INDIANTOWN
DEVELOPMENT OF REGIONAL IMPACT ASSESSMENT REPORT

TREASURE COAST REGIONAL PLANNING COUNCIL
INDIAN RIVER – MARTIN – ST. LUCIE – PALM BEACH

A DEVELOPMENT OF REGIONAL IMPACT ASSESSMENT REPORT

FOR

INDIANTOWN

MARTIN COUNTY, FLORIDA

DECEMBER 2006

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ABBREVIATIONS

The following abbreviations may be used in this report:

ADA	Application for Development Approval
BMP	Best Management Practice
CIE	Capital Improvement Element
COE	United States Army Corps of Engineers
Council	Treasure Coast Regional Planning Council
CRA	Community Redevelopment Area
CSA	School District's Concurrency Service Area
CWHIP	Community Workforce Housing Innovation Program
DO	Development Order
DRI	Development of Regional Impact
FAC	Florida Administrative Code
FDEP	Florida Department of Environmental Protection
FFWCC	Florida Fish and Wildlife Conservation Commission
FDOT	Florida Department of Transportation
FIAM	Fiscal Impact Analysis Model
FLUM	Future Land Use Map
FPL	Florida Power and Light Company
FS	Florida Statutes
FSUTMS	Florida Standard Urban Transportation Model Structure
GPD	Gallons per Day
HCM	Highway Capacity Manual
HUD	United States Department of Housing and Urban Development
IFAS	Institute of Food and Agricultural Sciences
ITE	Institute of Transportation Engineers
LOS	Level of Service
MGD	Million Gallons per Day
NCD	New Community Development District
NGVD	National Geodetic Vertical Datum
NOPC	Notice of Proposed Change
NPDES	National Pollutant Discharge Elimination System
NPV	Net Present Values
SF	Square Feet
SFWMD	South Florida Water Management District
SRPP	Strategic Regional Policy Plan
TAZ	Traffic Analysis Zone
TPS	Traffic Performance Standards
USB	Urban Service Boundary
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service

INDIANTOWN DRI
REPORT AND RECOMMENDATIONS

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INTRODUCTION

This assessment of the Indiantown Development of Regional Impact (DRI) has been prepared by the Treasure Coast Regional Planning Council (Council) as required by Section 380.06(12), Florida Statutes and 9J-2.024(1), Florida Administrative Code (FAC). The primary purpose of the assessment report is to identify the regional impacts, both positive and negative, that can reasonably be expected to occur should the proposed project be approved. In carrying out this objective, the report suggests opportunities to eliminate or mitigate negative impacts expected to occur and where possible to enhance positive features of the proposed development.

The Indiantown Application for Development Approval (ADA) was originally submitted on September 23, 2005 and was supplemented with additional information submitted on March 3, 2006 and July 11, 2006. On August 25, 2006 the County and the applicant were notified that the ADA for the Indiantown DRI had been reviewed by Council and found to have completed the informational sufficiency process pursuant to Section 380.06(10), Florida Statutes. The County was notified that the public hearing may be set for the proposed DRI pursuant to Section 380.06(11), Florida Statutes, and that Council will prepare the regional assessment report.

The series of recommendations contained in the Indiantown assessment report are based on the goals, strategies, and policies of the Strategic Regional Policy Plan (SRPP), adopted pursuant to Section 186.508, Florida Statutes. The recommendations of the Council are provided to assist the County in creating a development order (DO) for the DRI, consistent with 9J-2.025, FAC. This report and the recommendations are primarily directed at regional systems and facilities and do not necessarily address all local concerns. The recommendations do not foreclose or abridge the legal responsibility of the local government to act pursuant to applicable local laws or ordinances.

Once Council adopts the Indiantown DRI assessment report it is transmitted to the County. From there the County shall hold the public hearing that has been set for the proposed Indiantown DRI. At the hearing the County shall approve, deny or approve with conditions, restrictions, or limitations taking into consideration whether and the extent to which:

1. the development is consistent with the local comprehensive plan and local land development regulations;
2. the development is consistent with the report and recommendations of the regional planning council; and
3. the development is consistent with the State Comprehensive Plan.

The County is required to render a decision on the proposed Indiantown DRI within 30 days after the hearing unless an extension is requested by the developer.

PROJECT INFORMATION

Project Name: Indiantown

Applicant: Centex Homes, a Nevada General Partnership

Jurisdiction: Martin County

Size: 804 acres

Location: On the east side of Allapattah Road (CR 609) in Indiantown

Population: 4,339 persons

Employment: 100 permanent jobs

Uses:

1,650	residential dwelling units
10,000 SF	retail
20,000 SF	office

Buildout Date: 2020

Phases: 3 phases as described in the following table:

Phase	Years	Residential (DU)	Retail (SF)	Office (SF)
1	2005-2010	653	10,000	20,000
2	2010-2015	744	0	0
3	2015-2020	253	0	0
Total	2005-2020	1,650	10,000	20,000

