeric oak
4201	Mesic oak, high density shrub layer
4211	Xeric oak, high density shrub layer
422	Brazilian pepper
422H	Brazilian pepper-hydric
423E1	Pine-cabbage palm-oaks, 10-24% exotics
424	Melaleuca
424H	Melaleuca-hydric
427	Live oak
427E2	Live oak, 25-49% exotics
427E3	Live oak, 50-75% exotics
428E3	Cabbage palm, 50-75% exotics
513	Ditch
524	Lakes less than 10 acres which are dominant features
600	Shrub wetland
616	Inland pond
617E4	Mixed wetland hardwoods
621	Cypress
6412	Cattail
643	Wet prairie
740	Disturbed land
743	Spoil area

PROJECT: *Pelican Landing DRI Bald Eagle Management Plan*

APPLICANT: *WCI Communities, Inc.*

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FLA. REG. #

COUNTY:	LEE	DATE:	Sept. 21, '99
SEC:	TWP: RGE:	REV NO:	
	4,5,8,9 47S 25E		
PROJECT NO.	FILE NO:		
F0250-024-006	C-0250-006		
DRWN BY/EMP NO.	SHEET NO:		
M.W.L./1260	4 OF 4		

Revised Bald Eagle Management Plan for Nest LE-28A  
Pelican Landing DRI

Appendix A

**APPENDIX A**

**1994 Version of Bald Eagle Management Plan (Heald, 1994a, 1994b)**

*Heald and Associates, Inc.*

7550 S.W. 136 Street  
Miami, Florida 33156  
305-253-5343

Management Plan for the Southern Bald Eagle  
in the Vicinity of  
The Pelican Landing DRI, Lee County, Florida  
(Revised to Reflect Renewed Nesting Activity)

Prepared for  
Westinghouse Bayside Communities, Inc.

by

Dr. Eric J. Heald, Ph.D.  
Heald and Associates, Inc.

May, 1994

### Introduction

Nest-building by bald eagles is known to have occurred at 5 locations (trees) within or in the vicinity of the Pelican Landing DRI project boundaries over the past decade. Some confusion has existed in connection with the locations and official designations of these (see sections of ADA, ADA Sufficiency Response, and pertinent correspondence appended to Draft Management Plan, June 1993).

The nest trees (sites, territories) are listed by Florida Game and Fish Commission (FGFC) as follows, and their current status is described:

#### LE 08

The nest no longer exists, having disintegrated over the past several years. The nest tree, a cypress, remains, and a pair of eagles was sighted at the tree during a December 3, 1992 overflight by FGFC.

#### LE 08A

This nest is no longer in existence (FGFC, Dec., 1993). It was occupied by great-horned owls during the 1991-1992 and 1992-1993 breeding seasons. It is addressed in a Lee County Rezoning Resolution (#Z-88-034) for San Marino Pines (March 18, 1988) in which a 900' buffer zone was established in a semi-circle to the west of the nest tree.

#### LE 28

Only a few twigs remain. It has been unoccupied since the 1986/1987 breeding season.

#### LE28A

The nest is located in a large pine tree on the western margin of Half-way Creek. It was occupied during the 1990-1991 breeding season, and was reported by Mr. Paul Schultz (FGFC) as occupied in December, 1993. A field representative of United States Fish and Wildlife Services (USFWS) inspected the preserve area and the newly-occupied nest tree (LE-28A) in January, 1994. On January 31, 1994 USFWS signified approval of the Management Plan (see enclosed letter from Mr. Peter Plage to Mr. Dan Trescott), and requested a study to determine flight lines during the current nesting season. This has been conducted (copy appended).

#### LE-28B

This recently constructed nest was occupied during the 1992-1993 breeding season and contained an unfledged eaglet at the time of FGFC overflight on March 14, 1993. The eaglet was no longer in evidence on overflights conducted by Heald and Associates on May 3

and May 20, 1993. It was not used during the 1993-1994 breeding season (Schultz, FGFC, Pers. Comm.).

#### Management Strategies

Nest tree ('territory') 28A on the western margin of Half-way Creek lies within approximately 120 contiguous acres of upland and wetland communities to be preserved within the Pelican Landing Development. It is located almost at the northern boundary of the project. A proposed two lane access road to single family homesites lies, at its closest point, approximately 1300' from the tree. The nest tree, and other potential nest, roost, or perch trees in close proximity within the preserve, will remain available for any future nesting activities. The birds presumably feed primarily in the Estero Bay system which they reach either by flying over the proposed single-road alignment of single family residences and the existing fish camp, or by flying over undeveloped uplands and wetlands immediately north and northwest of the nest tree (see appended copy of recorded flight patterns).

USFWS has determined that the primary zone should be established at a radius of  $\pm 1300'$  from the nest tree. Human activities within the preserve will be limited to pedestrian pathways, with interpretive/educational signage. Pathways will not impinge upon a 750' radius around the nest tree, which is well-screened by dense oaks. The nest tree and all other potential nest trees within the preserve will be monitored twice a month from October through April for a period of five years to determine if nesting is occurring. If the nest is occupied, access to all pathways within the  $\pm 1300'$  primary zone will be prohibited until nesting activities are reliably reported to have ceased. Appropriate signs will be installed at the barricaded path entrances. No habitat management activities, such as selective clearing or prescribed burning, will be conducted during the active nesting season and no construction of road or residences will be permitted within a 2500' radius of the nest tree during this period.

Bayside Improvement District will own the preserve area, known as the Pelican Landing Eco-Park, and will be responsible for all management and maintenance, in accordance with the approved Development Order.

Nest tree 28B lies off the property, approximately 1800-2000' west of the northwest boundary of the project. The birds feed primarily in the extensive Estero Bay system to the west of the nest tree. Approximately 80 acres of uplands plus approximately 42 acres of freshwater wetlands within the northwestern portion of the project will be preserved; and are thus available as potential additional feeding sites. Scattered large pines within the upland preserve will also remain available as potential nesting sites. Since applicant does not own the nest tree site or the lands surrounding it, further management practices are not feasible. Monitoring of potential nest trees within the preserve area will be

conducted as described above (28A), and appropriate measures will be taken to comply as far as practical with established guidelines if the birds relocate onto the subject property.

The remaining nest trees or territories (28, 08 and 08A) are located north and east of the project site. The birds, should they resume residence or nesting, will be unaffected by project activities. Extensive wetland areas preserved to the south within the project will remain available as potential feeding areas. Florida Game and Fish Commission and U.S. fish and Wildlife Service will be consulted on appropriate actions if the eagles are reported to relocate to trees closer to the project than at present.

DEC 7 '94 16:03 FROM WCI PLANNING/DESIGN

ATTACHMENT X  
PAGE.009

**Attachments**

Observations From January - May, 1994  
on the Flight Patterns of Southern Bald Eagles  
from Nest Tree LE 28A on the "L&L Tract",  
Pelican Landing, Lee County, Florida

Prepared for  
Westinghouse Bayside Communities, Inc.

by  
Dr. Eric J. Heald, Ph.D.  
Heald and Associates, Inc.

May, 1994

### Introduction

As an integral part of a Development of Regional Impact (DRI), Westinghouse Bayside communities (WBC) in 1992 designated a contiguous area of ±120 acres, including ±78 acres of xeric oak scrub and pine flatwoods, for preservation. This area, known as the "L&L Tract" and latterly as the "Pelican Landing Eco-Park", lies north of Coconut Road in Southern Lee County and constitutes a portion of the Planned Community of Pelican Landing (Figure 1). The preserved tract includes several large slash pines, one of which contains the nest of a southern bald eagle. The nest tree, designated LE-28A by Florida Game and Fish Commission (FGFC) was occupied during the breeding season of 1990-1991 and was not used during the subsequent two seasons.

In accordance with requests by several regulatory agencies during the Application for Development Approval review process, a Management Plan for the southern bald eagle was prepared and submitted for review to U.S. Fish and Wildlife Service (USFWS) in June 1993. While the Management Plan was under review the nest was reported by FGFC in December, 1993 to be occupied by a pair of eagles (Paul Schultz, FGFC; Pers. Comm.). It is assumed, though not confirmed, that the eagle pair currently occupying this nest utilized nest LE 28B during the 192-1993 breeding season. In January 1994, USFWS, while approving the Management Plan as submitted, requested that prevalent flight patterns of the birds occupying nest LE-28A be documented to assist further review. At the request of WBC, Dr. Eric Heald of Heald and Associates (H&A) conducted the field observations reported below.

### Methods

The slash pine containing the nest stands immediately adjacent to the western margin of Halfway Creek (Figure 2) and from most angles is effectively screened from view beyond a distance of 200' to 600' by pines, dense scrub oak and tall *Lyonia* spp. During mid-late January, 1994 several potential observation stations were tried before a satisfactory station (see Figure 2) was chosen. With the exception of two flights recorded on January 19, 1994 all observations were conducted from this station. Observations were conducted on 25 separate days between January 19 and May 19. Table 1 gives dates, hours of observation, basic climatic conditions and miscellaneous observations.

Activities at or in the immediate vicinity of the nest were observed through binocular field-glasses. Outbound flights were monitored with or without field-glasses until visual contact was lost. The efficacy of tracking varied according to pattern of flight on departure from nest tree, direction of flight, and altitude assumed by the bird during flight. Inbound flights (returns) were sometimes not detected until the bird was within 200' of the nest tree, and are thus considered a less reliable indication of flight patterns.

**FIGURE 1**  
**Location of the "L&L Tract".**

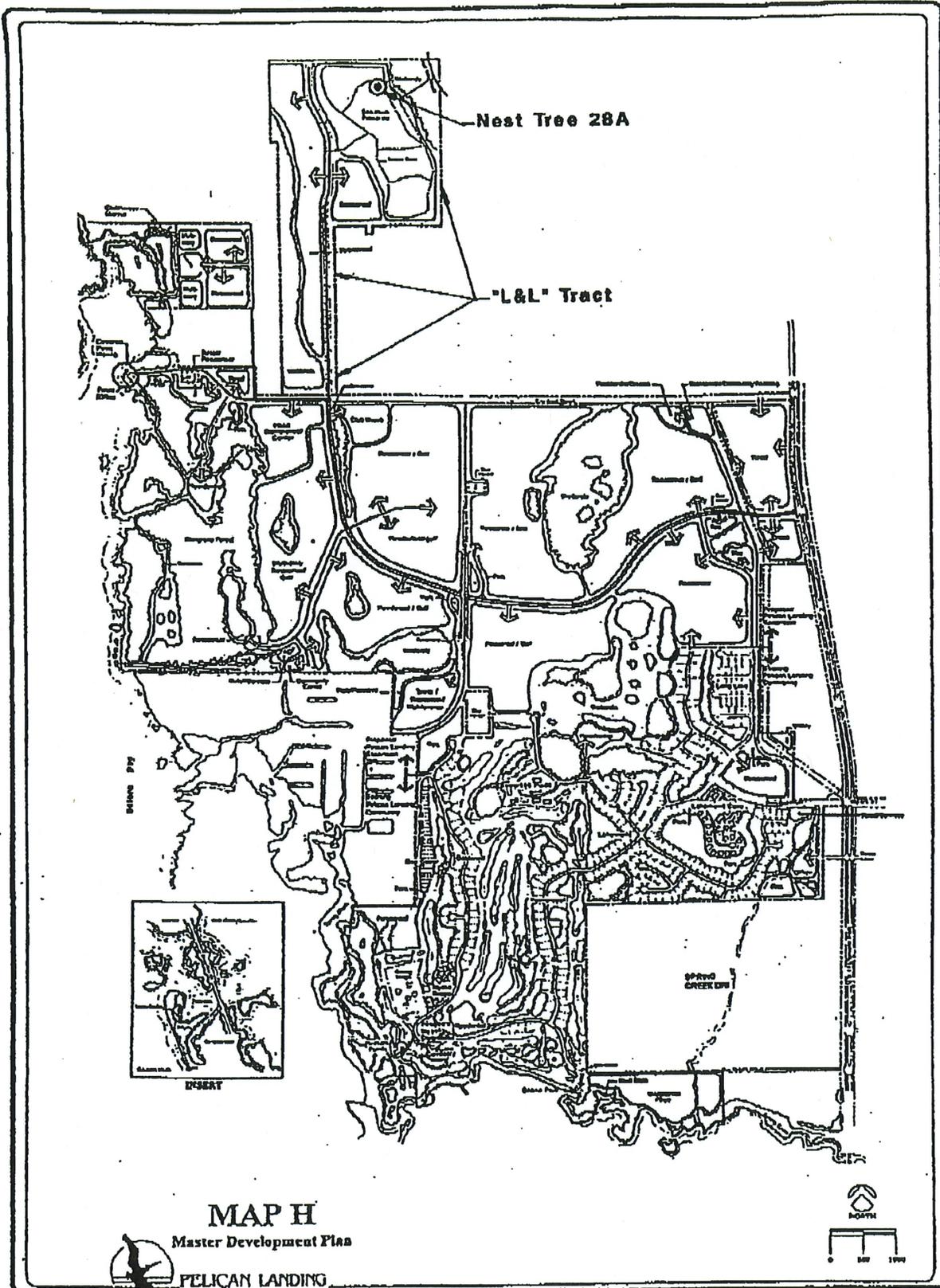
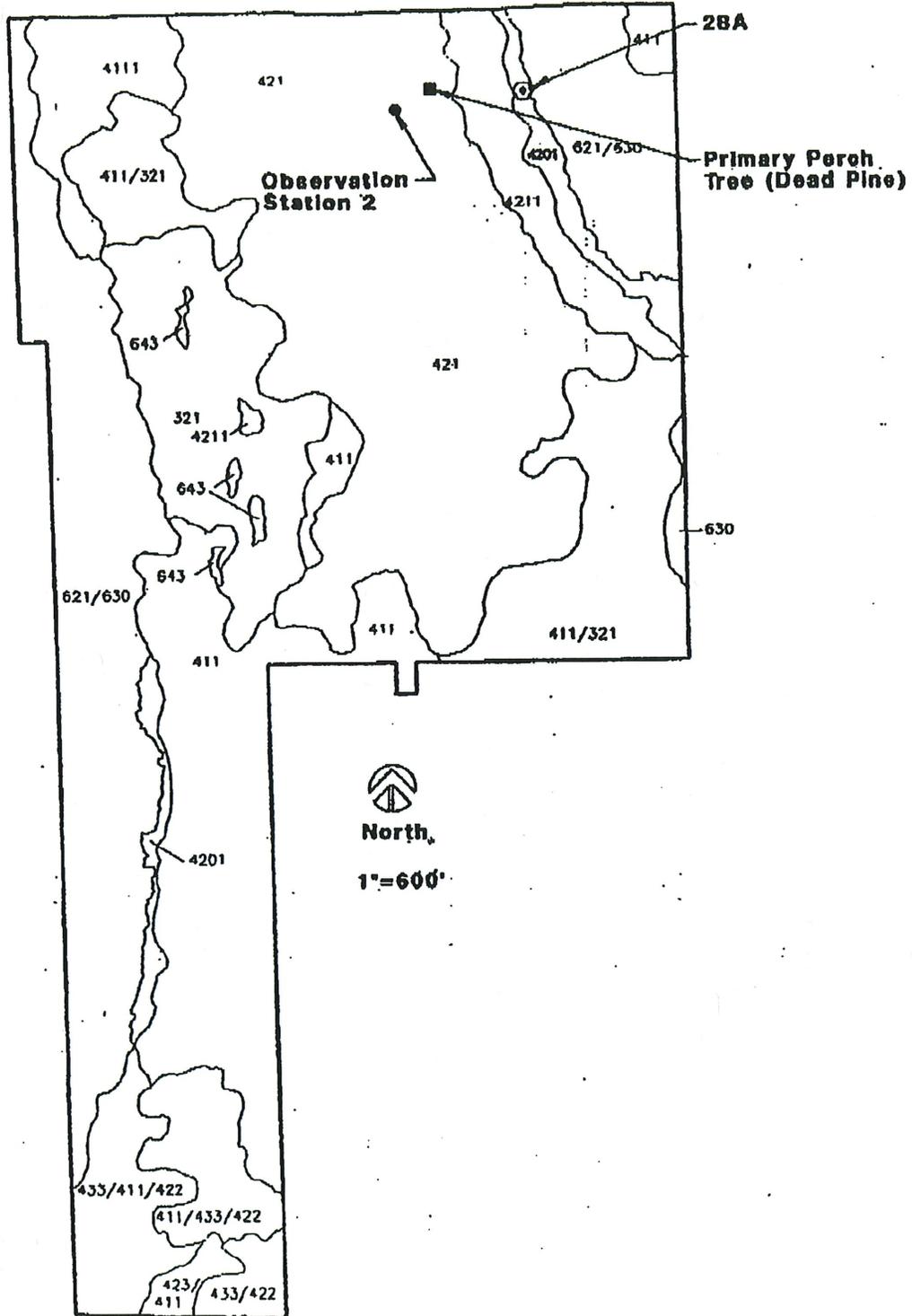


TABLE I. Observations January 19 to May 19 1994

DATE	TIME		FLIGHTS		SKY	APPROX WIND (approx)			COMMENTS
	ARR	DEP	OUT	IN**		TEMP	DIR	MPH	
1/19	0930	1630	2	-	Clear	70	NE	<5	4 stations occupied
1/31	1420	1730	1	-	Pt. Cloudy	70	ENE	<5	Station on Figure 2
2/01	0800	1140	2	1	Pt. Cloudy	65	E	5	-
2/01	1425	1720	1	1	Cloudy	65	E	<5	-
2/02	1300	1700	-	-	Cloudy	50	NE	<5	Drizzle/rain
2/03	1030	1515	1	1	Clear	50	SE	10	Cold
2/08	1600	1800	1	1	Pt. Cloudy	75	SW	10	-
2/09	0800	1540	1	-	Clear	75	SW	15	-
2/10	0730	1005	-	1	Clear	70	SE	0-10	Gusty Winds
2/16	1410	1615	1	-	Cloudy	65	ENE	10	-
2/17	0800	1000	-	-	Pt. Cloudy	70	E	20	Very windy
2/22	1550	1705	-	-	Pt. Cloudy	75	SE	5	-
2/23	1520	1900	2	1	Clear	80	SW	5-20	Gusty winds; eaglet observed
2/24	0800	1730	2	2	Cloudy	70	NONE	NONE	Eaglet observed
3/08	1100	1330	1	-	Pt. Cloudy	80	NE	5	Eaglet observed
3/09	0700	1100	-	-	Pt. Cloudy	75	ENE	5-10	-
3/12	1600	1745	4	2	Clear	75	E	10-15	Eaglet observed
3/13	1130	1610	4	2	Clear	80	SE	<5	Eaglet exercising wings
3/14	1000	1250	4	2	Cloudy	75	NONE	NONE	Eaglet on edge of nest
3/15	1130	1520	1	2	Clear	80	E	<5	Eaglet - edge of nest; exercising wings
3/28	1300	1435	-	-	Clear	80	NE	15-20	Eaglet on adjacent branch
4/01	1500	1755	1	-	Clear	80	SW	5	Eaglet - edge of nest; exercising wings
4/07	1600	1735	-	-	Clear	75	W	<5	Eaglet in nest
4/13	1215	1430	-	-	Pt. Cloudy	80	WSW	15	Eaglet moving between branches
5/18	1605	1755	-	-	Clear	85	SE	<5	No birds at nest
5/19	0940	1130	-	-	Pt. Cloudy		ESE	<5	No birds at nest

\*\* If sighted further than approximately 500' from nest tree

**FIGURE 2**  
**FLUCCS Vegetation Map Showing Location of Nest Tree**  
**LE 28A, Observation Station, and Perch Tree.**



### Observations

Figure 3 and Table II reflect behavior on 44 observed flights between January 19 and May 19. Flight directions in Figure 3 are portrayed within 45° compass quadrants centered upon N, NW, NE, etc. The observed number of flights in either direction within a specific quadrant is indicated along each vector arrow. Inbound flights are only recorded if the bird was sighted and tracked from sufficient distance from the nest tree to be considered a reliable indicator of the direction of approach.