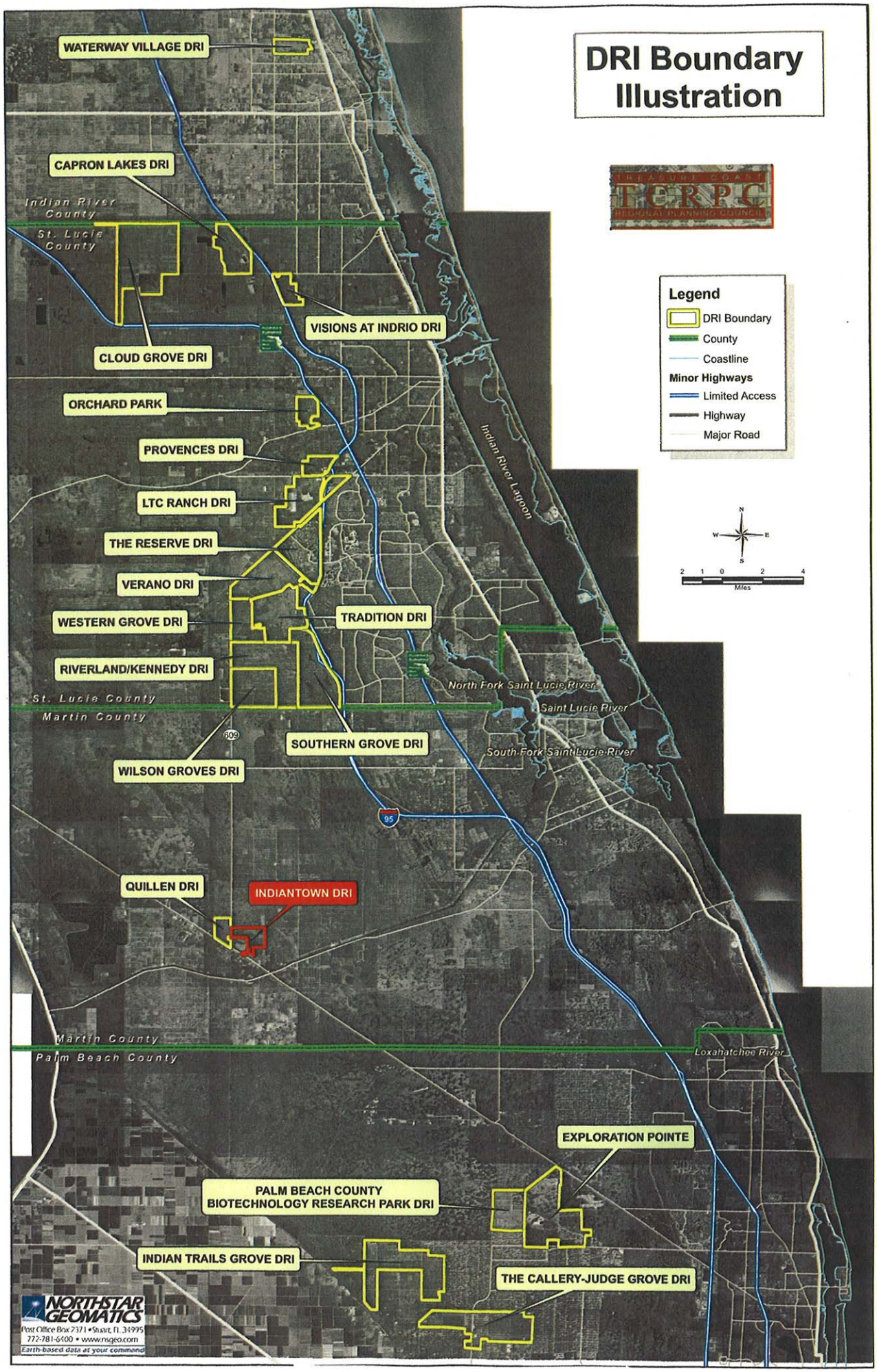
GENERAL PROJECT DESCRIPTION

The Indiantown DRI is a proposed mixed-use development on approximately 804 acres located near the community of Indiantown in western Martin County, Florida. The project site is located on the east side of Allapattah Road (CR 609) and north of Warfield Boulevard (SR 710). The site is bounded by the proposed Quillen DRI to the west; residential estates and agricultural land to the north; agricultural land to the east; and agricultural land, the Indianwood Golf Course, and single family homes to the south. Most of the project is located within the Indiantown Community Redevelopment Area (CRA). Location maps and the proposed Master Development Plan are included on the following pages.

The Master Development Plan proposes eight residential areas of various shapes and sizes, a four-acre mixed-use Neighborhood Center, a school and park site, water management areas, and approximately 350 acres of open space, including upland preserves, wetlands, greenways, and recreation areas. The plan proposes a total of 1,650 residential dwelling units, 20,000 SF of office, and 10,000 SF of retail. Development is proposed to occur in three five-year phases with buildout in 2020. The Indiantown Company, Inc. will provide potable water and off-site treatment of wastewater for the development. The surface water management system will provide water quality treatment in on-site wet detention ponds prior to directing discharges to the C-44 Canal via the Troup Indiantown Drainage District canal system and the Rowland Canal.

The site contains improved pasture, as well as wetlands and remnant native upland communities. A large part of the improved pasture area is located in a protected area surrounding a Bald Eagle nest. The majority of the project is located within the Urban Service Boundary (USB) and has a LD (Low Density) future land use designation of the Martin County Comprehensive Plan. The project density is about 2 unit/acre, which is below the 5 unit/acre allowed by the LD future land use designation. The portion of the project outside the USB will require a Comprehensive Plan amendment to move the USB line and change the future land use designation from RD (Rural Density Residential) at 1 unit/2 acres to ED-1 (Estate Density Residential) at 1 unit/acre. These comprehensive plan amendments are currently under review by Martin County.