Although no distinction is made in Figure 3 between the flight patterns of male and female birds, the detailed flight patterns of the two sexes differed significantly. The larger bird, presumably the male, frequently flew to an almost dead pine approximately 400' WNW of the nest tree (Figure 2) and there remained for 1-5 minutes before departing westward or northward. The (smaller) female was never observed to do this. Further, all 6 flights recorded in the northeast to south quadrants were made by the female bird.

Flight activity observed from January 19th to May 19th comprised 44 events/flights. A single chick hatched in mid-February, at which point flight activity increased significantly. Although increased in frequency, flights from mid-February onward did not deviate appreciably from previously observed directional patterns.

From mid-March to mid-April, the eaglet was frequently observed exercising wing muscles and hopping between branches, but was never observed in flight. The nest was not visited from mid-April to mid-May, by which time it appeared empty.

As Table II shows, 84% of all flights recorded inbound or outbound fell within the northern, northwestern and western quadrants. The single flight to the southwest was in pursuit of a black vulture or a turkey vulture by the male bird. The female initially gave chase but returned to the nest tree from approximately ¼ mile out.

### Conclusions

Almost 85% of all recorded flights were to or from the northwest quadrant. Only 6% lay within quadrants which would lead to existing or proposed Pelican Landing development. The findings thus support the USFWS conclusion that the proposed development would have no appreciable impact on nesting activities at nest tree LE-28A.

**FIGURE 3**  
**Recorded Flights to and from Nest Tree. Number**  
**of Flights Depicted on each Vector Arrow.**

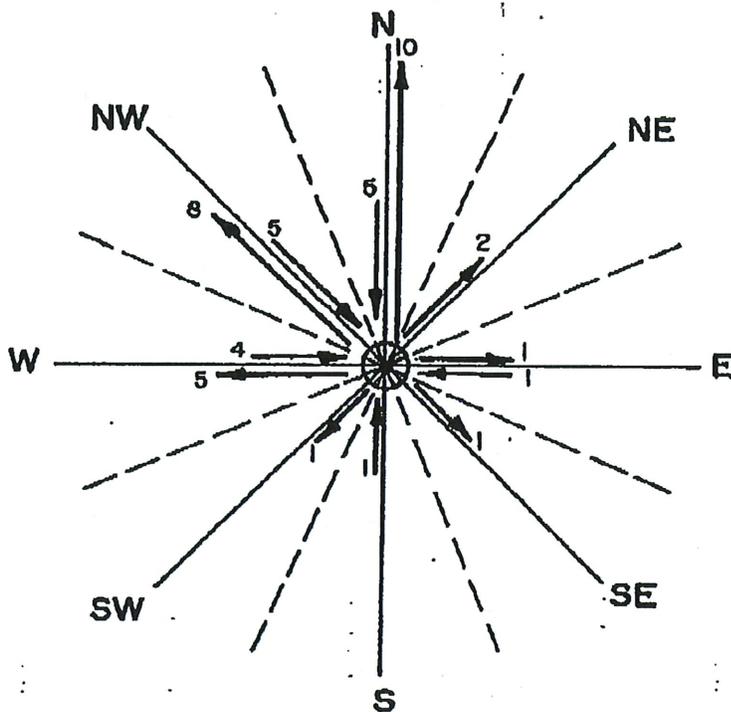


TABLE II. Summation of Observed Flight Directions, Jan. 19 - May 19, 1994

DIRECTION	NO. OF FLIGHTS		TOTAL	% OF TOTAL
	OUT	IN**		
N	10	5	15	34.1
NE	2	-	2	4.5
E	1	1	2	4.5
SE	1	-	1	2.3
S	-	1	1	2.3
SW	1	-	1	2.3
W	5	4	9	20.5
NW	8	5	13	29.5

\*\* If sighted further than 500' from nest tree.

Revised Bald Eagle Management Plan for Nest LE-28A  
Pelican Landing DRI

Appendix B

**APPENDIX B**

**Pelican Landing DRI Eco-Park Habitat Management Methods**

## PELICAN LANDING DRI ECO-PARK HABITAT MANAGEMENT METHODS

### Introduction

The (existing) Pelican Landing DRI "Eco-Park" encompasses approximately 78 acres in the northeast corner of the DRI property. The Eco-Park consists of 65 acres of high quality xeric oak/scrub habitat and 13 acres of pine flatwoods and was established primarily as a gopher tortoise (*Gopherus polyphemus*) preserve. A bald eagle's nest (nest #LE-28A) is present near the northeast corner of the Eco-Park. The majority of the Eco-Park lies within protection zones surrounding this nest and special consideration has been given to minimize disturbance to the nest from habitat management practices.

The Eco-Park is bordered by a cypress/hardwood wetland system (Halfway Creek) to the east, native uplands and wetlands to the west, and residential subdivisions to the north and south. The Eco-Park has been placed under a conservation easement granted to the Florida Game and Fresh Water Fish Commission (now the Florida Fish and Wildlife Conservation Commission - FFWCC) and is managed as outlined below.

Maintenance of the Eco-Park is acknowledged to be an important component of assuring the long term viability of scrub habitat, the existing gopher tortoise population, and the bald eagle's nest. The legal entity responsible for the maintenance of the Eco-Park will be WCI Communities, Inc., or its assignee.

### Management Methods

The following is a summary of the management methods to be employed in the Eco-Park:

1. Maintenance activities will be conducted in perpetuity and will involve a combination of mechanical treatment, selective hand clearing, and/or prescribed burning. Mechanical treatment methods would include mowing and bush hogging which would be conducted when daytime temperatures are below 75 degrees F (periods of reduced tortoise activity). Hand pruning or clearing of midstory vegetation could occur as necessary to control overgrowth. Removal of all or parts of larger trees may be performed in order to increase or maintain sunlight penetration to ground level, except in the Primary Protection Zone of the bald eagle nest. No maintenance activities will be conducted within the Primary Protection Zone of eagle nest LE-28A during the active nesting season.

Preferred maintenance practices per habitat type are as follows.

#### A. *Xeric Scrub*

- Hand-trim to a height of 6-9 feet at 5-year intervals or as deemed necessary.
- Excessive layers of shrubby growth will be removed by hand at 3-year intervals if necessary.
- Prescribed burns may be conducted at 8-year intervals if judged feasible and necessary. Any burning will be conducted by an experienced control-burn contractor. Burning will adhere to applicable regulatory guidelines and will be coordinated with the appropriate Fire District and the State of Florida Division of Forestry. Steps taken to protect the eagle nest or perch trees will include hand raking or clearing to minimize fuel in the vicinity of the tree prior to burning.

- No mowing or raking will be performed in xeric scrub areas.
- No burning will take place during the eagle nesting season in either the Primary or Secondary Protection Zones surrounding the eagle nest.

*B. Pine Flatwoods and Other Upland Habitat Types*

- Bush hogging and/or mowing at 3-year intervals if judged necessary to maintain a minimum of 30% total ground area clear of saw palmetto or other shrubs.
- Prescribed burning will be conducted as in xeric scrub habitat, but at an approximate 3-year interval if judged feasible and necessary.
- Exotic/nuisance plant species will be removed by hand.

*C. Wetland Habitats*

- Wetland habitats will be initially maintained by removing exotic and nuisance plant species (primarily melaleuca, Brazilian pepper, and downy rose myrtle). Hand removal will be utilized whenever feasible. In certain areas of heavy infestation, mechanical clearing may be necessary. Any mechanical clearing will first be approved by the FFWCC and will be conducted so as to minimize disturbance to eagles during the active nesting season.
- Following initial removal of exotic/nuisance species, wetland habitats will be maintained in perpetuity to suppress re-infestation and maintain exotic/nuisance plant species abundance at low levels. Ongoing control of undesirable species will be via directed herbicide applications, physical uprooting, or a combination of these methods.
- During prescribed burning of upland areas of the Eco-Park, appropriate steps will be taken to insure that site wetlands are not unduly damaged by fire (e.g., installing fire breaks, back-burning, executing burns under climatic conditions when wetland vulnerability to fire is minimized, etc.).

2. Maintenance activities will be initiated upon recording of the conservation easement for the Eco-Park and every other year thereafter.
3. A locally based nuisance-wildlife expert will be engaged as necessary to remove feral hogs from the Eco-Park.
4. If deemed necessary by FFWCC, native plant species of value to gopher tortoises will be used to supplement existing vegetation. Species used would include, but not be limited to, dwarf live oak, gopher apple, buckthorn, lyonia, gallberry, tarflower, and prickly pear cactus.
5. Prior to scheduled maintenance activities (every other year), a site walk and habitat evaluation will be performed by a qualified biologist to determine maintenance requirements. Potential need for supplemental foraging plant material plantings will also be evaluated.
6. Brochures containing information on gopher tortoise and bald eagle habitat, behavior and protection measures will be developed and made available to local homeowners and site users (golfers, Hyatt resort guests, other people utilizing the Eco-Park).

7. Recreational activities will be restricted to specific pedestrian trails. These will be established subject to FFWCC approval during final site planning. No designated picnic areas, biking trails, horse trails or interpretive facilities (other than approved signs, vita trails, and bird viewing blinds) will be allowed. The vita trails will not be paved, hardened or made impermeable. The location and design of all facilities will be reviewed and approved prior to construction by the FFWCC. Educational signage will be placed along the trails.
8. Human access will be restricted by appropriate signage within the primary zone of the eagle nest during the nesting season. During the non-nesting season, pedestrian trails or other human use will be restricted to a minimum of 500' from the nest tree. The trail will be barricaded off by a cable across the path.
9. Exotic vegetation (primarily melaleuca, Brazilian pepper and downy rose myrtle) will be removed from protection areas in perpetuity.

**EXHIBIT 3**

**AERIAL WITH FLUCFCS AND BALD EAGLE NEST**



**EXHIBIT 4**

**AERIAL WITH SITE PLAN, BALD EAGLE NEST,  
CONSERVATION AREA, AND SURROUNDING LAND USES**



SEVENTEENTH DEVELOPMENT ORDER AMENDMENT  
FOR PELICAN LANDING  
A DEVELOPMENT OF REGIONAL IMPACT

STATE DRI #1-9293-121  
COUNTY CASE DRI ~~DRI2005-00004~~ DRI2024-00001

WHEREAS, a letter requesting a change pursuant to Section 380.06(19)(e)2. was delivered to the County on February 13, 2013 to allow the temporary construction and service road entrance reflected on Map H to become a permanent access road; and

WHEREAS, Section 252.363, Florida Statutes permits the tolling of time during a State of Emergency declared by the Governor of the State of Florida, and

WHEREAS, Governor Scott declared a State of Emergency for wildfires in Executive Order number 11-128 and the County recognized the extension of time for the state of emergency for a period of 126 days plus 6 months by letter of the Director of Zoning dated February 23, 2012, and

WHEREAS, Governor Scott declared a State of Emergency for Tropical Storm Isaac in Executive Order 12-199 which resulted in an extension of 6 months plus 60 days, and Tropical Storm Debby in Executive Orders 12-140, 12-192 and 12-217 which resulted in an extension of time for a period of 6 months plus 95 days, and

WHEREAS, the letters acknowledging the State of Emergency Time Extensions require the Developer to incorporate the time extensions into the DRI Development Order during the consideration of a Notice of Proposed Change and this application is the appropriate time to acknowledge the time extensions, and

WHEREAS, the extensions will be reflected in the change of the build out date from May 20, 2020 to August 28, 2022, and the termination date from May 20, 2026 to August 27, 2028; and

WHEREAS, an extension request was submitted to Lee County on September 13, 2024, pursuant to Section 252.363, Florida Statutes; and

WHEREAS, this document incorporates the following Development Order Amendments, (and includes an acknowledgement of the changes approved in 2012 in the new paragraph 15) for Pelican Landing DRI adopted:

- 1) March 22, 1995 (incorporating the terms of a settlement agreement);
- 2) August 16, 1995, which incorporated the conditions of the Spring Creek West DRI as set forth in the Eighth Amendment to Spring Creek DRI #10-7677-9;
- 3) November 4, 1996;
- 4) November 17, 1997;
- 5) September 21, 1998;
- 6) June 21, 1999;
- 7) December 6, 1999;
- 8) August 7, 2000, to add 3.2 acres;
- 9) September 18, 2000, to add 140 acres;
- 10) February 26, 2002, to revise the legal description and clearly define the

- jurisdictional line between the City and County;
- 11) October 7, 2002, to accomplish the following: (a) adjust the original buildout date (from December 31, 2002 to May 21, 2004) and termination date (from December 31, 2005 to May 21, 2007) to reflect the one year and 141 days the effectiveness of the Development Order was tolled as a result of the 1996 appeal and challenge; and (b) extend the buildout and termination dates by 4 years and 364 days to May 20, 2009 and May 20, 2012, respectively;
  - 12) December 4, 2006 (submitted by Bayside Improvement Community Development District on January 25, 2005), to amend the legal description and Map H to (a) include a 1.45 acre tract for the purpose of constructing a maintenance facility, and (b) to reduce the number of residential dwelling units from 4,400 to 3,912 residential units and changed the mix of units types to allow an increase in single family units from 665 to 930 unit and a reduction in multi-family units from 3,735 to 2,982; and
  - 13) October 2, 2007 pursuant to House Bill 7203, a three-year extension was granted in response to Section 380.06(19)c, F.S., extending the buildout date to May 20, 2012, and the termination date to May 20, 2015;
  - 14) November 15, 2011, pursuant to House Bill 7207, a four-year extension was granted to extend the build out date by four years to May 20, 2016, and the termination date to May 20, 2019; and
  - 15) March 5, 2012, to extend the build out date by four years to May 20, 2020 and the termination date to May 20, 2026, and amend various conditions of the DRI to reflect completion and passage of time for certain items, and ending the interface zone monitoring requirements; and
  - 16) August 6, 2013, to extend the build out date by two years to August 28, 2022 and the termination date to August 27, 2028, and amend various conditions of the DRI, and amend Map H; and
  - 17) [Adoption date], to extend the build out date by ten years to August 28, 2034 and the termination date to August 27, 2040, and amend various conditions of the DRI and amend Map H.

WHEREAS, this amendment complies with F.S. Ch. 380 and other applicable Florida Statutes, local development regulations, and Lee Plan provisions, including the findings in Lee County Land Development Code Section 34-204(b)(7); and,

WHEREAS, this is the ~~Sixteenth~~ Seventeenth Amendment to the Pelican Landing DRI Development Order; and,

NOW, THEREFORE, be it resolved by the Board of County Commissioners of Lee County, Florida, that the Development Order for Pelican Landing DRI is hereby further amended as follows:

I. FINDINGS OF FACT/CONCLUSIONS OF LAW

A. The "Pelican Landing DRI" is a partially built master planned community on a total of 2,749.7± acres located approximately three miles north of the Lee/Collier County Line. Approximately 1,249.8 acres of the Pelican Landing DRI are located within the City of Bonita Springs; approximately 1,217.9 acres of the Pelican Landing DRI are located within the unincorporated area of Lee County; and approximately 282± acres of the 2,749.7± acre total constitutes the Spring Creek West DRI, which is located in the City of Bonita Springs. The property is bounded on the west by Estero Bay, on the east by US 41, and on the south by Spring Creek. Coconut Road provides the general northern boundary of Pelican Landing;

however, a part of the project is located north of Coconut Road.

The development is approved with a total of ~~3,912~~ 4,400 residential units, ~~of which 930 are single family and 2,982 multi-family,~~ ~~300,000~~ 153,000 square feet of gross floor area of retail commercial, and ~~475,000~~ 374,161 square feet of gross floor area of office commercial. ~~The retail uses will provide up to 2,048 parking spaces and the office uses will provide up to 1,587 parking spaces.~~ The project includes ~~750~~ 982 hotel/motel rooms, a 50,000-square-foot conference center, 65 wet boat slips and ~~450 dry boat slips~~, various recreational amenities including, but not limited to: golf, tennis, canoe parks, an existing boat ramp on the Baywinds Parcel and a beach park for the benefit of the owners in Pelican Landing. There are 143.81 acres of upland habitat preserve, 678.5 acres of salt and freshwater wetlands, 247.49 acres of water management lakes, 162.16 acres of public and private rights-of-way, 3.2 acres of "off-site" parking, 6 acres of utilities and an .11-acre cemetery site.

Water supply and wastewater treatment, and reclaimed water, when available, will be provided by Bonita Springs Utilities, Inc. The project buildout is ~~August 28, 2022~~ August 28, 2034.

B. LEGAL DESCRIPTION: The Pelican Landing DRI is located in Sections 05, 06, 07, 08, 09, 16, 17, 18, 20, and 21, Township 47 South, Range 25 East, and Sections 13 and 24, Township 47 South, Range 24 East, Lee County, Florida as more particularly described in attached Exhibits A, B, C and D and E.

Exhibit A identifies the boundaries of the Pelican Landing DRI as located within unincorporated Lee County.

Exhibit B identifies the boundaries of the DRI located within the City of Bonita Springs, except the Spring Creek West DRI portion.

Exhibit C identifies the boundaries of the Spring Creek West DRI, which is located in City of Bonita Springs.

Exhibit D is a sketch of the legal descriptions, set forth in Exhibits A, B and C.

C. The DRI property is currently zoned AG-2, RS-1, RM-6, PUD, RPD, CPD, MPD, TFC-2 and RM-2; the property is partially developed.

D. The Application for Development Approval as modified by the settlement agreement was determined to be consistent with the requirements of Section 380.06, Florida Statutes.

E. The development is not located in an area designated as an Area of Critical State Concern under the provisions of Sections 380.05 and 380.06 (14), Florida Statutes.

F. The proposed Development Order Amendment does not unreasonably interfere with the achievement of the objectives of the adopted State Land Development plan applicable to the area. The development is consistent with the State Comprehensive Plan if developed pursuant to the conditions set forth herein.

G. The Section 380.06(19)(e)2 change has been reviewed by the Southwest

Florida Regional Planning Council (SWFRPC) staff.

H. The development is located in the Urban Community, Outlying Suburban, Wetlands, and Resource Protection Areas future land use classifications of the Lee Plan with the and the property is located within the Privately Funded Infrastructure Overlay and is consistent with the Lee County Comprehensive Plan and Lee County's Land Development Regulations if subject to the conditions contained in this Development Order Amendment.

I. The proposed conditions below meet the criteria found in Section 380.06(15)(d), Florida Statutes.

J. In accordance with the Development Order condition Section III. Condition 16. herein, the lands within the Spring Creek West DRI were incorporated into this Development Order. Those lands described as the Spring Creek West DRI will only be subject to those terms and conditions set forth in the Eighth Development Order Amendment for the Spring Creek West DRI. They will remain applicable to the property known as the Spring Creek West DRI in the same manner as they are presently applicable, except that one biennial monitoring report that includes both Pelican Landing and Spring Creek West DRIs must be submitted. Additionally the Spring Creek West DRI legal description has been included within the Pelican Landing DRI. Since the Spring Creek West land is part of an almost completely developed vested DRI, there is no reason to alter the conditions within the Spring Creek West DRI Development Order. The Spring Creek West property is vested under the terms and conditions of the Spring Creek West DRI Development Order. The Spring Creek West Property is vested under the terms and conditions of the Spring Creek West DRI Development Order, and this property will not be considered in any cumulative analysis of Pelican Landing in accordance with Section III Condition 16. The Spring Creek West DRI is built out. The monitoring for a built out DRI only needs to occur for one year after buildout. The Spring Creek West development has been built out for more than one year.

K. A portion of the DRI property is in the incorporated limits of the City of Bonita Springs pursuant to legislation adopted during the 1999 and 2015 Legislative sessions. The property now located in the City of Bonita Springs lies within the area described in section 6 of the Committee Substitute for Senate Bill 2626, 1<sup>st</sup> Engrossed. Pursuant to Florida Statutes section 380.06(15)(h), a separate DRI development order was previously adopted by the City of Bonita Springs that incorporates the rights and obligations specified in this development order as they affect property located within the city limits. Also pursuant to that section of the Florida Statutes, the Pelican Landing DRI development order adopted by the County was amended to remove property located in the City of Bonita Springs. Conditions pertaining to the adoption of an amended DRI development order for property remaining within unincorporated Lee County are set forth in Section II. L. of this development order.

L. Pelican Landing DRI qualified for the statutory three-year extension to all phase, buildout and expiration dates granted by the 2007 Florida Legislature under House Bill 7203 (amending F.S. §380.06(19)(c)) and signed into law on June 19, 2007. The Board of County Commissioners granted the extension pursuant to Lee County Resolution 07-10-03, as the Thirteenth Amendment to the Pelican Landing DRI Development Order, adopted on October 2, 2007. Under HB7203, the three-year extension did not constitute a substantial deviation, is not subject to further Development of Regional Impact review, and may not be considered when determining whether a subsequent extension is a substantial deviation under F.S. §380.06(19)(c).

M. House Bill 7202 (HB7207), as signed into law by the Governor of the State of Florida on June 2, 2011 (as codified in Chapter 2011-139, Laws of Florida) authorized a four year extension for all valid DRI Development Orders. At the option of the Developer, all commencement, phase, buildout and expiration dates for valid Developments of Regional Impacts may be extended by four years regardless of previous extensions issued in the past

In accord with HB 7207, the Pelican Landing DRI qualified for the extension of the DRI's compliance dates. Under HB 7207, the extension of the DRI's compliance dates does not constitute a substantial deviation of the original development order approvals warranting further DRI review.

## II. ACTION ON REQUEST AND CONDITIONS OF APPROVAL

NOW THEREFORE, be it resolved by the Board of County Commissioners of Lee County, Florida, in a public meeting duly advertised, constituted and assembled on August 6, 2013, that the requested Section 380.06(19)(e)2 change to the Development of Regional Impact Development Approval submitted on behalf of WCI Communities, Inc. for the project known as the Pelican Landing, is hereby APPROVED, SUBJECT TO the conditions, restrictions and limitations that follow.

For the purposes of this Development Order, the term "developer" or "Applicant" refers to and includes successors or assigns, and all references to County Ordinances or other regulations, includes future amendments thereto.

### A. **Historical/Archaeological Sites**

1. The Zenith Mound Archaeological Site (State Master File #8LL1436) and the Johnson Cemetery (State Master File #8111440) will be preserved in perpetuity and have been recorded as "preserve" on all appropriate plats, site plans, and the Master Development Plan for Pelican Landing DRI.

2. If any additional archaeological/historical sites are uncovered during development activities, all work in the immediate vicinity of such sites will cease. The Developer will immediately contact the Florida Department of State, Division of Historical Resources, the SWFRPC, and Lee County and advise them of the discovery. The Developer will have a State-certified archaeologist determine the significance of the findings and recommend appropriate preservation and mitigation actions, if necessary.

### B. **Housing**

1. There were no regionally significant housing impacts for the first planning horizon of the DRI Development Order, which ended on December 31, 1997. Utilizing supply data not adjusted to account for the fact that housing sells for less than the listed price, Planning Horizon II (January, 1998, through December 2002) would have an unmet need of 99 affordable units for very low income and no unmet need for low income households. Utilizing supply data adjusted to account for the fact that housing sells for less than the listed price, Planning Horizon II would have an unmet need of only 38 affordable housing units for very low income households and still no unmet need for low income households. The aforementioned data is based on the existing studies.

The supply adjustment figures mentioned above are based on actual sales prices relative to listed prices. Affordability thresholds for owner-occupied affordable housing

are determined using PITI (Principal, Interest, Taxes, and Insurance) calculations methodology as outlined in the Florida Department of Economic Opportunity (FDEO) 1991 Draft methodology.

2. The SWFRPC, the FDEO and Lee County accepted the Developer's contribution of \$20,000.00 to assist existing and prospective employees within the Pelican Landing DRI to locate affordable housing. The \$20,000.00 was contributed to the Lee County Affordable Housing Trust Fund by January 2, 1997. Lee County may use all, or a portion, of the funds to conduct a needs assessment study, and the County will commit to use SHIP funds to assist a minimum of 8 qualified employees within the Pelican Landing DRI obtain a home. Qualified employees must be first time homebuyers, employed by a business located within the Pelican Landing DRI, including employees of WCI. The applicants for funding must meet the program guidelines including, but not limited to, income limitations and repayment obligations. The funds will only be used to provide interest free deferred payment assistance to qualifying homebuyers for either closing costs or down payments associated with the purchase loan.

### **C. Hurricane Preparedness**

1. The developer provided Lee County with the funds for the provision and connection of a portable diesel powered generator for the Gateway Elementary School. The generator must be equipped with a fuel tank, capable of generating enough power to handle the demands of ventilation fans, lighting, life safety equipment (alarms and intercom), and refrigeration and cooking equipment. The Developer was responsible for the initial electrical hook-up costs. The selection of the generator was in coordination with Lee County Emergency Management Staff.

2. The Lee County Emergency Management staff will act as a liaison between the Developer and the Lee County School District staff, and will make all of the necessary arrangements for the location of the generator on Lee County School Board property.

3. The provision of the generator serves to mitigate the shelter and evacuation impacts of the project at buildout. Should Lee County ever adopt an impact fee, or other type of levy or assessment to provide funding for shelter space and improvements thereto, the Developer will be entitled to a credit against the fee or levy in the amount of the cost of the generator, if eligible under the terms of that impact fee or levy.

4. The Developer must notify all purchasers of real property within the residential portions of development, through the restrictive covenants, of the potential for storm surge flooding in feet above the Base Flood Elevation, according to the National Weather Services' storm surge model "SLOSH", and the National Flood Insurance Program.

5. The Developer must prepare, in conjunction with Lee County Emergency Management and Division of Natural Resources (DNR) staff, a brochure advising all marina owners of the measures that can be taken to minimize damage in the event of a hurricane. This brochure must address how boat owners can minimize damage to their vessels, the marina site, neighboring properties and the environment. The brochure must be provided to all boat owners and users at the marina.

6. Prior to the issuance of a Certificate of Occupancy for any Hotel, the Developer or the hotel owner/manager must prepare a written hurricane preparation and evacuation/sheltering plan. This plan will be prepared in conjunction with Lee County

Emergency Management Staff and must be coordinated with the hurricane evacuation plan for the overall DRI.

7. The Property Owner's Association must host an educational seminar, and will be responsible for obtaining the place for the seminar and for providing the invitations to the homeowners. The time will be coordinated with the Lee County Emergency Management staff, who will provide the education and information at the seminar and will advise the owners of the risks of natural hazards and the action they should take to mitigate the inherent dangers.

8. The Developer must develop a hurricane evacuation plan for the DRI. The hurricane evacuation plan must address and include: a) operational procedures for the warning and notification of all residents and visitors prior to and during a hurricane watch and warning period; b) the educational program set forth in condition 7 above; c) hurricane evacuation; d) the method of advising residents and visitors of hurricane shelter alternatives including hotels and public hurricane shelter locations; e) identification of the person(s) responsible for implementing the plan; and f) how the private security force will be integrated with the local Sheriff's personnel and the Division of Public Safety. The plan must be developed in coordination with the Lee County Emergency Management officials and found sufficient by those officials after the effective date of the DRI Development Order. *Editorial note: The Developer submitted an emergency plan to Lee County Emergency Management for review and approval. The plan must be re-submitted annually by the Developer, the property or homeowner's association or the community development district to address changes in the development parameters and changes in local hurricane evacuation and sheltering policies. The plan must comply with Lee County Administrative Code 7-7, as it may be amended.*

9. The developer, and any successor landowner, will pay any All Hazards Tax properly levied by Lee County to provide for shelter space, upgrades to shelters, and to address other natural disasters.

#### **D. Marina Facilities**

1. The Developer must create a conservation easement precluding the construction of additional docking facilities beyond those specifically authorized in this Development Order. This conservation easement will be in addition to the 4,000-foot conservation easement already required in Spring Creek. The location and extent of the conservation easement will be contingent upon navigability of the waterway, and will be established in association with the Florida Department of Environmental Protection (FDEP) permits.

2. All docking and dry storage facilities must be constructed in accordance with the terms and conditions of any FDEP permit or lease, and in accordance with any Lee County dock permit.

3. The Developer has constructed dock and channel markers within Estero Bay. The DNR will be permitted to mount regulatory signs on the docks and channel markers owned by the developer. Lee County will be responsible for insuring that the addition of the regulatory signs does not cause the developer to be in violation of any permit condition or FDEP, Coast Guard, or other agency regulation. The regulatory signs will remain the property and maintenance responsibility of the DNR.

4. The marina operator must dispense manatee awareness brochures to all users of the marina facilities. The brochures must also include information regarding channel locations, proper boating routes, and shallow water habitats to be avoided.

5. The Developer and marina operator must insure that the marina lighting is directed away from adjacent mangroves and estuarine systems to reduce any negative impacts to the wildlife using these areas.

6. The marina operator will remove or cause to be removed from the marina any boat operator observed violating the guidelines set forth in the manatee awareness brochures or Lee County regulations regarding the protection of manatees.

7. The Developer must designate and reserve one wet slip for the Florida Marine Patrol or the Lee County Sheriff's Special Response Unit, if needed by these agencies.

8. The shuttle boat captain and marina operator must keep a log of all manatee sightings. The log must reflect the locations, time and date of the sighting, the number of manatees, and the nature of their activity if it can be determined. The log should also note the name of the person recording the sighting. This information must be forwarded to Lee County and FDEP on a periodic basis.

9. The developer must construct an educational board on a Kiosk at the Beach Park. The educational board will be created in conjunction with the DNR, Marine Sciences Program and Turtle Time.

10. The Developer will comply with all water quality monitoring requirements imposed by the FDEP and the South Florida Water Management District (SFWMD).

11. Any boat wash areas must have a closed loop system that captures and recirculates the water through a filtration or other acceptable system. Any boat repair and maintenance facilities must be in an enclosed, roofed, impervious surfaced area to limit the run-off of contaminated water during a storm event.

12. Once a year the marina operator must host an Educational and Hurricane Preparedness Workshop for all tenants in the wet slip area. The marina operator will provide the facility for the seminar and must insure that all tenants are invited. The marina operator will establish the date and time for the workshop in conjunction with Lee County Emergency Management and the DNR, Division of Marine Sciences. Lee County will provide a trained representative who will educate the tenants on natural resources awareness, manatees, safe boating practices and on proper procedures, prior to and during a hurricane.

~~13. The dry storage facilities must be located in a building or structure which is designed and constructed to meet all requirements of the Standard Building Code, as adopted by Lee County.~~

#### **E. Vegetation and Wildlife/Wetlands**

The Developer conducted Protected Species surveys in accordance with the Florida Game and Fresh Water Fish Commission (FGFWFC) [now known as the Florida Fish & Wildlife Conservation Commission (FWCC)] guidelines and the Lee County Land Development Code (LDC). These surveys identified the presence of the following protected species: bald eagle, wood stork, little blue heron, tricolored heron, reddish egret, snowy

egret, white ibis, piping plover, Southeastern snowy plover, least tern, American oystercatcher, black skimmer, brown pelican, Atlantic loggerhead sea turtle, and gopher tortoise. The Baywinds parcel has existing environmental permits that remain valid as of the date of the Seventh Development Order Amendment. These permits are based on the plan of development shown on the local Development Order Approval No. 95-12-068.00D. Some improvements were made pursuant to those permits. Future improvements to the Baywinds parcel must be consistent with the conditions set forth in those permits as may be amended.

1. There were three bald eagles' nests of concern prior to the original development order adoption. One nest was on the Pelican Landing property in the Eco Park. The other two nests were originally within 1500 to 1600 feet of Pelican Landing. One of these other nests was located on the Kersey parcel and declared abandoned by the USFWS in July 1998. The buffers that affect Pelican Landing property were established in an on-site eagle habitat management plan addressing the Pelican Landing property only.

Prior to any new development within 1500 feet of any active eagle nest other than the nest located within the Eco Park, the Developer must prepare an on-site eagle management plan, addressing the Pelican Landing DRI property only, that will be reviewed by FDEO, SWFRPC, FWDC, Lee County, and USFWS. The agencies must provide specific written objections or concerns if any, regarding any new proposed management plan and indicate how those concerns can be addressed by the developer.

The Developer will revise the management plans to respond to any lawful objections. The agencies will review and respond to the management plan resubmittal. The agencies will provide a written response to Lee County and the Developer, which reflects that there is no objection to the management plan or outlines specific objections and concerns. The agency response will indicate how any concerns or objections can be addressed by the Developer. Lee County and FDEO will have the final approval authority. If a proposed management plan includes development within 750 feet of an active eagle's nest, the plan must also be submitted to the Lee County Eagle Technical Advisory Committee (ETAC). ETAC will review the plan and forward recommendations to the FWDC and USFWS.

The document entitled "Raptor Bay Golf Course Renovation Bald Eagle Management Plan for Bald Eagle Nest LE-28A," prepared by Passarella & Associates, Inc. dated July 2022, is hereby incorporated as a condition of this approval.

2. A local development order for the Hickory Island Beach Park has been issued to permit construction of beach park infrastructure. This local development order includes a protected species survey and phased Preliminary Management Plan (PMP). The PMP incorporated DNR and FWCC recommendations.

The PMP required the Developer to provide the County with a conservation easement over the entire parcel, except for the active building areas approved through the local development order. The PMP permitted a refinement of the conservation easement boundaries after completion of a one year utilization study. The final conservation easement is consistent with the provisions of Section 704.06, Florida Statutes. For the purpose of this DRI Development Order, Section 704.06, F.S. will not preclude educational signage, and signage and land management activities required by the management plan, including but not limited to the removal of exotic vegetation.

The objectives of this one year study were: 1) determine shorebird utilization of land under Developer's ownership based on detailed surveys and prepare a shorebird

management plan, 2) analyze beach vegetation and prepare a maintenance plan, and 3) monitor beach use by Pelican Landing visitors. Additionally, the PMP requires surveys for identification and protection of sea turtle nests, the construction of three osprey platforms, and a review of the elements of the overall plan to be conditioned on the DRI Development Order.

The Developer submitted a Final Management Plan to Lee County, FGFWFC, and DCA within 18 months of the effective date of the DRI Development Order, on November 14, 1994. Lee County, FWCC, and FDEO reviewed the management plan. Lee County approved this plan and its implementation was certified in October 1996.

3. The projected gopher tortoise burrow count for the original Pelican Landing DRI area was 439, based on an estimate of FWCC habitat guidelines, a minimum of 75 acres of gopher tortoise habitat must be protected.

The Developer has set aside a 78±- acre area of xeric scrub and pine flatwoods to mitigate the impacts to the upland gopher tortoise habitat for the original Pelican Landing DRI land area. This area is known as the Pelican Landing Eco-Park. The Eco-Park area contains significant portions of the xeric oak habitat existing on the original Pelican Landing DRI site.

A Gopher Tortoise Population Study and Management Plan was submitted to the FWCC (f/k/a Florida Game and Fresh Water Fish Commission) on or about December 22, 1993 for the original Pelican Landing DRI. A new protected species survey was conducted in March and April of 1998 on the addition to the Pelican Landing DRI known as the Kersey-Smoot parcel. The new survey revealed the presence of 114 active and inactive gopher tortoise burrows on 70 acres. A protected species survey was conducted in 1990 and February 1996 on the Baywinds parcel. The survey revealed the presence of 28 active and inactive gopher tortoise burrows on 15.41 acres. The Developer has an Incidental Take Permit for the new gopher tortoise burrows located outside of the Eco-Park in the undeveloped Kersey-Smoot and Baywinds parcels. The Developer obtained an Incidental Take Permit prior to proceeding with development within the gopher tortoise habitat areas. Prior to the start of construction, all gopher tortoise burrows within the development areas must be excavated and any resident gopher tortoises, or commensal species, relocated to open spaces within the Pelican Landing DRI.