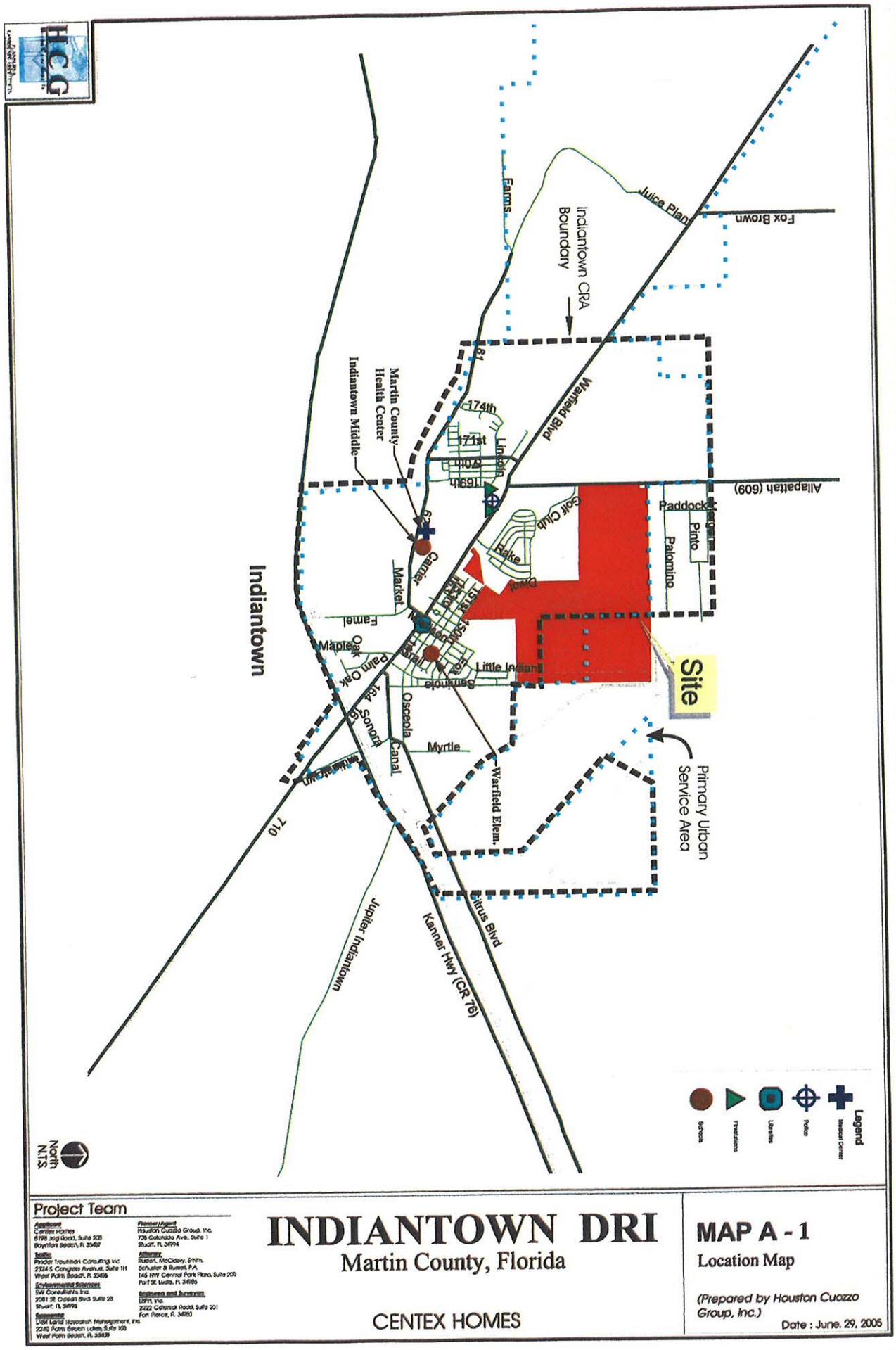
Project Location
Regional View
St. Lucie County
Martin County
St. Lucie River
City of Stuart
Martin Hwy (CR 714)
Florida's Turnpike
I-95
0 1 2 3 4
Miles
N
Allapattah Road (CR 609)
Project Location
Warfield Blvd. (SR 710)
Kanner Highway (CR 76)
Citrus Blvd. (CR 726)
Pratt-Whitney Road (CR 711)
FPL Cooling
Reservoir
C-44 Canal
I-95
Lake
Okeechobee
Martin County
Palm Beach County
Indiantown Road (CR 706)
Beeline Highway (SR 710)



Project Location Map – Regional Context

Summary of New and Recently Approved DRIs in the Treasure Coast Region

County/Project	Status	Acres	Residential Units	Hotel Rooms	Retail Sq. Ft.	Industrial Sq. Ft.	Office Sq. Ft.
Indian River County							
Waterway Village	Approved	696	1,740	0	30,000	0	0
County Subtotal		**696**	**1,740**	**0**	**30,000**	**0**	**0**
St. Lucie County							
Cloud Grove (fka Adams Ranch Stewardship)	Submitted	5,918	12,000	0	100,000	0	500,000
Capron Lakes (fka Indrio)	Submitted	1,938	5,078	0	900,000	0	750,000
LTC Ranch	Approved	2,455	6,500	0	725,000	1,960,200	1,508,500
Verano (fka Montage)	Approved	3,000	6,000	350	250,000	0	0
Orchard Park (fka West St. Lucie Farms)	Submitted	840	2,500	0	300,000	0	400,000
Provences	Submitted	733	3,350	350	1,225,000	0	500,000
Reserve	Approved	2,690	4,100	250	390,000	1,600,000	100,000
Riverland/Kennedy	Approved	3,845	11,700	0	892,668	1,361,250	1,361,250
Southern Grove	Approved	3,606	7,388	500	2,164,061	1,999,404	2,073,238
Tradition	Approved	2,522	7,245	300	675,512	0	1,295,567
Visions at Indrio	Submitted	780	2,605	240	750,000	0	250,000
Western Grove	Submitted	1,593	4,062	0	365,904	0	250,906
Wilson Groves	Approved	2,499	7,700	0	765,000	1,361,250	1,583,250
County Subtotal		**32,419**	**80,228**	**1990**	**9,503,145**	**8,282,104**	**10,572,711**
Martin County							
Indiantown	Submitted	804	1,650	0	10,000	0	20,000
Quillen	Submitted	582	2,250	0	150,000	0	0
County Subtotal		**1386**	**3,900**	**0**	**160,000**	**0**	**20,000**
Palm Beach County							
Callery-Judge Grove	Submitted	3,872	10,000	150	1,400,000	3,000,000	600,000
Exploration Pointe (fka Vavrus Ranch South and Gardens Science & Tech. Community)	Submitted	4,763	9,982	300	644,000	2,770,000	350,000
Indian Trail Groves	Pre-Application	4,930	12,325	0	1,500,000	0	0
Palm Beach Co. Biotech. Research Park	Approved	1,919	2,000	0	430,000	8,500,000	0
County Subtotal		**15,484**	**34,307**	**450**	**3,974,000**	**14,270,000**	**950,000**
Regional Total		**49,885**	**120,175**	**2,440**	**13,669,585**	**22,552,104**	**11,542,711**