Impacts to gopher tortoise habitat within the Kersey-Smoot and Baywinds parcels have been mitigated through incidental take funds paid to the FWCC for the purpose of regionally significant gopher tortoise habitat.

The applicant and the FWCC have had considerable discussion regarding the modifications and refinements to the existing 78-acre Eco-Park boundaries. The addition of the eastern 140-acre "Skebe Tract", of which 63.24 acres will be added to the Eco-Park, will provide for an 81% increase in the overall size of the Pelican Landing Eco-Park.

The new Eco-Park configuration will delete the southern-most ±22 acres, while adding new lands to the park area within the confines of the "Skebe Tract". An overall increase (net gain) of ±11 acres of upland habitat, plus 52.24 additional acres of forested wetland acreage will increase the overall size of the revised Eco-Park boundaries to approximately 141.45 acres.

Any active or inactive gopher tortoise burrows found within the Eco-Park deletion zone or the new golf lands of the eastern portion of the "Skebe Tract" will be excavated to

search for activity. Any tortoises found will be relocated to the modified Eco-Park boundaries, pursuant to the Eco-Park Reconfiguration Plan, authored by Wilson, Miller, Inc., and accepted by the FWCC. The initial Gopher Tortoise Incidental Take Permit LEE-9 must be modified by the FWCC in order to adopt the Eco-Park Reconfiguration for both the existing Eco-Park south deletion area, the "Skebe Tract" addition to the Eco-Park, and the inclusion of a portion of the "Skebe Tract" in the development area.

A revised perpetual Conservation Easement will be recorded in the Lee County records, pursuant to the revised boundaries of the Eco-Park. The deleted ±22 acres will be formally released from the Conservation Easement by the FWCC.

4. All areas designated as Preserve on the adopted Map H must remain undeveloped and be owned, maintained, and managed by an Improvement District or a similar legal entity. No lot lines will be allowed within any preserve areas. The following uses are permitted within Preserves: habitat management activities, hiking and nature study, outdoor education, recreational fishing, gates and fencing, and boardwalks limited to pedestrian use. Trimming of mangroves for residential visual access to Estero Bay or Spring Creek is prohibited in wetland areas #14 and #21 (as identified in DRI ADA), and Bay Cedar Phase II (along Spring Creek), and any saltwater wetlands abutting the Kersey-Smoot and Baywinds parcels. However, minor mangrove trimming is permitted within the vicinity of the clubhouse on the Baywinds parcel to provide a limited view of the Estero Bay. The scope of the developer's FDEP application request for minor trimming is subject to the review and approval of Lee County Division of Planning, Environmental Sciences staff. All trimming activity will be subject to the wetland regulatory permit approvals.

The Developer has granted a conservation easement consistent with Section 704.06., Florida Statutes for the Eco-Park to the FWCC. The conservation easement was drafted to allow use of the Eco-Park for resource-based recreational activities, enjoyment of nature and education enrichment, including, but not limited to: Picnic areas, trails, benches, boardwalks, biking/jogging trails, vita courses, bird viewing blinds/towers and interpretative facilities, signs, on-going maintenance and removal of exotic vegetation and compliance with the management plan required per the FWCC. Educational and directional signage are permitted within the Eco- Park. For the purposes of this DRI D.O. the prohibition of signage included within Section 704.06, Florida Statutes applies to off-site signs and billboards. The removal of exotics, controlled burns and the maintenance of the vegetation in accordance with the Eco-Park management plan will be permissible in the conservation easement notwithstanding the provisions of Section 704.06, Florida Statutes prohibiting the destruction of trees. A paved golf cart path, a wooden golf cart bridge across Halfway Creek, a buried irrigation line to be under the path and bridge, and a buried outfall pipe for a surface water management system will be located within the Eco-Park.

5. Should any orchids, wild pine air plants, Florida Counties, Catesby's lilies, leather ferns, royal ferns, or cabbage palms with gold polypody and shoestring ferns be located within development areas, best efforts must be used to relocate these plants to open space and landscaped areas.

6. As part of local development order approval for any phase of the development, an invasive exotic vegetation removal and maintenance plan must be submitted to the DNR for approval. At a minimum, this plan must be structured to provide for the phased removal of invasive exotic vegetation and maintenance to control exotic re-invasion within the wetland and upland preserve areas. Removal within preserve areas may be done on a pro rata basis as phased local development orders are obtained.

7. The existing Pelican's Nest golf course includes native vegetation along the rough and between golf holes. The applicant must continue to incorporate the native vegetation into the design of future golf holes, where feasible. Native vegetation has been retained on individual lots and between tracts in the existing developed area of Pelican Landing. Where feasible, the Applicant will continue to incorporate native vegetation into the open space and landscaped areas.

8. The Applicant must design the golf course and conduct maintenance, which includes fertilization and irrigation, in a manner that is sensitive to the water and nutrient needs of the native xeric vegetation in and around the golf course. However, this condition will not be interpreted in a manner that forces the applicant to jeopardize the health and viability of the golf course.

9. Upon approval of the management plans referenced above, the approved management practices will be considered a part of this development order for reinforcement purposes, and be enforceable in the same manner as a condition of this development order.

10. This project may result in the filling of not more than ~~43.25~~ 16.01 acres of wetlands. The mitigation for the impact to wetlands will be determined at the time of final permitting, but the mitigation should include the removal of exotic invasive plants, the restoration of historic hydro periods, and a total of not more than 10 acres of littoral zone plantings. The mitigation for wetland impacts to the Baywinds parcel was determined prior to the inclusion of the property into the Pelican Landing DRI as part of the environmental and local government permitting. The mitigation was based on the plan of development reflected in Lee County Development Order 95-12-068.00D. Changes to the plan of development that include additional wetland impacts may necessitate modification to the environmental and local government permitting.

#### **F. Solid/Hazardous/Medical Waste**

1. All storage, siting, and disposal of hazardous wastes and hazardous materials must be accomplished in accordance with federal, state, and local regulations. The business owner/operator is responsible for compliance with all permitting, reporting, emergency notification provisions and other regulations relating to hazardous materials and hazardous wastes.

2. All business owners and operators must ensure that regulated substances are loaded, off-loaded and stored in an area that is curbed and provided with an impervious base. The impervious base must be maintained free of cracks and gaps so as to contain any spills or leaks.

3. Outdoor storage of hazardous waste is prohibited.

4. Restaurants must be outfitted with grease traps or approved equivalent systems. The owner/operators of any restaurant must follow all applicable codes and regulations for cleaning and maintaining grease traps.

5. If any hotel pool utilizes gaseous chlorine, the pool must be equipped with chemical sensors, alarm devices, or other comparable equipment. The hotel owner/operator is responsible for compliance with this requirement and notice of this responsibility/obligation must be included on all deed transfers or lease agreements.

6. Any business that generates hazardous waste defined by the Code of Federal Regulations 40 CFR Part 261, must notify the DNR for an assessment as required by Section 403.7225, Florida Statutes. This assessment will address any deficiencies in the management practices of hazardous waste generated at the facility.

7. The Developer, or any subsequent owner of the golf course, must insure that the golf course maintenance equipment is handled in accordance with all federal, state and local regulations. Specifically, the developer will ensure that all wash down facilities comply with FDEP rules regarding chemical residue, and insure the continued recycling of motor oil from maintenance equipment, and ensure recycling of used motor oil, used oil filters, anti-freeze, lead acid batteries, cleaning solvents, shop rags, and aerosol cans.

8. The Developer must investigate the feasibility of mulching trees and brush for on-site needs.

9. The developer/property owner of each commercial parcel which will be used to store, manufacture or use hazardous materials, must contact the Lee County Office of Emergency Management, Hazardous Material Representative, prior to obtaining a development order, to discuss the proposed development in relation to potential type, and storage of hazardous materials located on the premises.

10. If required by federal, state or local regulations:

a. The developer/property owner must prepare or have available material safety data sheets (MSDS) and submit either copies of MSDS or a list of MSDS chemicals to the appropriate fire department or district and to the Lee County Division of Public Safety.

b. The developer/property owner must establish an emergency notification system to be used in the event of a hazardous material release.

#### **G. Storm Water Management**

1. The surface water management system must be designed, constructed and operated in accordance with the pertinent provisions of Chapters 373 and 403, Florida Statutes; Chapter 40E, Florida Administrative Code; and the South Florida Water Management District "Basis of Review", and any pertinent local regulations regarding the design, construction and maintenance of the surface water management system. This condition applies to anyone obtaining a local Development Order within Pelican Landing. The Bayside and Bay Creek Improvement Districts (formed pursuant to Chapter 190, Florida Statutes), must ensure that the portion of the system under the ownership and control of the district is operated in accordance with the pertinent portion of the regulatory provisions cited above, and any permit (construction or operation) issued by the SFWMD. Individual lot owners with on-site wetlands or Storm water retention or detention areas under their control must comply with the pertinent portion of the regulatory provisions cited above and any permit issued by the SFWMD.

2. Water Control Structures must be installed as early in the construction process as practicable to prevent over-drainage or flooding of preserved wetland areas. If the SFWMD establishes a construction schedule or scenario that is contrary to this condition, the permit requirement of SFWMD will control.

3. Any shoreline banks created along on-site storm water wet detention lakes must include littoral zones constructed consistent with SFWMD requirements. The shoreline banks must be planted in native emergent and submergent vegetation. The Developer must establish and maintain, by supplemental planting if necessary, 80 percent cover by native aquatic vegetation within the littoral zone for the duration of the project. The littoral zone will include, at a minimum, the area between high water and ordinary low water.

4. The Bayside Improvement and Bay Creek Districts, and/or all property owners, must undertake a regularly scheduled vacuum sweeping of common streets, sidewalks and parking facilities within the development.

5. The Developer must implement the best management practices for monitoring and maintenance of the surface water management systems in accordance with Lee County and SFWMD guidelines.

6. The SFWMD must establish all internal surface water management and wetland systems. The developer must set aside all internal surface water management and wetland systems as private drainage easements, common areas, or preserves. These areas must also be identified as specific tracts on the recorded final plat or some other legally binding document acceptable to the Lee County Attorney's office.

7. The Baywinds parcel must be developed in accordance with the following permits: Water Management permit numbers 36-02043-S-02 and 36-02043-S, ACOE permit number 89IPD-20127 and the letter of permission to continue work authorized in the original permit, LOP #1989001127, and FDEP permit number 36293225. These permits were granted based on the plan of development reflected in Lee County Development Order No. 95-12-068.00D. These permits may be modified, updated or replaced as required by law. Changes to the local development order may also require modification of the referenced permits.

#### H. **Transportation**

##### 1. Significant Impact

a. The original traffic impact assessment for this project assumed the development parameters and land uses shown in Exhibit F, "Pelican Landing DRI Development Parameters." The assessment indicates that the significantly impacted roadways and intersections described below would be operating below acceptable levels of service at the end of Planning Horizon I (1997) and buildout (2009). Each monitoring report, described in Paragraph 4, reflected whether the roadways and intersections described below were significantly impacted or were projected to be significantly impacted by this project in the following year.

b. The Pelican Landing DRI based on the original traffic study was projected to significantly and adversely impact (as defined by Lee County Administrative Code) the following roadways and intersections:

Planning Horizon I (1997)

Needed Improvement

US 41/Corkscrew Road

-Signal retiming

US 41/Williams Road	-Signalization, if warranted
US 41/Coconut Road	-Signalization, if warranted US
41/Pelican Commercial Entrance	-Northbound left turn lane
	-Southbound right turn lane
	-Eastbound right turn lane
US 41/North Pelican Entrance	-Northbound left turn lane
	-Southbound right turn lane
	-Eastbound left and right turn lanes
	-Signalization, if warranted
US 41/Pelican Landing Parkway/Old 41	-Southbound dual left turns
	-Signal retiming
US 41/Pelican's Nest Drive	-Northbound left and right turn lanes
	-Southbound left and right turn lanes
	-Eastbound left and thru/right lanes
	-Westbound left and thru/right lanes
	-Signalization, if warranted
US 41/Terry Street	-Signal retiming
US 41/Bonita Beach Road	-Signal retiming
Coconut Road/Spring Creek Road	-Separate NB left & right turn lanes
	-Separate EB thru & right turn lanes
	-Separate WB thru and left turn lanes

Buildout (2002 in the original assessment)

Corkscrew Road	
-Three Oaks Parkway to 1-75	-Widen to 4 lanes
Old 41	
-Bonita Beach Road to Terry St.	-Constrained (no widening possible; maximum v/c ratio of 1.85 per 1993 Lee Plan Policy 22.1.9)
US 41	
-Immokalee Road to Old 41 (Collier County)	-Widen to 6 lanes
-Bonita Beach Road to West Terry Street	-Widen to 6 lanes
-West Terry Street to Pelican's Nest Drive	-Widen to 6 lanes
-Coconut Road to Williams Rd.	-Widen to 6 lanes
-Constitution Boulevard to Alico Road	-Widen to 6 lanes
US 41/Corkscrew Road	-Separate EB left and thru/right lanes
	-Westbound dual left turn lanes
	-Signal retiming
US 41/Williams Road	-Signalization, if warranted
US 41/Coconut Road	-Separate EB left and right turn lanes
	-Signalization, if warranted
US 41/Pelican Commercial Entrance	-Northbound left turn lanes
	-Southbound right turn lane
	-Eastbound right turn lane
US 41/North Pelican Entrance	-Northbound left turn lane
	-Southbound right turn lane

	-Eastbound left and right turn lanes -Signalization, if warranted
US 41/Pelican Landing Parkway/Old 41	-Southbound dual left turn lanes -Northbound dual left turn lanes -Eastbound thru/right turn lane -Westbound two thru lanes -Signal retiming
US 41/Pelican's Nest Drive	-Northbound left and right turn lanes -Southbound left and right turn lanes -Eastbound left and thru/right lanes -Westbound left and thru/right lanes -Signalization, if warranted
US 41/Terry Street	-Northbound dual left turn lanes -Separate WB thru & right turn lanes -Signal retiming
US 41/Bonita Beach Road	-Signal retiming
Coconut Road/Spring Creek Road	-Separate NB left and right turn lanes -Separate EB thru & right turn lanes -Separate WB thru & left turn lanes

The Traffic Impact Statement submitted in support of the Fifteenth Amendment to the Pelican Landing DRI found that the following roadway links will be significantly and adversely impacted by the Pelican Landing development at buildout (~~2022~~ 2034).

<u>Buildout (<del>2022</del> 2034)</u>	<u>Needed Improvement</u>
Old US 41 Bonita Beach Road to East Terry	- No Improvement Constrained Roadway

## 2. Mitigation

a. The Developer will pay impact fees as defined in the LDC to mitigate Pelican Landing's transportation impacts on the non-site related roads and intersections set forth in Section H.1.b. above. Road Impact Fees were originally estimated to be \$8,900,000 for the land uses identified in Exhibit F. Road Impact Fee payments represent the DRI's proportionate share payment for all road and intersection improvements identified in Condition H.1.b. as significantly impacted by this project and operating below the adopted level of service standard by 2002 and as updated through the new buildout year of 2022 2034. Estimated Road Impact Fees from this project exceed the community's estimated proportionate share dollar amount of all significantly impacted roadway improvements.

If the LDC Chapter governing Impact Fees is repealed, reduced, or made unenforceable by court petition, the Pelican Landing DRI will continue to pay, per individual permit, an amount equivalent to Road Impact Fees prior to such repeal, reduction or court petition. If payment is not made consistent with that schedule, then a substantial deviation will be deemed to occur, and the traffic impacts of Pelican Landing DRI must be reanalyzed to determine appropriate alternative mitigation prior to the issuance of further building

permits for the Pelican Landing DRI.

All road impact fee monies paid by the Pelican Landing DRI after adoption of this DRI Development Order will be applied by Lee County toward the non-site related improvements included in Transportation Condition H.1.b., provided those improvements are deemed necessary to maintain the adopted level of service standards and are included in the County's Capital Improvement Program. Should the identified improvements be funded through other sources, in whole or in part, or deemed unnecessary to maintain the adopted level of service standards, Lee County may apply any Pelican Landing impact fees not required for those specific improvements to other improvements consistent with the requirements of the LDC.

b. If through the local development approval process, the developer constructs, with the approval of the Lee County DOT, an intersection or roadway improvement identified in Paragraph H.1.b., those improvements may be eligible for Road Impact Fee credits. The determination of whether such credits will be granted will be made consistent with the procedures outlined in the LDC.

c. The Developer has dedicated 60 feet of right-of-way for Burnt Pine Drive North, from Pelican Landing Parkway to Coconut Road, a distance of 6,926 feet; and for Burnt Pine Drive South from Pelican Landing Parkway to Pelican's Nest Drive, a distance of 2,326 feet. The developer constructed, as a two-lane access road, Burnt Pine Drive North from Pelican Landing Parkway to Coconut Road, and Burnt Pine Drive South from Pelican Landing Parkway to Pelican's Nest Drive. Credits, if any, for the right-of-way dedication and construction identified above will be issued consistent with the procedures outlined in the LDC. Dedication of the roadway right-of-way and construction of Burnt Pine Drive for the links below is complete:

1) Burnt Pine Drive South from Pelican Landing Parkway to Pelican's Nest Drive: coincident with the Certificate of Compliance for the commercial parcel located in the northeast quadrant of the intersection of Burnt Pine Drive South and Pelican's Nest Drive.

2) Walden Center Drive North from Pelican Landing Parkway to Pelican Landing North Entrance.

3) North Commons Drive North from Pelican Landing North Entrance to Coconut Road.

d. The Developer reserved and dedicated 25 feet of additional right-of-way along the south side of Coconut Road from US 41 west to Spring Creek Road to ensure that improvements to Coconut Road are not precluded. Such right-of-way was dedicated to Lee County. Credits, if any, for the right-of-way dedication will be granted at the time of dedication, and must be consistent with the LDC in effect at that time.

e. As a mitigation option, the Developer made, with the concurrence of Lee County, made an advance payment of a portion of Pelican Landing's total Impact Fees. Lee County utilized the advance payment to accelerate the Project Design & Environmental (PD&E) Study for US 41 from the Collier County line to San Carlos Boulevard. The PD&E Study, at the time, was scheduled in FDOT's Tentative Five Year Work Program for fiscal year 1998/99 (WPI #1114700).