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INDIANTOWN DRI

Martin County, Florida

CENTEX HOMES

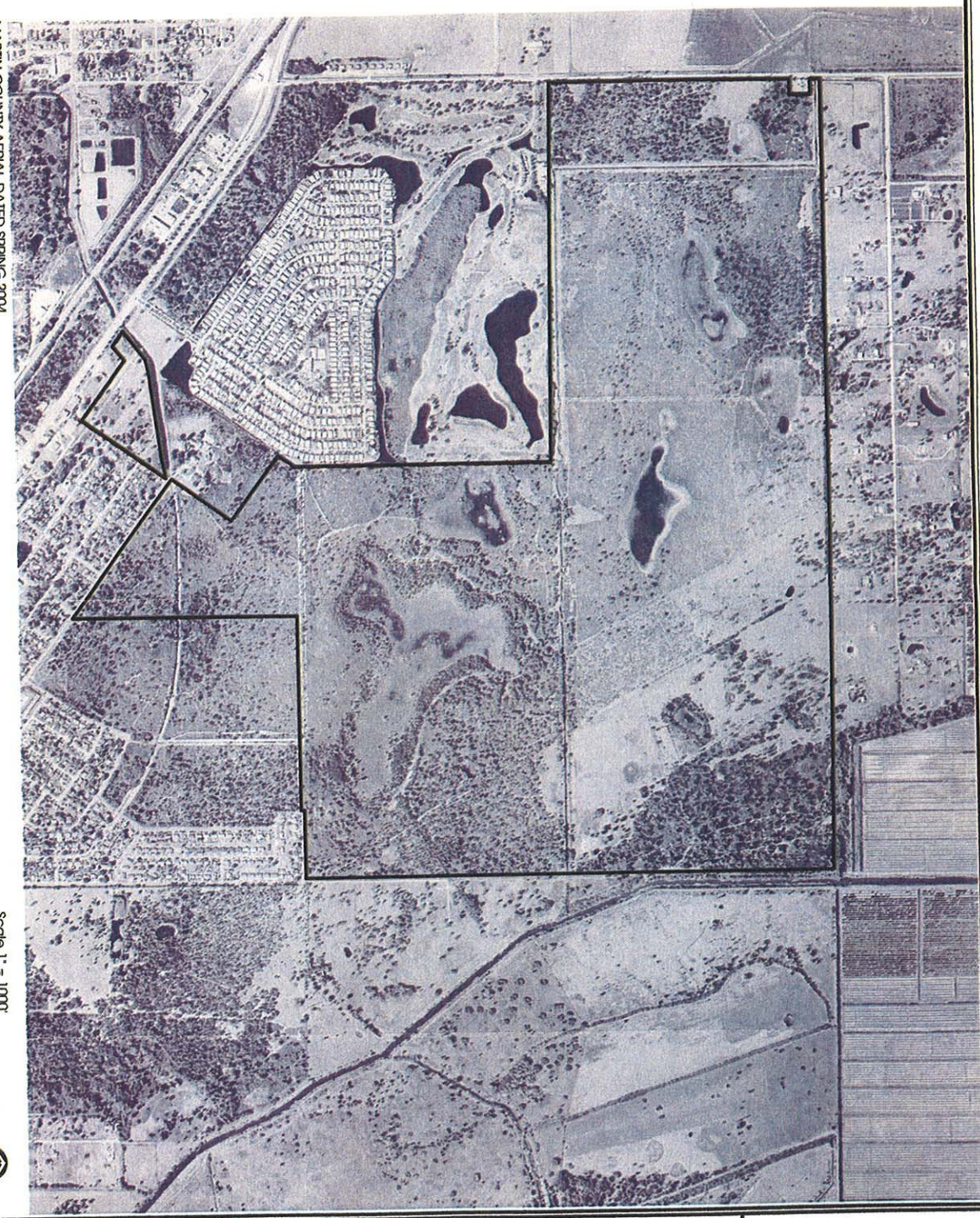
MAP A - 1

Location Map

(Prepared by Houston Cuozzo Group, Inc.)