### 3. Access and Site-Related Improvements

a. The Developer will be fully responsible for site-related roadway and intersection improvements required within the Pelican Landing DRI. The Developer must pay the full cost for any site-related intersection improvements (including but not limited to signalization, turn lanes and additional driveway through lanes) found necessary by Lee County or the Florida Department of Transportation (FDOT) permitting requirements for the Community's access intersections on US 41, Coconut Road and Spring Creek Road.

b. The Pelican Landing DRI site access points are located and developed consistent with the FDOT's access management classification for US 41, unless otherwise approved by the FDOT. Improvements to those access points will be consistent with FDOT's permitting requirements.

c. Site-related improvements will be as defined in the LDC.

d. Except for Spring Creek Road and Coconut Road, all roads located within Pelican Landing will be maintained by the Bayside Improvement District (BID) or Bay Creek Improvement District, a properly constituted and designated property owners association or other appropriate entity, unless subsequently dedicated to and accepted by Lee County or the City of Bonita Springs.

#### 4. Traffic Monitoring Report

a. The developer will submit a biennial traffic monitoring report to the following entities for review and approval: Lee County, FDOT, FDEO, and the Southwest Florida Regional Planning Council (SWFRPC).

The first monitoring report was submitted. Reports must be submitted biennially thereafter until buildout of the project.

b. The monitoring report was designed in cooperation with Bonita Springs, the Lee County Department of Transportation, FDOT, the SWFRPC and the FDEO prior to the submittal of the first report. The methodology of the biennial traffic monitoring report may be revised if agreed upon by all parties.

c. The biennial traffic monitoring report must contain the following information:

(1) P.M. peak hour existing volumes and turning movement counts at all site access onto US 41 and Coconut Road, and a comparison to the project trip generation assumed in the DRI analysis.

(2) For existing conditions and a one-year projection, P.M. peak hour peak season turning movement counts, Pelican Landing's estimated share of traffic, and an estimated level of service for the intersections identified in Paragraph H.1.b. as impacted by this project.

(3) For existing conditions and a one-year projection, P.M. peak hour peak season traffic counts, Pelican Landing's estimated share of traffic, and an estimated level of service for the roadway links identified in Paragraph H.1.b. as impacted by this project through buildout.

(4) An estimate of when the monitored roadways and intersections will

exceed adopted levels of service.

(5) A summary of the status of road improvements assumed to be committed in the ADA, including the following:

<u>Roadway</u>	<u>Segment</u>	<u>Improvement Schedule</u>	
Pelican's Nest Dr.	Pelican's Nest to US 41	0 to 2	Planning Horizon I (1997/98)
Corkscrew Road	1-75 to Treeline Ave.	2 to 4	Planning Horizon I (1997/98)

<u>Roadway</u>	<u>Segment</u>	<u>Improvement Schedule</u>	
US 41	Alico Rd. to Island Park Rd.	4 to 6	Planning Horizon I (1997/98)
US 41	Island Park Rd. to south of Daniels Parkway	4 to 6	Planning Horizon I (1997/98)
Bonita Beach Road	Hickory Blvd. to Vanderbilt	2 to 4	Planning Horizon I (1997/98)

(6) A summary of the roadway and intersection improvements listed in Paragraph H.1.b. that have been constructed, and the program status of the remainder.

d. If the biennial monitoring report confirms that the peak season P.M. peak hour traffic on the significantly impacted roadways exceeds the level of service standards adopted by Lee County, or is projected to exceed the adopted level of service standards adopted by Lee County within the forthcoming 12 months, and if the project is utilizing 5% or more of LOS "D" the roadway service volume at the adopted level of service standard during peak hour peak season traffic conditions, then further local development orders, building permits and certificates of occupancy may not be granted until the standards of the County's concurrency management system have been met. This means that adequate district-wide level of service capacity must be available through 1999. After 1999, significantly impacted individual links must be operating at the adopted level of service, or an improvement to achieve the adopted level of service must be scheduled for construction in the first three years of an adopted local government capital improvement program or state work program.

e. If the biennial traffic monitoring report confirms that the peak season P.M. peak hour traffic on the segment of US 41 in Collier County from Immokalee Road to Old US 41 exceeds the level of service standard adopted by Collier County and if the project is utilizing 5% or more of the roadway service volume at the adopted level of service standard during peak hour, peak season traffic conditions, then further building permits may not be granted until the subject roadway segment is committed for construction by FDOT and/or Collier County.

f. In the event the Developer confirms that no additional development occurred on any portion of the site for the year, even after the approval of a local development order, they may submit a Letter of "No Further Transportation Impact" in lieu of fulfilling the

transportation monitoring portion of the Biennial Monitoring Report.

**I. Wastewater Management/Water Supply**

1. The developer or the Bayside or Bay Creek Improvement District must obtain a SFWMD Water Use Permit, or a Modification to an existing Consumptive Use Permit for any water withdrawals, and for dewatering activities proposed in connection with on-site construction that does not qualify for a No Notice General Permit, under Rule 40E- 20.302(4), F.A.C.

2. Builders within Pelican Landing must utilize ultra-low volume plumbing fixtures, self-closing or metered water faucets, and other water conserving devices/methods consistent with the criteria outlined in the water conservation element of the Bonita Springs Utilities, Incorporated, SFWMD Water Use Permit or the water conservation element of any other approved utility provider utilized by the Development.

3. Developers must utilize xeriscape principles in the landscape design of the project to further the conservation of nonpotable water.

4. If reclaimed water is available for use within the project to address a portion of the project's irrigation demands, the Developer or Bayside or Bay Creek Improvement District, as appropriate, must ensure that on-site lakes, wetlands, and the surface water management system are protected in accordance with the requirements of the SFWMD and FDEP.

5. Any owner or tenant who operates a commercial facility that generates hazardous commercial effluent must provide written assurance that any hazardous commercial effluent, generated by them, will be treated separately from domestic wastewater, and handled in accordance with FDEP regulations.

6. Except for temporary septic tanks for construction trailers or for sales offices/models, septic tanks are prohibited.

7. All potable water facilities, including any on-site potable water treatment system, must be properly sized to supply average and peak day domestic demand, as well as fire flow demand. The facilities must be constructed and sized in accordance with all pertinent regulations of the FDEP, Lee County and any Fire Control District with jurisdiction.

8. All irrigation systems constructed for the golf course, landscaped areas and commercial/office portions of the project must be designed to accommodate effluent for irrigation use. Reclaimed water, to the extent it is available, must be used to address irrigation needs. The remaining demand will be satisfied through approved groundwater or surface water withdrawals. Reclaimed water must be used in accordance with all applicable regulations.

**J. Police and Fire Protection**

1. Construction must comply with the fire protection requirements of all building, development, and life safety codes adopted by Lee County.

2. Facilities qualifying under the Superfund Amendments Reauthorization Act

(SARA) Title III and the Florida Hazardous Materials Emergency Response and Community Right to Know Act of 1988, must file hazardous materials reporting applications in accordance with Sections 302 and 312. Each reporting facility must update these applications annually.

3. Emergency medical service impacts and fire protection impacts generated by the proposed development through the payment of ad valorem taxes, and fire and EMS impact fees when required by the LDC.

4. If access to development is through a security gate or similar device that is not manned 24 hours per day, the Developer must install an override switch in a glass-covered box for use by emergency vehicles, or a comparable system that permits emergency vehicles to access the project. The parking lot for the beach parking lot is required to be gated or closed by the zoning resolution. The gate, chain or other device to prohibit access to the parking lot after hours will be unmanned, and the override system required by this condition does not apply to the parking lot gate, chain, or other device.

**K. Interface Zone**

1. The Developer will design, develop, and maintain any golf course constructed adjacent to the mangrove fringe area of Estero Bay in accordance with condition 14 a. through l. of Lee County Resolution Number Z-94-014. Adjacent to the mangrove fringe means any golf course constructed within 500 feet of the mangrove fringe.

2. The Developer will employ management strategies to address the potential for pesticide/chemical pollution of groundwater and surface water receiving areas, including but not limited to, Estero Bay, the mangrove fringe and any transition zone wetlands of Estero Bay, that may result from the development of a golf course and water management area within 500 feet of the mangrove fringe of Estero Bay.

3. The management practices that the Developer will follow are as follows:

a. The use of slow release fertilizers and/or carefully managed fertilizer applications that are timed to ensure maximum root uptake and minimal surface water runoff or leaching to the groundwater.

b. The practice of integrated pest management (IPM) when seeking to control various pests, such as weeds, insects, and nematodes. The application of pesticides will involve only the purposeful and minimal application of pesticides, aimed only at identified targeted species. The regular widespread application of broad spectrum pesticides is not acceptable. The IPM program will minimize, to the extent possible, the use of pesticides, and will include the use of the USDA-SCS Soil Pesticide Interaction Guide to select pesticides for uses that have a minimum potential for leaching or loss due to runoff depending on the site specific soil conditions. Application of pesticides within 100 feet of the jurisdictional mangrove system is prohibited.

c. The coordination of the application of pesticides with the irrigation practices (the timing and application rates of irrigation water) to reduce runoff and the leaching of any applied pesticides and nutrients.

d. The utilization of a golf course manager licensed by the state to use restricted pesticides and experienced in the principles of IPM. The golf course manager will

be responsible for ensuring that the golf course fertilizers are selected and applied to minimize fertilizer runoff into the surface water and the leaching of those same fertilizers into the groundwater.

e. The storage, mixing, and loading of fertilizer and pesticides will be designed to prevent/minimize the pollution of the natural environment.

4. The Developer has prepared and will continue to follow, as set out below, the management plan for the application of herbicides, pesticides, and fertilizers on the original Pelican Landing DRI golf course adjacent to the mangrove fringe of Estero Bay. This plan was amended to include the Kersey-Smoot parcels prior to the application of any herbicides, pesticides and fertilizers to the proposed golf course. The plan, or any amendment thereto, will be evaluated in accordance with the directives of Chapter 62-302 F.A.C., Water Quality Standards.

a. The amended management plan included a groundwater and surface water monitoring plan; provide for testing to assess whether there are any herbicide, pesticide, or fertilizer pollution of the water within the area of the golf course located within 500 feet of the mangrove fringe; identified the locations for groundwater monitoring and testing on a map(s); and set forth the testing and reporting requirements.

b. The monitoring program was established and operated at the expense of the Developer, the Bayside or Bay Creek Improvement District, or other comparable legal entity charged with the legal responsibility of managing the golf course.

c. The monitoring has been conducted for a period of 15 years, during which time there was no water quality violations in Estero Bay, the mangrove fringe, the Interface Zone, or within 500 feet of the mangrove fringe of Estero Bay. The golf course conditions and the approved management plan for the application of herbicides, pesticides and fertilizers are effective and have been shown to protect the water quality of the Bay.

d. Given the proven effectiveness of the golf course conditions, the Interface Zone monitoring requirement is no longer necessary, but will be immediately reinstated at any time the County's surface water monitoring sites (EB-4 and EB-7) along the Interface Zone reveal a violation of the water quality in the Bay that is or can be attribute to the application of fertilizer, pesticide or herbicides used on the golf course.

e. In the event any portion of the golf course within 500 feet of the mangrove fringe is reconfigured, redesigned or redeveloped, the Developer or other responsible entity must perform annual surface water and ground water monitoring, in accordance with the requirements in Condition K, for a period not to exceed three years from the date of the changes to the golf course.

f. The Bayside and Baycreek Improvement Districts, or other responsible entity, will provide a copy of any required NPDES monitoring in the Interface Zone, or at other required monitoring sites around the DRI, to Lee County and the City of Bonita Springs.

5. The Developer will submit a written amended surface and groundwater quality management plan to Lee County and FDEO. The amended plan must be approved by FDEO prior to the application of chemicals to the reconfigured, redesigned or redeveloped golf course. The FDEO will have 30 working days to review the management plan and

approve or object to the plan in writing. The objections must be based on valid rules and regulations, and must identify how the concerns or issues can be addressed by the Developer. The Developer must resubmit a revised water quality management plan to address the valid objections. FDEO will have 30 days in which to review any revised management plan and must provide written comments or approval in the same manner as for the original management plan. Should FDEO fail to provide a written response within the prescribed time frames, the plan will be deemed approved.

6. If groundwater or surface water pollution occurs, as that term is defined by the rules or regulations in effect at the time, and should the pollution be caused by the application of fertilizers, herbicides or pesticides to the golf course adjacent to the mangrove wetlands, the application of the pollutant must cease until there is a revised management plan for the application of the pollutant. A determination that the application of fertilizers, herbicides or pesticides to the golf course are the cause and source of the pollution must be based on competent and substantial evidence. If mitigation is necessary to address the pollution, a mitigation plan approved by FDEO will be implemented by the Developer, or other responsible entity. The mitigation plan will be based on rules and regulations in effect at the time the plan is reviewed and approved. The approved mitigation plan will be enforceable as a condition of the Development Order.

7. The mangrove wetland jurisdiction line of Estero Bay is buffered from the proposed golf course by a 100-foot-wide undisturbed naturally vegetated corridor, except for water management facilities permitted by the SFWMD and except for the removal of exotic plants as required by Lee County. The 100-foot-wide buffer area will run along the portion of the golf course that abuts the mangrove wetlands of Estero Bay south of Coconut Road.

The mangrove line for the Kersey-Smoot and Johnson (Government Lot 1, Parcel 3) parcels is offset 50 feet, to over 250 feet west of the wetland jurisdictional line delineated along the western (Estero Bay) side of the Kersey-Smoot parcels. No portion of the proposed golf course may be located closer than 100 feet to this mangrove line. To maintain the existing natural mangrove setbacks, no impacts are permitted to the wetlands on the western (Estero Bay) side of the Kersey-Smoot parcels. This includes both saltwater and freshwater wetlands contained within the boundary of the wetlands jurisdictional line. The proposed golf course fairways, tees and greens must be set back a minimum of 25 feet from all wetland jurisdictional lines on the Kersey-Smoot and Johnson parcels, except where wetland impacts have been permitted by the SFWMD and the Army Corps of Engineers. Water management facilities permitted by the SFWMD and the removal of exotic vegetation, subject to Lee County regulations, are allowed within all wetlands on the Kersey-Smoot and Johnson parcels.

8. All of the Interface Zone conditions will be interpreted and applied with the understanding that water quality is regulated by the FDEP and the SFWMD. None of the Interface Zone conditions will be interpreted in a manner which is contrary to Section 403.021, Florida Statutes, the Florida Air and Water Pollution Control Act, and the rules adopted thereunder.

9. The Interface Zone conditions will not be interpreted in a manner contrary to public policy directives to utilize domestic reclaimed water. Pelican Landing will not be responsible for any harmful pollutants applied to the golf course via the reclaimed water, unless Pelican Landing has actual knowledge that the reclaimed water provided by the utility contains harmful pollutants.

10. The conditions set forth in this DRI Development Order do not preempt the authority of the SFWMD and the FDEP. Section 373.016, Florida Statutes provides that the legislature has vested the authority in the FDEP/SFWMD to accomplish the conservation, protection, management, and control of the waters of the state. To the extent that any requirements of FDEO, SWFRPC, Lee County, or Bonita Springs pursuant to this DRI Development Order are contrary to those of the SFWMD/FDEP, in areas where the SFWMD and FDEP have been given preemptive authority, the requirements of the SFWMD and the FDEP will control.

L. **Dual Jurisdiction**

The Pelican Landing DRI is located within two jurisdictions, namely Lee County and the City of Bonita Springs. For State review purposes, the DRI will be considered an integrated and whole development, such that all approvals for development under the DRI Development Order will be applicable to the entire Pelican Landing DRI without regard to the jurisdictional split.

To this end, the developer is required to provide contemporaneous copies of any and all NOPC applications filed with respect to the Pelican Landing DRI to both the City and the County, even though the property actually affected by the amendment may be located wholly with one or the other jurisdiction. The jurisdiction most affected by the NOPC (i.e., as determined by the location of property affected by the proposed change) will take the lead in processing the NOPC. However, both jurisdictions may have input into the NOPC process, as a principle, if desired.

III. LEGAL EFFECT AND LIMITATIONS OF THIS DEVELOPMENT ORDER, AND ADMINISTRATIVE REQUIREMENTS

1. This amended Development Order constitutes a resolution of Lee County, adopted by the Board of County Commissioners in response to the application filed by WCI Communities, LLC to amend the Pelican Landing Development of Regional Impact Development Order.

2. All commitments and impact mitigating actions volunteered by the developer in the Application for Development Approval and supplementary documents that are not in conflict with conditions or stipulations specifically enumerated above are incorporated by reference into this Development Order. These documents include, but are not limited to the following:

- (a) Pelican Landing Application for Development Approval, stamped Received October 26, 1992;
- (b) Pelican Landing DRI sufficiency response, stamped Received February 5, 1993;
- (c) Pelican Landing DRI sufficiency response, stamped Received July 6, 1993;
- (d) Pelican Landing DRI sufficiency response, dated September 16, 1993; and
- (e) Pelican Landing DRI sufficiency response, stamped Received

November 22, 1993.

3. Map H, last revised ~~January 24, 2013~~ October 2022, and stamped received at the permit counter on ~~February 13, 2013~~ April 16, 2025, is attached hereto as Exhibit E and is incorporated by reference. It is understood that because it is a concept plan it is very general. The boundaries of development areas and location of internal roadways may be modified to accommodate topography, vegetation, market conditions, traffic circulation or other site related conditions as long as they meet local development regulations. This provision may not be used to reduce the acreage of the Eco-Park or other open space or preserve acreages. It is understood that the precise wetland boundaries are determined by the U.S. Army Corps of Engineers, SFWMD, FDEP and Lee County. A synopsis of the development parameters permitted under this approval and depicted on Map H are set forth in attached Exhibit F.

4. The Development Order is binding upon the Developer(s) and its assignees or successors in interest. Where the Development Order refers to the Bayside or Baycreek Improvement District, lot owners, business owners, or other specific reference, those provisions are binding on the entities or individuals referenced. Those portions of this Development Order that clearly apply only to the project developer are binding upon any builder/developer who acquires any tract of land within Pelican Landing DRI.

5. The terms and conditions set out in this document constitute a basis upon which the Developer and the County may rely in future actions necessary to implement fully the final development contemplated by this Resolution and Development Order.

6. All conditions, restrictions, stipulations and safeguards contained in this Development Order may be enforced by either party by action at law or equity. All costs of such proceedings, including reasonable attorney's fees, will be paid by the defaulting party.

7. Any reference to a governmental agency will be construed to mean any future instrumentality that may be created and designated as successors in interest to, or which otherwise possesses any of the powers and duties of, any referenced governmental agency in existence on the effective date of this Development Order.

8. If any portion or section of this Development Order is determined to be invalid, illegal, or unconstitutional by a court of competent jurisdiction, such decision will in no manner affect the remaining portions or sections of the Development Order, which will remain in full force and effect.

9. This Development Order grants limited approval and does not negate the developer's responsibility to comply with all applicable federal, state, regional and local regulations.

10. Subsequent requests for local development permits will not require further review pursuant to Section 380.06, Florida Statutes, unless the Board of County Commissioners, after due notice and hearing, finds that one or more of the following is present:

- (a) A substantial deviation from the terms or conditions of this Development Order, or other changes to the approved development plans that creates a reasonable likelihood of adverse regional impacts or other regional impacts not evaluated in the review by the Southwest Florida Regional Planning

Council; or

- (b) An expiration of the period of effectiveness of this Development Order.

Upon a finding that any of the above is present, the Board must order a termination of all development activity in the development affected by a substantial deviation or expiration of time until such time as a new DRI Application for Development Approval has been submitted, reviewed and approved in accordance with Section 380.06, Florida Statutes, and all local approvals have been obtained.

11. The project has a buildout date of August 28, ~~2022~~ 2034, and a termination date of August 27, ~~2028~~ 2040. The buildout and termination dates reflect adjustment of one year and 141 days applicable to the tolling of time for the appeal/challenge to the original DRI Development Order. The termination date recognizes that a local Development Order, which is valid for six years, may be obtained prior to the buildout date.

12. The developer and the Bayside Improvement District may not exercise any rights of condemnation to acquire land within the development commonly known as Spring Creek Village, El Dorado Acres, Estero Bay Shores, Mound Key Estates and Spring Creek Estates.

13. The Administrative Director of the Lee County Department of Community Development, or his/her designee, will be the local official responsible for assuring compliance with this Development Order.

14. The project will not be subject to down-zoning, unit density reduction, intensity reduction or prohibition of development until ~~2028~~ 2040, or any later date provided for in future time extensions/tolling permitted by state statute. If the County clearly demonstrates that substantial changes have occurred in the conditions underlying the approval of the Development Order through public hearings on an amendment to the zoning and/or this DRI Development Order then a down-zoning, unit density reduction, or prohibition of development may occur. These changes would include, but would not be limited to, such factors as a finding that the Development Order was based on substantially inaccurate information provided by the developer, or that the change is clearly established by local government to be essential to the public health, safety and welfare.

Lee County will reserve to this DRI until ~~2028~~ 2040, 300 acres of residential use allocation in each of the Urban Community and Outlying Suburban Future Land Use Categories (for a total of 600 acres), as established by Lee Plan Map 16, The Planning Communities Map and Table 1(b), known as the Planning Community Year ~~2030~~ 2045 Allocation. This reservation has the effect of reserving all of the acreage transferred from Gateway to Pelican Landing for the duration of the Development Order.

15. The Developer, or its successor in title to the undeveloped portion of the subject property, will submit a report biennially to Lee County, SWFRPC, FDEO and all affected permit agencies. This report must describe the state of development and compliance as of the date of submission. In addition, the report must be consistent with the rules of the FDEO. The first monitoring report was submitted to the Administrative Director of the FDEO in 2009. Further reporting must be submitted biennially thereafter, until buildout. Failure to comply with this reporting procedure is governed by Section 380.06 (18), Florida Statutes. The Developer must inform successors in title to the undeveloped portion of the real property covered by this Development Order of this reporting requirement. This

requirement may not be construed to require reporting from tenants or owners of individual lots or units.

16. In compliance with a condition of the first development order amendment, the Developer did amend this Development Order to incorporate the portion of the Spring Creek DRI located west of US Highway 41 into the Pelican Landing DRI. A legal description of that portion of the Spring Creek DRI, along with the conditions of the Spring Creek Development Order that are applicable to the Spring Creek West property are now incorporated into this development order. The impacts of the Spring Creek development will not be considered separately or cumulatively in any future change to the Pelican Landing Development Order. A change in the development plan for the Spring Creek property could be a substantial deviation that would require further analysis of Spring Creek West. The amendment was adopted solely for the purpose of consolidating Spring Creek West and Pelican Landing under the same Development Order and none of Spring Creek West's vested rights will be lost because of the amendment.

17. The County will forward certified copies of this Development Order to the SWFRPC, the developer, and appropriate state agencies. This Development Order is rendered as of the date of that transmittal, but will not be effective until the expiration of the statutory appeal period (45 days from rendition) or until the completion of any appellate proceedings, whichever time is greater. Upon this Development Order becoming effective, the Developer must record notice of its adoption in the office of the Clerk of the Circuit Court, as provided in Section 380.06(15), Florida Statutes. The inclusion of the Baywinds parcel as part of the Seventh Development Order amendment does not divest the rights provided in the permits, development orders, and government approvals obtained on that parcel based on the plan of development reflected in Lee County Development Order No. 95-12-068.00D. These approvals were granted prior to its inclusion in the Pelican Landing DRI and will allow for the development of the Baywinds Parcel consistent with the plan of development reflected in Lee County Development Order No. 95-12- 068.00D.

Commissioner Mulicka made a motion to adopt the foregoing resolution, seconded by Commissioner Hamman.

DULY PASSED AND ADOPTED this 20th day of August 2025.

ATTEST:  
KEVIN C. KARNES  
CLERK OF CIRCUIT COURT

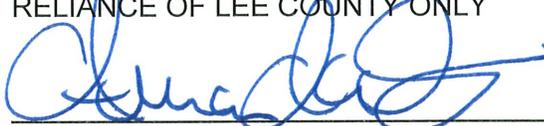
BY:   
Deputy Clerk



BOARD OF COUNTY COMMISSIONERS  
OF LEE COUNTY, FLORIDA

BY:   
Kevin Ruane, Chair  
Vice  
Commissioner Cecil L Pendergrass, Chairman  
Lee County Board of County Commissioners  
District 2

APPROVED AS TO FORM FOR THE  
RELIANCE OF LEE COUNTY ONLY

  
Amanda L. Swindle  
Assistant County Attorney, Senior  
County Attorney's Office

Attachments:

- Exhibit A. Legal Description of the Pelican Landing DRI area within unincorporated Lee County.
- Exhibit B. Legal Description of the Pelican Landing DRI area within the City of Bonita Springs, but excluding the Spring Creek West DRI area.
- Exhibit C. Legal Description of the Pelican Landing DRI area encompassed by the Spring Creek West DRI, located in the City of Bonita Springs.
- Exhibit D. Sketch of the legal descriptions of Pelican Landing DRI.
- Exhibit E. Map H, Master Development Plan - last revised ~~January 24, 2013~~ April 16, 2025, ~~stamped received February 13, 2013~~.
- Exhibit F. Pelican Landing DRI Development Parameters

EXHIBIT "A"

Legal Description of the Pelican Landing DRI area within unincorporated Lee County.

November 1, 2001

DESCRIPTION**PELICAN LANDING DRI - UNINCORPORATED LEE COUNTY  
SECTIONS 5, 6, 7, 8 AND 9, TOWNSHIP 47 SOUTH, RANGE 25 EAST  
LEE COUNTY, FLORIDA**

A tract or parcel of land lying in Sections 5, 6, 7, 8 and 9, Township 47 South, Range 25 East, Lee County, Florida, which tract or parcel is described as follows:

PARCEL 2-A

Beginning at an intersection of the West line of Tamiami Trail (State Road No. 45) with the south line of Coconut Road as described in Official Record Book 1738 at Page 2538 of the Public Records of Lee County, Florida; thence run S 00° 10' 56" W along said West line for 621.81 feet to a point of curvature; thence run southerly and southeasterly along said West line, along the arc of a curve to the left of radius 5797.58 feet (chord bearing S 04° 57' 34" E) (chord 1039.14 feet) (delta 10° 17' 00") for 1040.54 feet to a point of tangency; thence run S 10° 06' 04" E along said westerly line for 938.08 feet to an intersection with the south line of the Southeast Quarter (SE-1/4) of said Section 9; thence run S 89° 23' 00" W along said south line for 708.94 feet to the southwest corner of said Southeast Quarter (SE-1/4) of Section 9; thence run S 89° 27' 22" W along the south line of the Southwest Quarter (SW-1/4) of Section 9 for 2677.24 feet to the southwest corner of the Southwest Quarter (SW-1/4) of Section 9; thence run N 89° 25' 51" W along the south line of the Southeast Quarter (SE-1/4) of said Section 8 for 1,838.15 feet to an intersection with the easterly line of Spring Creek Road as described in Deed Book 305 at Page 276, Lee County Records; thence continue N 00° 07' 17" E along said east line for 343.54 feet; thence run S 89° 38' 58" E for 10.00 feet; thence run N 00° 07' 17" E along said East line for 849.27 feet to the Southwest corner of lands described in Official Record Book 2039 at Page 3364 said Public Records; thence run S 89° 21' 02" E along the South line of said lands for 189.98 feet; thence run N 00° 07' 17" E along the East line of said lands for 125.01 feet; thence run N 89° 21' 02" W along the North line of said lands for 199.98 feet to an intersection with the easterly line of said Spring Creek Road; thence run N 00° 07' 17" E along said East line for 1292.76 feet to an intersection with the South line of Coconut Road (50 feet wide); thence run S 89° 16' 14" E along said South line for 1802.38 feet to an intersection with the West line of said Section 9; thence run N 00° 39' 58" W along said West line for 25.00 feet to a Concrete Monument marking the Northwest corner of the Southwest Quarter (SW-1/4) of said section; thence continue along said west line N 00° 39' 58" W for 5.00 feet to an intersection with the south line of said Coconut Road as described in Official Record Book 1738 at Page 2538, said Public Records; thence run S 89° 35' 50" E along said south line for 1549.14 feet; thence run southwesterly along a non-tangent curve to the left of radius 30.00 feet (chord bearing S 45° 24' 10" W) (chord 42.43 feet) (delta 90° 00' 00") for 47.12 feet to a point of tangency; thence run S 00° 24' 10" W for 336.31 feet to a point of curvature; thence run along the arc of a curve to the left of radius 270.00 feet (chord bearing S 44° 35' 50" E) (chord 381.84 feet) (delta 90° 00' 00") for 424.12 feet to a point of tangency; thence run S 89° 35' 50" E for 99.41 feet to a point of curvature; thence run along the arc of a curve to

the right of radius 530.00 feet (chord bearing S 75° 44' 50" E) (chord 253.74 feet) (delta 27° 42' 00") for 256.23 feet; thence run N 20° 53' 52" W for 748.16 feet to an intersection with the aforementioned south line of Coconut Road; thence run along said south line S 89° 35' 50" E for 1,301.22 feet to the Point of Beginning.  
Parcel contains 294.56 acres, more or less.

AND

PARCEL 2-B

From a railroad spike marking the northwest corner of the Southwest Quarter (SW-1/4) of said Section 8 run S 00° 23' 24" E along the west line of said fraction for 25.00 feet to an intersection with the south line of Coconut Road as recorded in County Commissioners Minutes Book 6 at Page 288 of the Public Records of Lee County of Lee County, Florida, and the Point of Beginning.  
From said Point of Beginning run S 89° 16' 14" E along said south line for 3253.00 feet to an intersection with the west line of Spring Creek Road; thence run the following courses and distances along said west line of said Spring Creek Road; S 00° 17' 17" W for 817.15 feet; N 89° 52' 43" W for 14.27 feet to a point of curvature; thence run Southwesterly along said arc of a curve to the right of radius 1725.00 feet (chord bearing S 05° 52' 51" W) (chord 346.22 feet) (delta 11° 31' 09") for 346.81 feet to a point of tangency; thence run S 11° 38' 26" W for 178.50 feet to a point of curvature; thence run Southwesterly along said arc of a curve to the left of radius 2400.00 feet (chord bearing S 00° 28' 49" W) (chord 929.06 feet) (delta 22° 19' 14") for 934.96 feet to a point of tangency; thence run S 10° 40' 48" E for 231.66 feet to a point of curvature; thence run Southeasterly along said arc of curve to the right of radius 1725.00 feet (chord bearing S 08° 42' 25" E) (chord 118.78) (delta 03° 56' 45") for 118.80 feet to an intersection with the south line of said Section 8; thence run N 89° 25' 51" W along the south line of the Southeast Quarter (SE-1/4) of said Section 8 for 642.07 feet to the southeast corner of the Southwest Quarter (SW-1/4) of Section 8; thence run N 89° 25' 49" W along the south line of the Southwest Quarter (SW-1/4) of Section 8 for 2558.62 feet to the southwest corner of said Section 8; thence run N 89° 25' 49" W along the south line of the Southeast Quarter (SE-1/4) of said Section 7 for 2330 feet more or less to the waters of Estero Bay; thence run northerly along the waters of Estero Bay for 6,485 feet more or less to an intersection with the north line of the South Half (S-1/2) of Government Lot 2 of said Section 7; thence run N 89° 32' 15" E along the north line of said South Half (S-1/2) of Government Lot 2 for 793 feet more or less to the northeast corner of lands described in Official Record Book 1895 at Page 3817 of said public records; thence run S 08° 50' 45" E along the east line of said lands for 199.50 feet to the southeast corner of said lands; thence run N 89° 35' 27" E for 666.22 feet; thence run N 89° 32' 15" E for 239.00 feet to an intersection with the west line of Coconut Road; thence run S 01° 07' 45" E along said west line for 488.63 feet; thence run N 89° 40' 05" E along the south line of said Coconut Road for 24.69 feet to the Point of Beginning. Less and except Official Record Book 1677 at Page 3516 of said Public Records.  
Parcel contains 343 acres, more or less.

AND

PARCEL 2-C

A parcel of land lying in and being a portion of the East Half of the Northwest Quarter of Section 8, Township 47 South, Range 25 East of Lee County, Florida, being more particularly described as follows:

Commencing at the southwest corner of the East Half (E-1/2) of the Northwest Quarter (NW-1/4) of said Section 8; thence run N 01° 00' 45" W along the west line of said East Half (E-1/2) of the Northwest Quarter (NW-1/4) for 40.02 feet to an intersection with the northerly right-of-way line of Coconut Road (as maintained); thence run S 89° 16' 14" E along said right-of-way for 171.25 feet to the Point of Beginning.

From said Point of Beginning continue S 89° 16' 14" E along said right-of-way a distance of 342.50 feet; thence run N 01° 00' 44" W a distance of 367.98 feet; thence run N 89° 16' 14" W a distance of 342.50 feet; thence run S 01° 00' 44" E a distance of 367.98 feet to the Point of Beginning.

Parcel contains 2.89 acres, more or less.

AND

PARCEL 2-D

All that part of Florida Gulf Land Company's Subdivision as recorded in Plat Book 1 at Page 59 of the Public Records of Lee County, Florida, lying in Section 5, Township 47 South, Range 25 East South and West of lands to Florida Power and Light Company as described by deed recorded in Deed Book 244, Page 138 of said Public Records, also Lot 8, Block 14 of Eldorado Acres (an Unrecorded Subdivision) as shown in Deed Book 310 at Page 183 of said public records; also part of Sections 5, 6, 7 and 8, Township 47 South, Range 25 East, Lee County, Florida, being more particularly described as follows:

Beginning at the southeast corner of said Section 5; thence run N 88° 46' 30" W along the south line of the Southeast Quarter (SE-1/4) of said Section 5 for 2580.80 feet to the southeast corner of the Southwest Quarter (SW-1/4) of said Section 5; thence run N 89° 25' 13" W along the south line of said Southwest Quarter (SW-1/4) for 587.32 feet to an intersection with the east line of said Lot 8, Block 14, Eldorado Acres, an unrecorded subdivision; thence run the following three courses and distances along the boundary of said Lot 8: S 00° 50' 16" E for 132.70 feet; N 89° 11' 54" W for 75.00; N 00° 50' 16" W for 132.41 feet to an intersection with said south line of the Southwest Quarter (SW-1/4) of Section 5; thence run N 89° 25' 13" W along said south line for 610.82 feet to the northeast corner of the West Half (W-1/2) of the Northwest Quarter (NW-1/4) of

said Section 8; thence run S 01° 00' 45" E along the east line of said West Half (W-1/2) of the Northwest Quarter (NW-1/4) of Section 8 for 2612.19 feet to an intersection with the northerly right-of-way line (as maintained) of Coconut Road being 40.00 feet north of the centerline of Coconut Road as recorded in County Commissioners Minutes Book 6 at Page 288 of said Public Records, said right-of-way line being the south line of lands as described by deed recorded in Official Record Book 3052 at Page 1748 of said Public Records; thence run N 89° 16' 14" W along said maintained right-of-way for 1267.93 feet to an intersection with the west line of the Northwest Quarter (NW-1/4) of said Section 8; thence run N 01° 07' 45" W along said west line for 1284.51 feet to the southeast corner of Government Lot 1 of said Section 7; thence run S 89° 33' 42" W along the south line of said Government Lot 1 for 1813 feet more or less to the easterly waters of Estero Bay; thence run northerly along the waters of Estero Bay for 3000 feet more or less to an intersection with the north line of Government Lot 4 of said Section 6; thence run N 89° 41' 23" E along said north line or 1807 feet more or less to an intersection with the west line of lands as described by deed recorded in Official Record Book 1762 at Page 4173 of said Public Records; thence run the following courses and distances along the boundary of said lands: N 00° 48' 29" W for 775.70 feet; N 46° 11' 51" E for 523.67 feet; S 81° 20' 47" E for 600.53 feet; N 00° 49' 50" W for 162.49 feet; N 89° 10' 55" E for 349.43 feet; N 01° 31' 46" W for 92.78 feet to an intersection with the north line of the Southwest Quarter (SW-1/4) of said Section 5; thence run N 89° 34' 40" E along said north line for 2592.29 feet to the northeast corner of said Southwest Quarter (SW-1/4); thence run N 89° 31' 44" E along the north line of the Southeast Quarter (SE-1/4) of said Section 5 for 2401.02 feet to an intersection with the southwesterly line of said lands to Florida Power and Light Company; thence run S 20° 51' 33" E along said southwesterly line for 553.91 feet to an intersection with the east line of said Southeast Quarter (SE-1/4) of Section 5; thence run S 00° 08' 26" E along said east line for 2202.99 feet to the Point of Beginning.

Parcel contains 576 acres, more or less.

Bearings hereinabove mentioned are Plane Coordinate for the Florida West Zone.

  
Frances L. Yerdon (for the Firm LB-642)  
Professional Surveyor/ Mapper  
Florida Certificate No. 5652

20002476 Pelican Landing - County - 110101

**Q. GRADY MINOR & ASSOCIATES, P.A.**

Civil Engineers • Land Surveyors • Planners

Q. GRADY MINOR, P.E.  
MARK W. MINOR, P.E.  
C. DEAN SMITH, P.E.  
DAVID W. SCHMITT, P.E.  
MICHAEL J. DELATE, P.E.  
BLAIR A. FOLEY, P.E.