Date : June. 29, 2006

Project Location Map – General Location



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INDIANTOWN DRI

Martin County, Florida

CENTEX HOMES

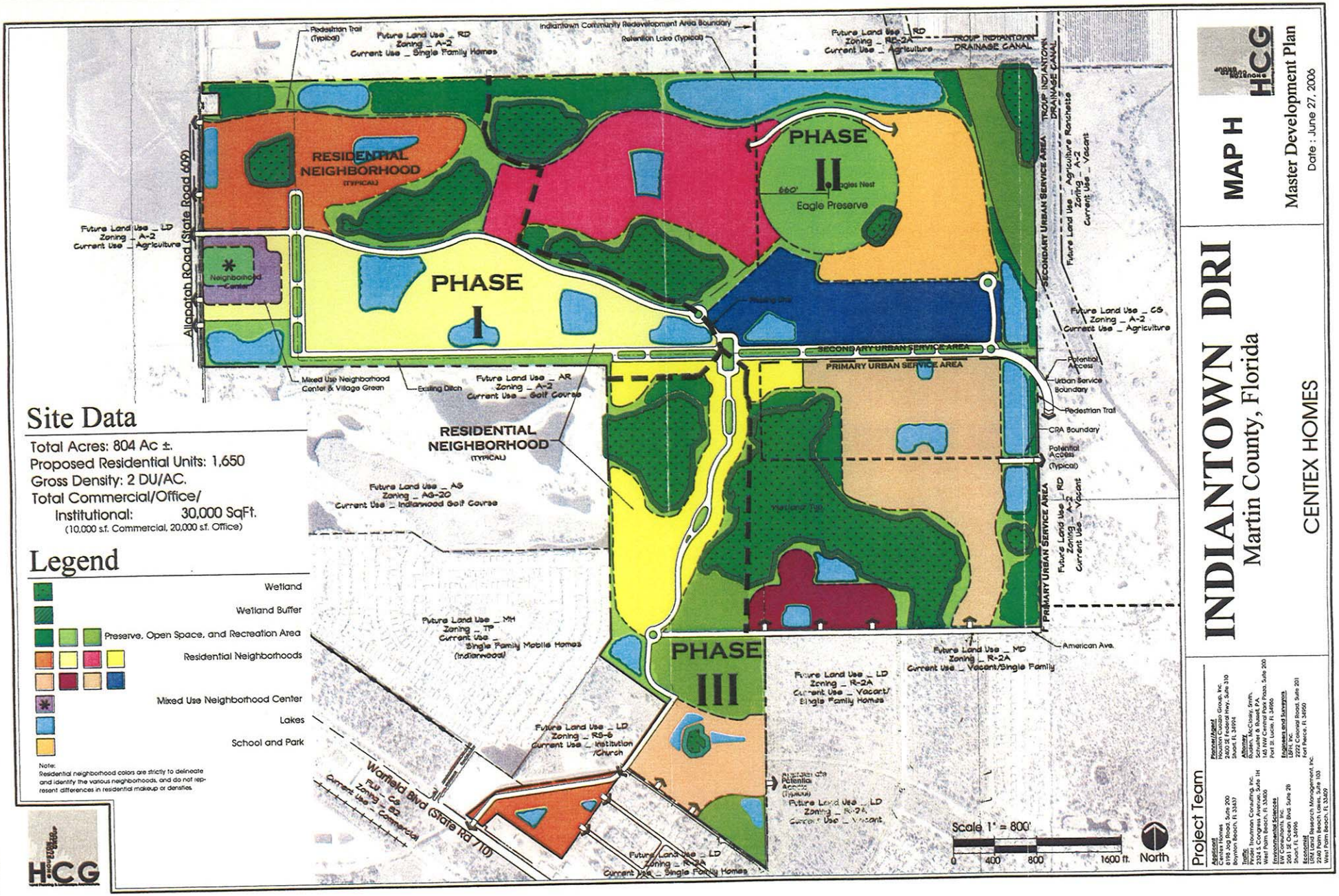
MAP B

Aerial Map

EW CONSULTANTS, INC.

Date : June. 17, 2005

Project Location Map – Immediate Vicinity



Site Data

Total Acres: 804 Ac ±.
Proposed Residential Units: 1,650
Gross Density: 2 DU/AC.
Total Commercial/Office/
Institutional: 30,000 SqFt.
(10,000 s.f. Commercial, 20,000 s.f. Office)

Legend

- Wetland
- Wetland Buffer
- Preserve, Open Space, and Recreation Area
- Residential Neighborhoods
- Mixed Use Neighborhood Center
- Lakes
- School and Park

Note:
Residential neighborhood colors are strictly to delineate and identify the various neighborhoods, and do not represent differences in residential makeup or densities.

HCG

INDIANTOWN DRI

Martin County, Florida

CENTEX HOMES

MAP H

Master Development Plan

Date : June 27, 2006

HCG

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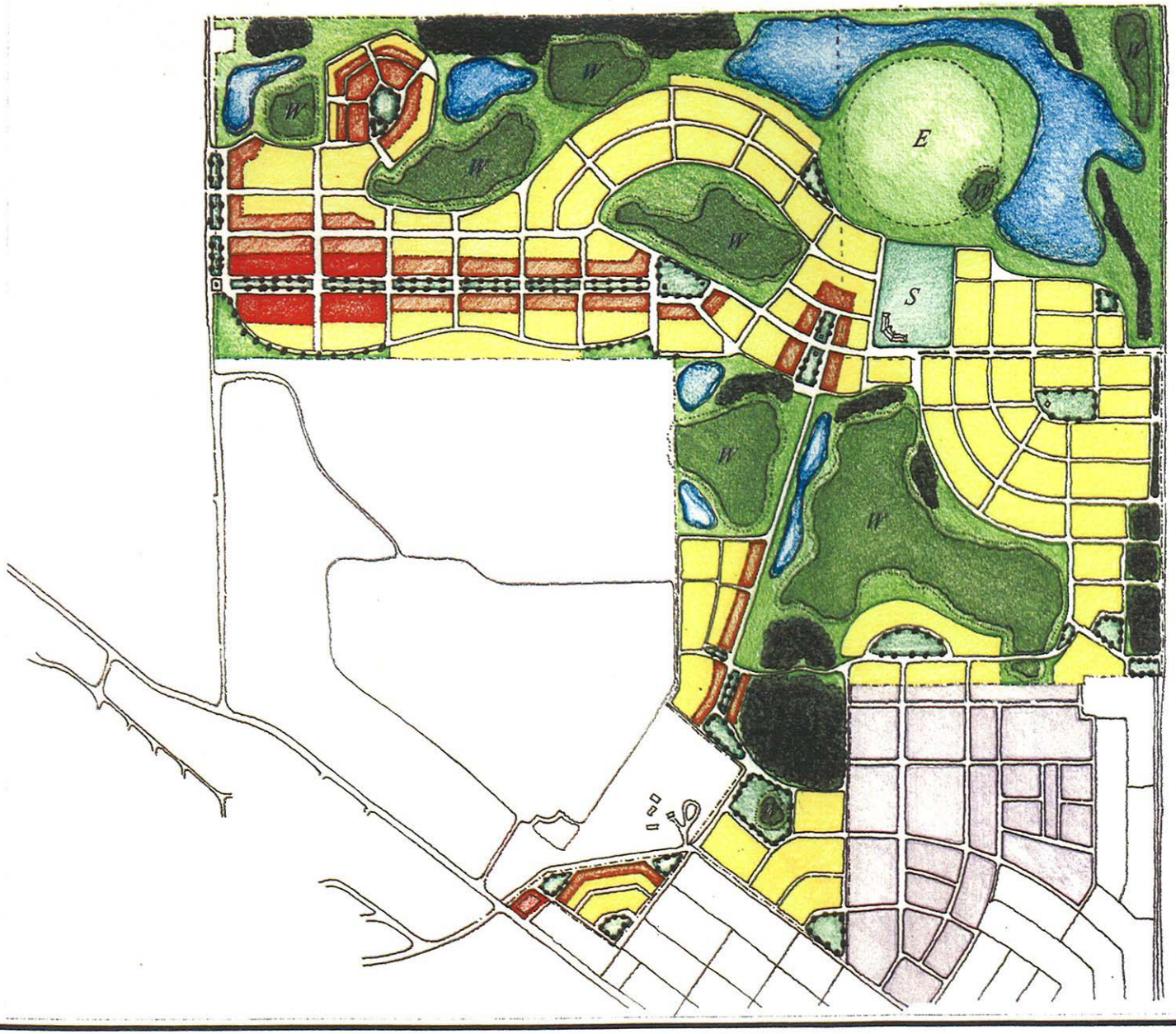


Indiantown Development of Regional Impact

Alternative Master Development Plan

Indiantown, Martin County

December 2006

Legend

- Single Family Residential
- Townhouse Residential
- Mixed-Use/Commercial
- Preserve
- Retention
- Parks
- *S* School Site
- *E* Eagle Preserve
- *W* Wetland

Total Site Area: 804 acres
Total Preservation/Retention Area: +/- 64.3 acres

Proposed Program

Residential

Single Family	1,079 d.u. (average 50'x100')
Townhouses	499 d.u. (average 28' wide)
Multi-Family	74 d.u. (average 1,000 s.f.)
TOTAL	1,652 dwelling units

Non-Residential

Commercial/Retail	113,000 s.f. (non-residential space)

Scale: 1"=800'

Treasure Coast Regional Planning Council

OVERVIEW OF INDIANTOWN DRI

Does anyone suppose that, in real life, answers to any of the great questions that worry us today are going to come out of homogeneous subdivisions and shopping malls?

- Jane Jacobs, *The Death and Life of Great American Cities (1961)*

The proposed development program for the 804-acre Indiantown DRI includes: 1,650 residential units, 10,000 square feet of retail and 20,000 square feet of office. It is not so much the quantity of development proposed which should concern the County as much as: 1) how these uses are arranged and organized in the landscape to define its urban form; 2) how its relationship with the surrounding community can be improved; 3) how to utilize this development opportunity to strengthen and enhance the existing Indiantown community; and 4) whether there will be adequate public facilities and infrastructure to support this development.

The project is important from a number of perspectives. First, it represents a chance for the County to carry out its Redevelopment Plan for the Indiantown CRA. Second, it is one of the earlier increments of growth being considered in an otherwise undeveloped part of the Indiantown CRA – a large area being relied upon by the County to provide for new community and economic development opportunities.

The Indiantown CRA consists of about 5,200 acres. About half of this land is relatively undeveloped, vacant or in agricultural use. The other half is developed as a series of diverse neighborhoods and a linear commercial district which together forms what is known as Indiantown. The population of this unincorporated area is about 6,500.

At build out, the Indiantown DRI is expected to add 100 permanent jobs and 4,300 new residents. The County is currently processing at least nine other development proposals in the Indiantown area that would add another 4,400 units and 11,000 new residents. All together these proposals will more than triple the current population of Indiantown. With this magnitude of development, the County is in a one-time position to use the market forces and economics of growth to: 1) strengthen Indiantown's urban form and address for business; 2) create highly livable neighborhoods; 3) ensure superior job and educational opportunities for all residents; and 4) enhance the charm and character of Indiantown.

The most fundamental elements of good urban form for a town or city are public streets and blocks. With the right combination of these elements and a detailed plan laying out public and private spaces, good and identifiable neighborhoods and special mixed-use districts can form. These neighborhoods and districts become the building blocks of good, livable cities. These are the towns worth visiting more than once, the towns worth

reinvesting in, the towns worth repeating, the towns worth saving – our most valuable and cherished places.

In its current form, the Indiantown DRI "master development plan" fails to address these fundamental regional planning and urban design elements. The land development scheme for the project is represented by more of a concept plan. This plan offers no commitment to all of the positive features that are the result of an orderly system of streets and blocks. While the plan does propose a different mix of land uses and housing types than typically exist in most areas of the County, it suggests this project will build out as a series of isolated pods of development with little or no relationship to each other. The plan is overly vague and does not portray the type of authentic neighborhood structure that will contribute to Indiantown's urban form and value. It is likely to create more problems rather than resolve existing ones that will be difficult to retrofit in the future.

The Indiantown DRI, by all accounts and by design, is not part of Indiantown's fabric, but rather is an isolated "project." One of the unsustainable ideas behind projects is the very notion that they are projects, abstracted out of the ordinary town and set apart. To think of salvaging, regulating, or improving projects, is to compound this root mistake and foster growth by "projects," forever weakening the fabric of the town. The aim should be to get that project, the potential promise or "patch" of prosperity for the town, rewoven back into the fabric – and in doing so, strengthen the surrounding fabric as well.

The County is in a position to redirect the planning for this project to accomplish this goal. There is a great opportunity for the County to ensure there is a regular network of streets and blocks, and a detailed plan is prepared which results in self-contained, walkable neighborhoods and mixed-use districts which connect all the important components of public and private life (sites for homes, shopping, parks, jobs, schools, churches, civic use, etc.). In other words, correcting the problems of community design that plague many unincorporated areas of the County.

Recent community planning efforts sponsored by the County for Indiantown's development and redevelopment suggest there may be some interest in refining the Indiantown DRI master plan. The County should consider this an opportunity to work on the plan with the developer to address the fundamental urban design and town planning issues raised above.

Council's impact assessment report is provided to the County for its consideration of the Indiantown DRI. It includes a comprehensive evaluation of regional issues and 67 recommended Development Order conditions of approval designed to: 1) minimize or eliminate unfavorable impacts on state and regional resources and facilities; 2) strengthen and detail the master plan to address some fundamental regional planning and urban design issues; 3) mitigate affordable housing and environmental impacts; and 4) assure that adequate public facilities and infrastructure related to transportation, schools,

emergency public shelters, water, sewer, police and fire protection, solid waste disposal, water management, and parks and recreation are provided to support this development.

Growth is coming to the Indiantown area and the Treasure Coast Region. Where the next 25-year increment of this growth is located and the form it takes will have a profound affect on whether regional impacts and issues get addressed and on the quality of life for future generations.

CONCLUSION

To its credit, Martin County has always exercised great control of its future through its comprehensive plan. Regardless of the SRPP, the State Comprehensive Plan, other local plans, or any private sector plan, the County still maintains control of their plan and the right to choose its future. The choice this time is between two models or forms of growth: the traditional neighborhood and suburban sprawl. They are polar opposites in appearance, function and character. They look different, perform differently, create measurably different regional impacts, and are different in their capacity and ability to address regional issues (see Appendix G, Two Ways To Grow). For the Indiantown DRI it remains the County's choice of what form of development to approve.