D. WAYNE ARNOLD, A.I.C.P.  
ERIC V. SANDOVAL, P.S.M.  
THOMAS CHERNESKY, P.S.M.  
ALAN V. ROSEMAN

**SURVEYOR'S AFFIDAVIT**

*I am a Professional Surveyor and Mapper holding Certificate Number 5426 under the laws of the State of Florida.*

*I hereby certify that the dividing line described in the legal descriptions of "Pelican Landing DRI - City of Bonita Springs" and "Pelican Landing DRI - Unincorporated Lee County" (submitted with the DRI), as prepared by Johnson Engineering, dated November 1, 2001, is the same as the Jurisdictional line as described in the legal description established by the Charter for the City of Bonita Springs; and is also the same line shown and depicted on the Specific Purpose Survey, as prepared by Q. Grady Minor & Associates, P.A., dated October 2, 2001, as Drawing number C-1497.*

*I also certify that there are no overlaps or hiatus between the legal descriptions and the lines mentioned above.*

**DRI 2000-00022**

*Q. Grady Minor & Associates, P.A.*

By:  Date: 11-2-01  
Thomas Chernesky, P.S.M. #5426

EXHIBIT A  
Page 5 of 5

EXHIBIT "B"

Legal Description of the Pelican Landing DRI area within the City of Bonita Springs, but  
excluding the Spring Creek West DRI area.

November 1, 2001

DESCRIPTION

**PELICAN LANDING DRI - CITY OF BONITA SPRINGS,  
SECTIONS 16, 17, 20 AND 21, TOWNSHIP 47 SOUTH, RANGE 25 EAST  
LEE COUNTY, FLORIDA**

A tract or parcel of land lying in Sections 16, 17, 20 and 21, Township 47 South, Range 25 East, City of Bonita Springs, Lee County, Florida, which tract or parcel is described as follows:

Parcel I-A

Beginning at the Northwest corner of the Northeast Quarter (NE-1/4) of Section 16; thence run S 00° 02' 54" W along said West line of the Northeast Quarter (NE-1/4) for 2643.98 feet to the Southwest corner of the Northeast Quarter (NE-1/4) of said section; thence run N 89° 10' 38" E along the South line of said fraction for 538.06 feet; thence run S 00° 06' 43" E for 1085.91 feet; thence run N 89° 06' 43" E for 744.41 feet to an intersection with the West line of Tamiami Trail (US 41 S.R. No. 45); thence run southerly along said West line, along the arc of a non-tangent curve to the right of radius 5619.58 feet (chord bearing S 00° 22' 05" E) (chord 50.21 feet) (delta 00° 30' 43") for 50.21 feet to a point of tangency; thence run S 00° 06' 43" E along said West line for 49.81 feet; thence run S 89° 06' 43" W for 300.00 feet; thence run S 00° 06' 43" E for 1445.84 feet to an intersection with the South line of the Southeast Quarter (SE-1/4) of said Section 16; thence run S 89° 16' 54" W along the South line of said fraction for 989.41 feet to the Southeast corner of the Southwest Quarter (SW-1/4) of said Section 16; thence run S 88° 38' 34" W along said South line of said Southwest Quarter (SW-1/4) for 2627.98 feet to the Northeast corner of said Section 20; thence run S 00° 35' 25" E along the East line of said section for 2659.47 feet to the Southeast corner of the Northeast Quarter (NE-1/4) of said section; thence run N 88° 52' 49" E along the North line of the Southwest Quarter (SW-1/4) of said Section 21 for 2,040.41 feet to an intersection with the West line of the East 600.00 feet of the East Half (E-1/2) of the Southwest Quarter (SW-1/4) of said Section 21; thence run S 00° 51' 35" E along said West line for 801 feet, more or less to the water of Spring Creek; thence run westerly along Spring Creek for 3630 feet more or less to an intersection of the East line of said Section 20; thence run S 00° 38' 52" E along said East line of Section 20 for 91 feet, more or less to an intersection with the approximate centerline of Spring Creek as shown on the Plat of Pelican Landing Unit 5 recorded in Plat Book 59 at Page 11 of said Public Records of Lee County, Florida; thence run along said centerline the following courses: S 78° 50' 00" W for 181.31 feet, N 34° 24' 12" W for 230.22 feet, N 30° 59' 12" W for 174.93 feet, N 24° 25' 16" E for 120.83 feet, S 65° 47' 43" E for 219.32 feet, N 18° 24' 43" E for 158.11 feet, N 75° 11' 47" W for 351.71 feet, N 65° 09' 33" W for 451.88 feet, N 84° 18' 44" W for 351.75 feet, N 66° 54' 31" W for 445.79 feet, S 63° 24' 43" W for 134.16 feet, S 03° 23' 22" E for 170.29 feet, S 50° 30' 17" W for 220.23 feet, N 84° 49' 43" W for 331.36 feet, S 62° 13' 07" W for 214.71 feet, S 22° 08' 36" W for 291.55 feet, S 72° 15' 11" W for 131.22 feet to an intersection with the East line of the Southwest Quarter (SW-1/4) of said Section 20; thence run N 00° 50' 19" W along said East line for 520.00 feet to the Northeast corner of said fraction; thence run S 89° 58' 37" W along the North line of said fraction for 290.00 feet to an intersection with the approximate centerline of the most easterly branch of said Spring

Creek as shown on said Plat of Pelican Landing Unit 5; thence run along said centerline the following courses; N 09° 13' 28" W for 137.34 feet, N 29° 08' 22" W for 590.59 feet, N 38° 31' 58" W for 278.03 feet, N 65° 16' 43" W for 254.95 feet, N 37° 18' 28" W for 286.01 feet, N 32° 51' 05" E for 252.39 feet, N 20° 11' 00" E for 236.69 feet, N 27° 23' 47" W for 369.25 feet, N 89° 15' 43" E for 50 feet more or less to the easterly shore of said Spring Creek; thence run northerly along said easterly shore for 1220 feet more or less to an intersection with the North line of said Section 20; thence run N 89° 15' 13" E along said North line of said section for 970 feet, more or less to a Concrete Monument marking the Northwest corner of the Northeast Quarter (NE-1/4) of said Section 20; thence run N 00° 31' 30" E along the West line of the Southeast Quarter (SE-1/4) of said Section 17 for 2674.38 feet to the Northwest corner of said Southeast Quarter (SE-1/4); thence run N 00° 31' 29" E along the West Line of the Northeast Quarter (NE-1/4) of said Section 17 for 3.40 feet to an intersection with the curved southerly line of Spring Creek Road; thence run northeasterly and northerly along the arc of a curve to the left of radius 1130.00 feet (chord bearing N 35° 09' 06" E) (chord 1296.89 feet) (delta 70° 02' 16") for 1381.30 feet; thence run N 89° 52' 02" W for 5.00 feet; thence run N 00° 07' 58" E along the easterly line of Spring Creek Road (50 feet wide) for 1611.64 feet to an intersection with the north line of the Northeast Quarter (NE-1/4) of said Section 17; thence run S 89° 25' 51" E along said north line of the Northeast Quarter (NE-1/4) of said Section 17 for 1838.15 feet to the Northeast corner of said Section 17; thence run N 89° 27' 22" E along the north line of the Northwest Quarter (NW-1/4) of said Section 16 for 2677.24 feet to the Point of Beginning.  
Parcel contains 909 acres; more or less.

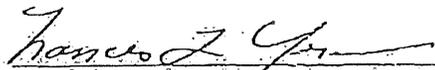
AND

PARCEL 1-B

Beginning at an intersection of the west line of Spring Creek Road with the north line of said Section 17; thence run the following courses and distances along the Southerly right-of-way of said Spring Creek Road: Southeasterly along an arc of a non-tangent curve to the right of radius 1725.00 feet (chord bearing S 03° 18' 23" E) (chord 206.27) (delta 06° 51' 19") for 206.40 feet to a point on a non-tangent line; thence run S 89° 52' 02" E for 16.47 feet; thence run S 00° 07' 58" W for 1406.64 feet; thence run N 89° 52' 02" W for 5.00 feet to a point of tangency; thence Southwesterly along an arc of said curve to the right of radius 1070.00 feet (chord bearing S 37° 51' 54" W) (chord 1309.62 feet) (delta 75° 27' 53") for 1409.31 feet to an intersection with the north right-of-way of a 30 foot wide road as recorded in Deed Book 305 at Page 276 of the Public Records of Lee County, Florida; thence run N 89° 59' 08" W along said right-of-way for 718.27 feet to an intersection with the easterly line of lands known locally as Spring Creek Estates, an unrecorded plat; thence along said lands the following courses and distances: N 00° 00' 52" E for 510.00 feet; N 89° 59' 08" W for 885.06 feet to a point of curvature; along an arc of a curve for 231.02 feet, having a radius of 390.00 feet, central angle of 33° 56' 23"; chord of 227.66 feet and chord bearing of S 73° 02' 41" W, to a point on the curve; S 00° 00' 52" W for 167.10 feet; and S 31° 38' 00" W for 130.70 feet to the northeast corner of lands described in Official Record Book 1194, Page 1085; thence westerly along said lands and waters of a canal 106 feet, more or less to the northeast corner of said lands described in Official Record Book 1057, Page 38; thence southwesterly and westerly along said lands and said canal 400 feet more or less to the

northwest corner of lands described in Official Record Book 1453, page 495; thence southwesterly along the mean high water line of a canal, 45 feet more or less to the south line of the North Half (N-1/2) of said Section 17; thence N 89° 59' 08" W for 136 feet more or less to the east quarter corner of said Section 18, thence run S 89° 58' 17" W along the south line of said Lot 2, said line being the basis of bearings for 1213.22 feet, said line being the southerly property line, to a bulkhead line established by Paul T. O'Hagan, Florida Professional Land Surveyor #1936 and duly approved by the County of Lee on September 27, 1967 and the State of Florida on November 21, 1967; thence the following courses and distances along said bulkhead line: N 56° 00' 38" W for 265.00 feet to a point of curvature; along an arc of a curve for 338.95 feet, having a radius of 520.00 feet, central angle of 37° 20' 50", chord of 332.98 feet and chord bearing of N 37° 20' 13" W, to a point of tangency; N 18° 39' 48" W for 481.24 feet to a point of curvature; along an arc of a curve for 104.44 feet, having a radius of 100.00 feet, central angle of 59° 50' 20", chord of 99.76 feet and a chord bearing of N 48° 34' 58" W, to a point of tangency; N 78° 30' 08" W for 144.73 to a point of curvature; along an arc of a curve for 56.48 feet, having a radius of 100.00 feet, central angle of 32° 21' 45"; chord of 55.74 feet and a chord bearing of N 62° 19' 15" W, to a point of tangency and an intersection with the waters of Estero Bay; thence run northerly along the waters of Estero Bay for 2270 feet more or less to an intersection with the north line of the Northeast Quarter (NE-1/4) of said Section 18; thence run S 89° 25' 49" E along said north line of the Northeast Quarter (NE-1/4) of said Section 18 for 2330 feet, more or less to the northeast corner of Section 18; thence run S 89° 25' 49" E along the north line of the Northwest Quarter (NW-1/4) of said Section 17 for 2558.62 feet to the northeast corner of said Northwest Quarter (NW-1/4); thence run S 89° 25' 51" E along the north line of the Northeast Quarter (NE-1/4) of said Section 17 for 642.07 feet to the Point of Beginning.

Parcel contains 304 acres, more or less.



Frances L. Yerdon (for the Firm LB-642)  
Professional Surveyor and Mapper  
Florida Certificate No. 5652

August 15, 2001

PARCEL IN  
GOVERNMENT LOT 3, SECTION 13  
AND  
GOVERNMENT LOT 2, SECTION 24  
TOWNSHIP 47 SOUTH, RANGE 24 EAST  
BIG HICKORY ISLAND, LEE COUNTY, FLORIDA

BEACH PARCEL

A tract or parcel of land lying in Government Lot 3, Section 13 and Government Lot 2, Section 24, Township 47 South, Range 24 East, Big Hickory Island, Lee County, Florida which tract or parcel is described as follows:

From the center of a turnaround on State Road No. 865 (Bonita Beach Road) being S.R.D. Station 19184.75 and N 24° 28' 41" W along the northern prolongation of said centerline of State Road No. 865 for 266.00 feet; thence run S 62° 26' 49" W for 98.40 feet; thence run N 27° 33' 11" W for 1863.42 feet; thence run N 20° 00' 41" W for 1403.30 feet; thence run N 65° 00' 00" E for 313.91 feet to the Point of Beginning. From said Point of Beginning run N 18° 55' 11" W for 97.51 feet, N 22° 26' 23" W for 100.53 feet, N 23° 09' 50" W for 100.14 feet, N 14° 51' 19" W for 73.01 feet, N 27° 40' 10" W for 88.01 feet, N 29° 33' 57" W for 46.01 feet, N 22° 14' 53" W for 47.27 feet, N 20° 39' 23" W for 46.98 feet, N 11° 15' 38" W for 29.80 feet, N 26° 10' 46" W for 46.87 feet, N 09° 09' 45" W for 48.26 feet, N 17° 35' 56" W for 46.04 feet, N 12° 49' 07" W for 50.04 feet, N 29° 20' 48" W for 69.12 feet, N 20° 48' 58" W for 63.82 feet; thence run N 79° 23' 51" W for 247 feet more or less to an intersection with the Approximate Mean High Water Line of the Gulf of Mexico; thence run northerly and northeasterly along said waters for 1140 feet more or less to an intersection with the South line of lands described in Official Record Book 198 at Page 188 of the Public Records of Lee County, Florida; thence run along said South line, along the arc of a curve to the right of radius 12000.00 feet for 783 feet to an intersection with the Waters of New Pass; thence run southerly, easterly, southwesterly and southerly along said waters for 4080 feet more or less to an intersection with a line bearing N 65° 00' 00" E and passing through the Point of Beginning; thence run S 65° 00' 00" W for 181 feet more or less to the Point of Beginning.

AND

From said Point of Beginning run S 13° 03' 59" E for 94.16 feet; thence run S 19° 13' 48" E for 50.64 feet; thence run S 04° 34' 15" E for 54.63 feet; thence run S 24° 53' 12" E for 50.09 feet; thence run S 27° 10' 29" E for 50.01 feet; thence run S 31° 01' 44" E for 42.51 feet to an intersection with the South line of lands described in Official Record Book 2246 at Page 4413 of the Lee County Records; thence run N 65° 00' 00" E along said south line for 134 feet, more or less to the waters of Estero Bay; thence northerly along said waters for 358 feet, more or less to an intersection with a line bearing N 65° 00' 00" E and passing through the Point of Beginning; thence run S 65° 00' 00" W for 181 feet, more or less to the Point of Beginning. Containing 36.8 acres, more or less.

Bearings hereinabove mentioned are Plane Coordinate for the Florida West Zone.

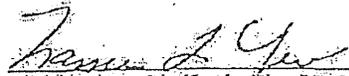
  
Frances E. Yerdon (for the Firm LB-642)  
Professional Surveyor and Mapper  
Florida Certificate No. 3652

EXHIBIT B  
Page 4 of 5

22005\BeachParcel-081501

**Q. GRADY MINOR & ASSOCIATES, P.A.**  
Civil Engineers ■ Land Surveyors ■ Planners

Q. GRADY MINOR, P.E.  
MARK W. MINOR, P.E.  
C. DEAN SMITH, P.E.  
DAVID W. SCHMITT, P.E.  
MICHAEL J. DELATE, P.E.  
BLAIR A. FOLEY, P.E.

D. WAYNE ARNOLD, A.I.C.P.  
ERIC V. SANDOVAL, P.S.M.  
THOMAS CHERNESKY, P.S.M.  
ALAN V. ROSEMAN

**SURVEYOR'S AFFIDAVIT**

*I am a Professional Surveyor and Mapper holding Certificate Number 5426 under the laws of the State of Florida.*

*I hereby certify that the dividing line described in the legal descriptions of "Pelican Landing DRI - City of Bonita Springs" and "Pelican Landing DRI - Unincorporated Lee County" (submitted with the DRI), as prepared by Johnson Engineering, dated November 1, 2001, is the same as the Jurisdictional line as described in the legal description established by the Charter for the City of Bonita Springs; and is also the same line shown and depicted on the Specific Purpose Survey, as prepared by Q. Grady Minor & Associates, P.A., dated October 2, 2001, as Drawing number C-1497.*

*I also certify that there are no overlaps or hiatus between the legal descriptions and the lines mentioned above.*

DRI- 2000-00022

Q. Grady Minor & Associates, P.A.

By: Thomas Chernesky Date: 11-2-01  
Thomas Chernesky, P.S.M. #5426

EXHIBIT B  
Page 5 of 5

EXHIBIT "C"

Legal Description of the Pelican Landing DRI area encompassed by the Spring Creek West DRI, located in the City of Bonita Springs.



EXHIBIT "D"

Sketch of the legal descriptions of Pelican Landing DRI.

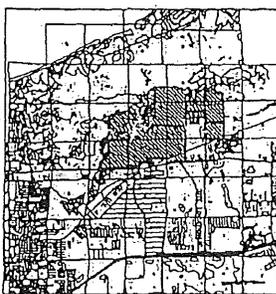
SECTION 13  
SECTION 14  
SECTION 15  
SECTION 16  
SECTION 17  
SECTION 18  
SECTION 19  
SECTION 20  
SECTION 21  
SECTION 22  
SECTION 23  
SECTION 24  
SECTION 25

WCI COMMUNITIES LIMITED PARTNERSHIP

LOCATED IN  
SECTIONS 5, 6, 7, 8, 9, 16, 17, 18, 20 & 21, TOWNSHIP 47 SOUTH, RANGE 24 EAST  
AND  
SECTIONS 13 AND 24, TOWNSHIP 47 SOUTH, RANGE 25 EAST  
LEE COUNTY, FLORIDA

SKETCH TO ACCOMPANY DESCRIPTIONS  
PREPARED FOR  
DRI 2000-00022

SECTION NO.	DESCRIPTION
1	SECTION 13 & 14
2	SECTION 15
3	SECTION 16 & 17
4	SECTION 18 & 19
5	SECTION 20 & 21



SECTION 13  
SECTION 14  
SECTION 15  
SECTION 16  
SECTION 17  
SECTION 18  
SECTION 19  
SECTION 20  
SECTION 21

SECTION 22  
SECTION 23  
SECTION 24  
SECTION 25

SECTION 5  
SECTION 6  
SECTION 7  
SECTION 8  
SECTION 9  
SECTION 16  
SECTION 17  
SECTION 18  
SECTION 20  
SECTION 21

SECTION 13  
SECTION 14  
SECTION 15  
SECTION 16  
SECTION 17  
SECTION 18  
SECTION 19  
SECTION 20  
SECTION 21

SECTION 22  
SECTION 23  
SECTION 24  
SECTION 25

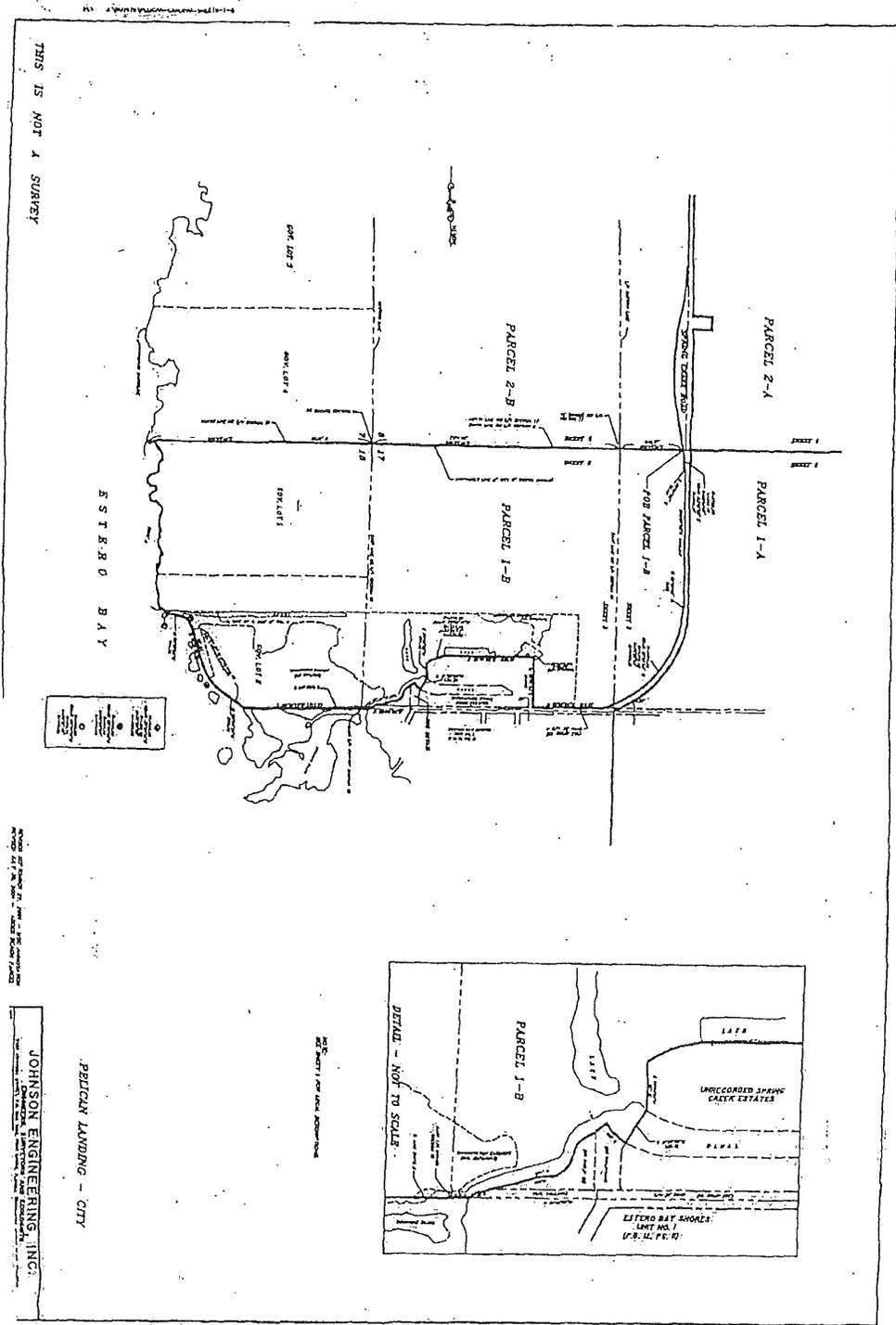
SECTION 5  
SECTION 6  
SECTION 7  
SECTION 8  
SECTION 9  
SECTION 16  
SECTION 17  
SECTION 18  
SECTION 20  
SECTION 21

SECTION 13  
SECTION 14  
SECTION 15  
SECTION 16  
SECTION 17  
SECTION 18  
SECTION 19  
SECTION 20  
SECTION 21

SECTION 22  
SECTION 23  
SECTION 24  
SECTION 25

JOHNSON ENGINEERING, INC.  
1000 N. W. 10th St.  
Fort Lauderdale, FL 33304  
Tel: (305) 555-1111  
Fax: (305) 555-1112



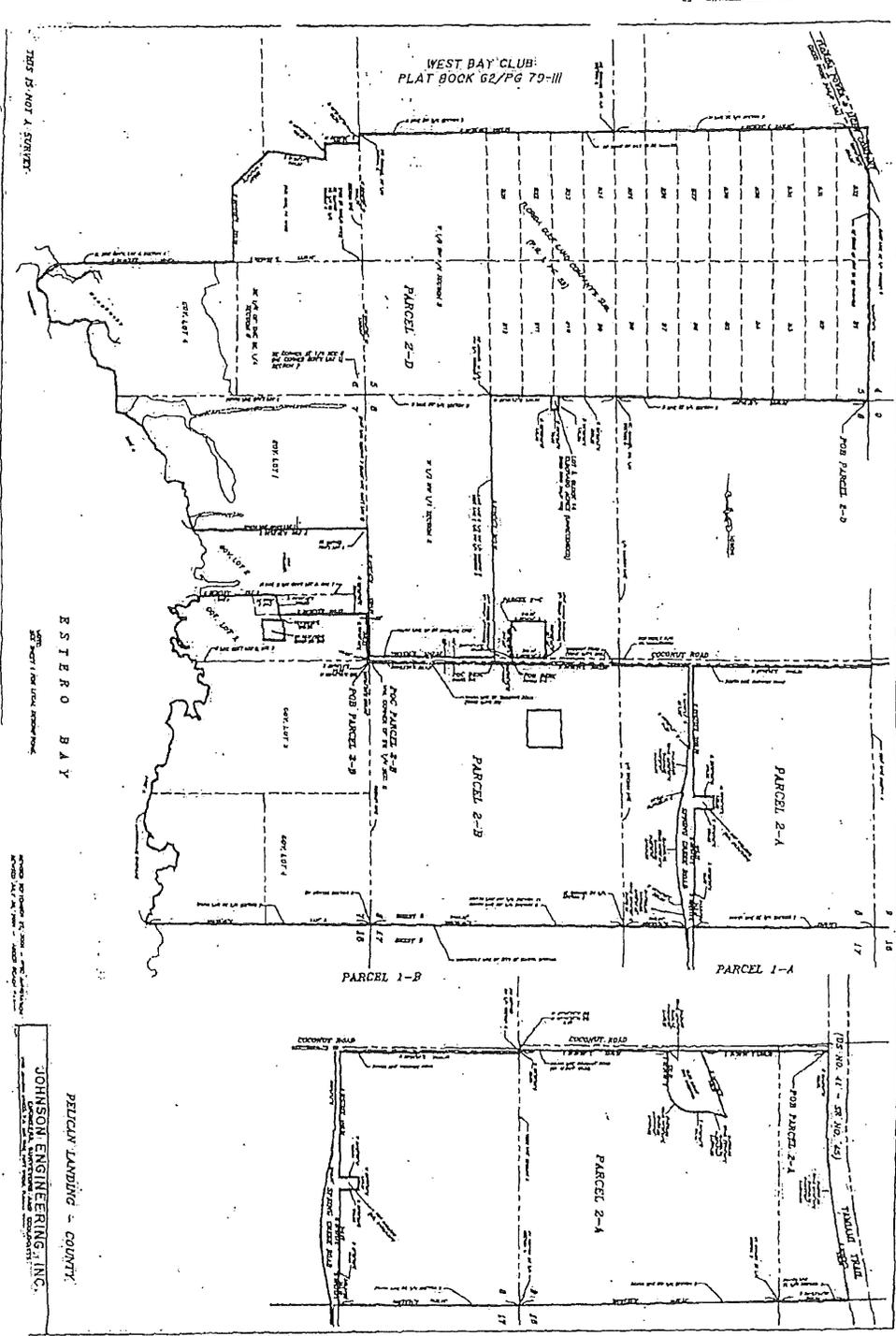


THIS IS NOT A SURVEY

ESTERO BAY

PELICAN LANDING - CITY

JOHNSON ENGINEERING, INC.

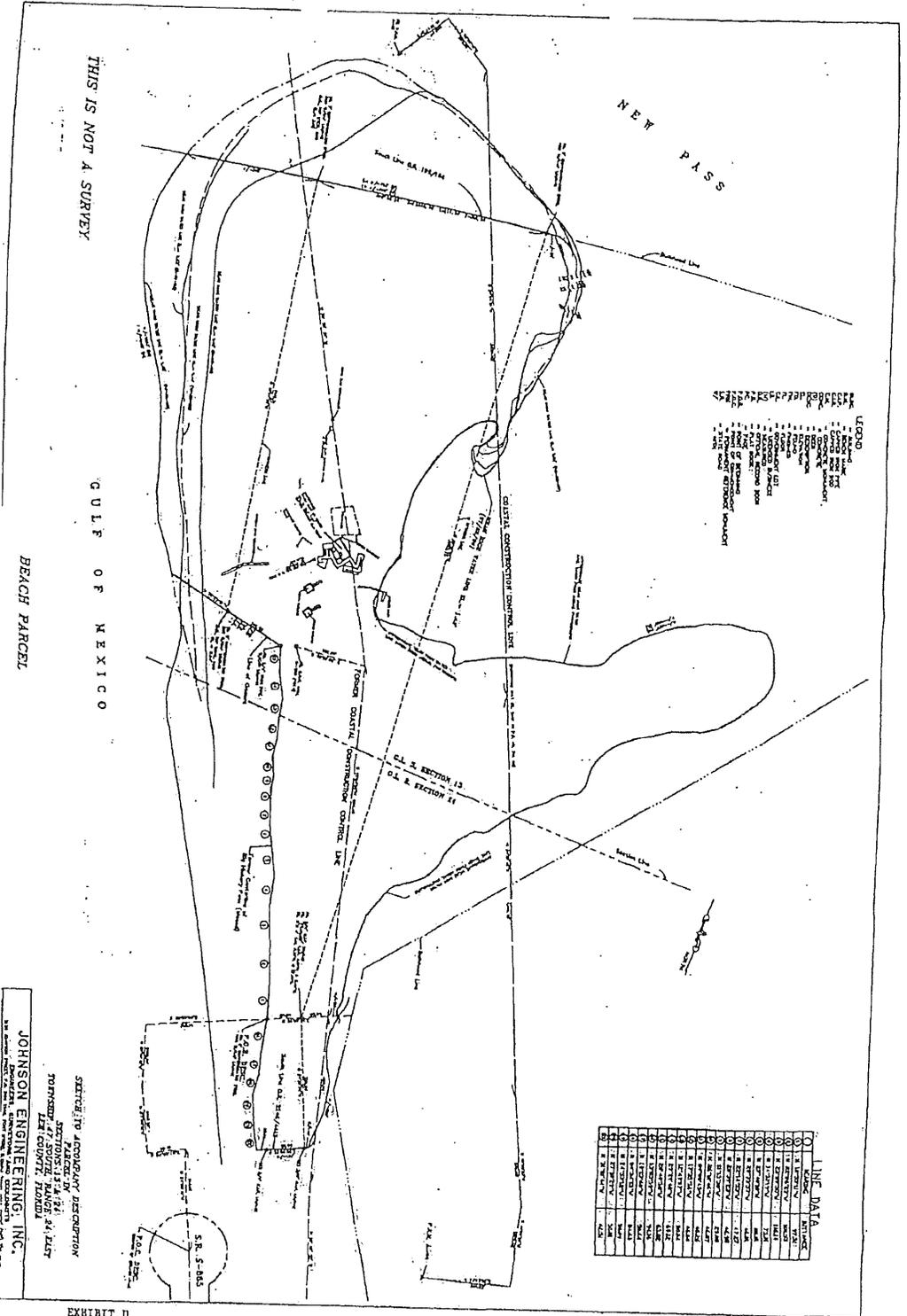


THIS IS NOT A SURVEY

ESTERO BAY  
 SURVEY FOR LAND ACQUISITION

PELICAN LANDING - COUNTY  
 JOHNSON ENGINEERING, INC.

WEST BAY CLUB:  
 PLAT BOOK 62/Pg 79-III



LEGEND  
 --- 1/2" WIDE EASEMENT  
 --- 10' WIDE EASEMENT  
 --- 20' WIDE EASEMENT  
 --- 30' WIDE EASEMENT  
 --- 40' WIDE EASEMENT  
 --- 50' WIDE EASEMENT  
 --- 60' WIDE EASEMENT  
 --- 70' WIDE EASEMENT  
 --- 80' WIDE EASEMENT  
 --- 90' WIDE EASEMENT  
 --- 100' WIDE EASEMENT  
 --- 120' WIDE EASEMENT  
 --- 150' WIDE EASEMENT  
 --- 200' WIDE EASEMENT  
 --- 250' WIDE EASEMENT  
 --- 300' WIDE EASEMENT  
 --- 400' WIDE EASEMENT  
 --- 500' WIDE EASEMENT  
 --- 600' WIDE EASEMENT  
 --- 700' WIDE EASEMENT  
 --- 800' WIDE EASEMENT  
 --- 900' WIDE EASEMENT  
 --- 1000' WIDE EASEMENT

LINE DATA

LINE NO.	START POINT	END POINT	LENGTH	BEARING
1	...	...	...	...
2	...	...	...	...
3	...	...	...	...
4	...	...	...	...
5	...	...	...	...
6	...	...	...	...
7	...	...	...	...
8	...	...	...	...
9	...	...	...	...
10	...	...	...	...
11	...	...	...	...
12	...	...	...	...
13	...	...	...	...
14	...	...	...	...
15	...	...	...	...
16	...	...	...	...
17	...	...	...	...
18	...	...	...	...
19	...	...	...	...
20	...	...	...	...
21	...	...	...	...
22	...	...	...	...
23	...	...	...	...
24	...	...	...	...
25	...	...	...	...
26	...	...	...	...
27	...	...	...	...
28	...	...	...	...
29	...	...	...	...
30	...	...	...	...
31	...	...	...	...
32	...	...	...	...
33	...	...	...	...
34	...	...	...	...
35	...	...	...	...
36	...	...	...	...
37	...	...	...	...
38	...	...	...	...
39	...	...	...	...
40	...	...	...	...
41	...	...	...	...
42	...	...	...	...
43	...	...	...	...
44	...	...	...	...
45	...	...	...	...
46	...	...	...	...
47	...	...	...	...
48	...	...	...	...
49	...	...	...	...
50	...	...	...	...
51	...	...	...	...
52	...	...	...	...
53	...	...	...	...
54	...	...	...	...
55	...	...	...	...
56	...	...	...	...
57	...	...	...	...
58	...	...	...	...
59	...	...	...	...
60	...	...	...	...
61	...	...	...	...
62	...	...	...	...
63	...	...	...	...
64	...	...	...	...
65	...	...	...	...
66	...	...	...	...
67	...	...	...	...
68	...	...	...	...
69	...	...	...	...
70	...	...	...	...
71	...	...	...	...
72	...	...	...	...
73	...	...	...	...
74	...	...	...	...
75	...	...	...	...
76	...	...	...	...
77	...	...	...	...
78	...	...	...	...
79	...	...	...	...
80	...	...	...	...
81	...	...	...	...
82	...	...	...	...
83	...	...	...	...
84	...	...	...	...
85	...	...	...	...
86	...	...	...	...
87	...	...	...	...
88	...	...	...	...
89	...	...	...	...
90	...	...	...	...
91	...	...	...	...
92	...	...	...	...
93	...	...	...	...
94	...	...	...	...
95	...	...	...	...
96	...	...	...	...
97	...	...	...	...
98	...	...	...	...
99	...	...	...	...
100	...	...	...	...

SECTION 13 ACCORDARY DESCRIPTION  
 BEACH PARCEL IN  
 TOWNSHIP 47 SOUTH RANGE 34 EAST  
 LEES COUNTY, FLORIDA  
 JOHNSON ENGINEERING, INC.  
 200 S. W. 10th St., Ft. Lauderdale, Fla. 33304

THIS IS NOT A SURVEY

GULF OF MEXICO

BEACH PARCEL

EXHIBIT "E"

Map H, Master Development Plan - last revised April 16, 2025.



EXHIBIT "F"  
 PELICAN LANDING DRI  
 DEVELOPMENT PARAMETERS  
 (updated through ~~3-1-01~~ 2025)

		Existing	Build out Total
Land Use	Units <sup>1</sup>	<del>(1998)</del> <u>(2025)</u>	<del>(2008)</del> <u>(2034)</u>
Residential <sup>5</sup>	DU	1083 <u>2,807</u>	4,400
Single Family	DU	402 <u>910</u>	665
Multi Family	DU	596 <u>1,897</u>	3,735
Retail <sup>2</sup>	GFA	11,000 <u>21,000</u>	300,000 <u>153,000</u>
Office <sup>3</sup>	GFA	134,738 <u>229,222</u>	475,000 <u>374,161</u>
Hotel/Motel Rooms		0 <u>450</u>	750 <u>982</u>
Recreation Uses			
Pelican Nest Golf Course/Clubhouse/ Practice Range Holes	<u>*Within Pelican Landing DRI/Spring Creek Holes not included</u>		
		24 <u>30</u>	30
Colony Range Club/ Golf Course/ Clubhouse/Practice Range Holes		19	19
Resort Golf Course/ Clubhouse Practice Range	Holes	19	28
Tennis Center	Courts	24	24
Coconut Marina	Boat Slips		
	Wet	24	48
	Dry <sup>6</sup>	0	150
Redfish Point	GFA	5,000	5,000
	Boat Slips		
	Wet	15	15
Other <sup>4</sup>	Boat Slips		
	Wet	0	3.2

Footnotes:

- 1 Units  
DU - Dwelling Units  
GFA - Square Feet of Gross Floor Area
- 2 Includes conference center, community center and clubhouse/marina
- 3 Includes "Foundations"
- 4 Ancillary Use
- 5 Includes Continuing Care Facility (CCF) and Assisted Living Facility (ALF)/Independent Living

Facility (ILF) units with the following density equivalents: ALF at a density of 4 ALF beds : 1 residential dwelling unit per LDC 4-1283(A)(1) and ILF calculated at a density of 2 ILF : 1 residential dwelling unit per LDC 4-1183(c).

6 150 Dry Slips assigned to the Bayview on Estero Bay RPD/CPD