The Indiantown DRI could be easily redesigned to be consistent with all elements of the SRPP (traditional neighborhood forms) and still deliver the positive fiscal and social impact the County and developer hope to achieve, without all the negatives of sprawl. There is a great opportunity for the County to ensure there is a regular network of streets and blocks, and a detailed plan is prepared which results in self-contained, walkable neighborhoods and mixed-use districts that connect all the important components of public and private life (sites for homes, shopping, parks, jobs, schools, churches, civic use, etc.). In other words, implementing the goals and achieving the vision articulated in the Indiantown Community Redevelopment Plan.

Martin County should approve this DRI and require it to develop consistent with the SRPP's preferred form. Council's DRI assessment report provides a strategy and basic instructions to help the County accomplish this task. If the County chooses suburban sprawl, the recommended DO conditions are simply designed to minimize regional impacts and reduce the damage associated with sprawl projects.

RECOMMENDATION

The Indiantown DRI assessment report contains a series of advisory recommendations for Martin County based on the goals, strategies, and policies of the SRPP. These recommendations are made in response to the Indiantown DRI master plan within the context of the SRPP. They are provided to address urban form issues, minimize project-related regional impacts, improve the project's capacity to strengthen and enhance the existing Indiantown community, and to further implement the SRPP.

In its current form and given the current level of planning, the Indiantown DRI cannot be determined to be consistent with the SRPP. In response to this situation, the Indiantown DRI assessment report makes suggestions for how the Indiantown DRI master plan can be further detailed and improved to be consistent with the SRPP and further its implementation.

As proposed, the Indiantown DRI will also place additional demands and have regional impacts on the regional transportation system and other urban services, public facilities and infrastructure. Incorporation of conditions into a Development Order will provide assurance that regional impacts are mitigated.

Martin County should approve the Indiantown DRI. It is recommended that, at a minimum, the conditions of approval contained in Council's DRI Assessment Report be included in the Development Order issued by Martin County.

SUMMARY OF REGIONAL IMPACTS

During review of the proposed Indiantown DRI, Council identified several issues that will have significant impact on Martin County and the Region. These issues are related to: 1) the master development plan, 2) transportation, 3) environmental and natural resources, 4) housing, and 5) human resources. This section summarizes the impacts. The proposed general conditions of approval contained in this report are designed to reduce or mitigate unfavorable impacts on resources and facilities of the State and Region.

MASTER DEVELOPMENT PLAN

"Until one is committed there is hesitancy, the chance to draw back, always ineffectiveness and underachievement"

- Johann Wolfgang von Goethe

Most comprehensive plans do not differentiate between acceptable and preferable development forms. Most take a regulatory approach to growth management, setting minimum standards and focusing on preventing the worst things from happening. This philosophy has often failed to result in sustainable or complete communities, has unnecessarily compromised the function and value of state and regional resources and facilities, and limited the Region's ability to accomplish regional goals and resolve regional issues.

Although most comprehensive plans include outstanding policies to address development processes and impacts, no picture or vision is established for the community. No desired or preferred form of development is prescribed. Recognition of the pattern of development and the physical structure of the built environment as powerful tools to mitigate local and regional impacts is completely discounted. These are weaknesses which have largely undermined the intended effect of the policies to resolve problems and achieve goals identified by the community.

The SRPP is different. Council made a conscious decision that its plan for the Treasure Coast Region would overcome this inherent weakness and commit to a different approach. The Council was clear in that the Region should state a vision for the future, advocating ways to address its particular challenges and opportunities through the application of time-tested regional and town planning and urban design principles at all scales of development. Because of the magnitude and pace of growth expected in the Region, the Council established a principle focus for its regional planning and visioning efforts on the form, organization and location of future development as the primary way to reduce or eliminate unfavorable impacts on state and regional resources and facilities.

The most significant element of the SRPP is the Future of the Region or vision/urban form section. This element focuses on community structure and organization, urban form and patterns of development that do not sprawl. The reason for this is based on Council's

conclusion that regional issues related to location, balance, mix and organization of residential types, work places and services (i.e. the built environment) will be critical to address if the Region is to accomplish its goals and sustain a high quality of life for its citizens. For example, urban form and development patterns have a profound regional effect on: 1) how often and how far we drive; 2) how much energy we use; 3) how long and well the regional roadway network will function; 4) how much air and water pollution we generate; 5) how much the public must spend on public facilities and infrastructure; 6) how much land and water we consume; 7) the extent to which upland and wetland systems are impacted; 8) whether there is an adequate supply of affordable housing; 9) how successful we are at infill and redevelopment of our established towns and cities; 10) how competitive we are in attracting business and economic development; 11) the region's ability to minimize crime and emergency response times; 12) how much public money we have to spend on education, homelessness, and care of the elderly and children; 13) how well we respond and recover from natural disasters; 14) how successful we are in implementing the Comprehensive Everglades Restoration Plan and restoring the Loxahatchee River, St. Lucie River, and Indian River and Lake Worth Lagoon systems; and many other important regional issues and concerns.

Right now the form or pattern of growth in the Region is represented by two types of development: traditional neighborhoods and suburban sprawl. They are polar opposites in appearance, function and character. They look different, perform differently, create measurably different regional impacts, and are different in their capacity to resolve regional issues and minimize unfavorable impacts to state and regional resources and facilities (see Appendix G, Two Ways to Grow).

In its current form and current level of planning, the master development plan for the Indiantown DRI is overly vague and cannot be determined to be consistent with the SRPP. The land development scheme for the project is represented by more of a concept plan. This plan offers no commitment to a sustainable pattern or form of development. Based on the SRPP, it would be typified as suburban sprawl.

With that said, the Indiantown DRI could be easily redesigned to be consistent with all elements of the SRPP (traditional neighborhood forms) and still deliver the positive fiscal and social impact the County and developer hope to achieve, without all the negatives of sprawl. There is a great opportunity for the County to ensure there is a regular network of streets and blocks, and a detailed plan is prepared which results in self-contained neighborhoods and mixed-use districts which connect all the important components of public and private life (sites for homes, shopping, parks, jobs, schools, churches, civic use, etc.). In other words, correcting the problems of community design, balance and serviceability that plague many areas of unincorporated Martin County and a large part of the Region.

In response to this situation, the Indiantown DRI assessment report contains recommended DO conditions that suggest how the Indiantown DRI master plan can be further detailed and improved to be consistent with the SRPP and further its

implementation. These recommendations are made in response to the Indiantown DRI master plan within the context of the SRPP. They are provided to address urban form issues, minimize project-related regional impacts, improve the project's capacity to strengthen and enhance the existing Indiantown community, and to further implement the SRPP.

TRANSPORTATION

> *"The cities will be part of the country; I shall live 30 miles from my office in one direction, under a pine tree; my secretary will live 30 miles away from it too, in the other direction, under another pine tree. We shall both have our own car. We shall use up tires, wear out road surfaces and gears, consume oil and gasoline. All of which will necessitate a great deal of work ... enough for all."*
>
> -Le Corbusier, The Radiant City (1967)

> *"...we shall solve the City Problem by leaving the City."*
>
> -Henry Ford (1922)

The Indiantown DRI is a proposed multi-use development to be developed in accordance with the Indiantown CRA Plan. The development program calls for 1,650 residential units and 10,000 square feet of retail and 20,000 square feet of office development. The project is to be developed in three phases with buildout in the year 2020.

The proposed development is expected to impact the level of service (LOS) on the regional roadway network. Rule 9J-2.045, FAC requires that state and regional roads be maintained at their adopted LOS. Mitigation through widening of roadways, expansion of intersections, and the provisions of adequate lane geometry is necessary to ensure that an acceptable LOS can be maintained on the regional roadways given the growth in the area. As such, new roadway construction and expansions are being recommended. Appendix F presents a summary of the traffic study.

The development has significant impact along SR 710 and widening is necessary to maintain adopted levels of service. SR 710 is part of the Florida Intrastate Highway System and the Strategic Intermodal System. Therefore, the Florida Department of Transportation (FDOT) has established statewide minimum level of service standards. Two segments of SR 710 need improvements in Phase 1, prior to the year 2010. The segment between CR 726 (Citrus Boulevard) and SR 76 (Kanner Highway), which includes a bridge, requires widening to a four-lane-divided cross section in Phase 1. The entire segment of SR 710 between Fox Brown Road and Seminole Pratt-Whitney Road, in Palm Beach County, requires widening to a four-lane-divided cross section prior to the year 2015.

The FDOT has recently started two Preliminary Design and Engineering Studies for SR 710. However, these studies will not be complete for one to three or more years. Funding for design and construction has yet to be secured, and will need to be

programmed into the FDOT Work Program. This schedule lags behind when the improvements are needed by the proposed Indiantown DRI.

Impacts to Seminole Pratt-Whitney Road, in Palm Beach County, are also anticipated by the proposed development. The traffic study assumed the segment of this road between SR 710 (Beeline Highway) and PGA Boulevard extension was built by the end of Phase 1. This assumption was consistent with DRI rules that improvements contained in the first 3 years of the County's Work Program are assumed as assured and existing. However, this year in August, Palm Beach County deleted this improvement from its Work Program. As such, construction of this road is being recommended as a condition of approval for this development.

Other Martin County roads significantly impacted by the proposed development include SR 76 (Kanner Highway). Since this road is also projected to exceed the adopted level of service, improvements are recommended.

Some factors may affect government's ability to maintain an acceptable LOS on the regional roadway network. Changes to the FDOT Adopted Transportation Improvement Work Program may expedite or delay construction of the required improvements to maintain adequate LOS on the regional roadway network. Rule 9J-2.045 (7) (1) (b) FAC requires an assessment and report of the guaranteed improvements on no less than a biennial basis. This report needs to identify the timing of improvements to assure they will be constructed according to schedule. This kind of report is being recommended as a condition of approval for this project.

Rule 9J-2.045, F.A.C. defines acceptable methods of guaranteeing identified roadway improvements:

"1. Scheduling of Facility Improvements

a) A schedule which specifically provides for the mitigation of impacts from the proposed development on each significantly impacted roadway which will operate below the adopted level of service standard at the end of each project Phase's build out, or alternatively, a subset stage of that Phase. The schedule shall ensure that each and every roadway improvement which is necessary to achieve the adopted level of service standard for that project stage or Phase shall be guaranteed to be in place and operational, or under actual construction for the entire improvement, at build out of each project stage or Phase that creates the significant impact.

This guarantee shall be in the form of:

I. A clearly identified, executed and recorded local government development agreement, consistent with Sections 163.3220 through 163.3243, F.S., that is attached as an exhibit to the development order, and which ensures, at a minimum,

that all needed roadway improvements will be available concurrent with the impacts of development, consistent with paragraph 163.3180 (2) (c), F.S.;

II. A binding and enforceable commitment in the development order by the local government to provide all needed roadway improvements concurrently with the development schedule approved in the development order;

III. A local government commitment in the current year of their local government comprehensive plan Capital Improvement Element to provide all needed roadway improvements, or a local government commitment in the current three years of their Capital Improvement Element to provide all needed roadway improvements when the local government has specifically adopted an in-compliance Rule 9J-5.0055 (2) (c), F.A.C., concurrency management system in their plan;

IV. A Florida Department of Transportation commitment in the current three years of the Adopted Work Program to provide all needed roadway improvements;

V. A binding and enforceable commitment in the development order by the developer to provide all needed roadway improvements concurrently with the development schedule approved in the development order; or

VI. Any combination of guarantees I through V above that ensures that all needed roadway improvements will be provided concurrently with the development schedule approved in the development order."

Other acceptable methods recommended for mitigating regional transportation impact which are listed in Council's DRI assessment report include: 1) providing for an adjusted level of service or variance to accommodate project traffic through build out; and 2) paying a proportionate share for roadway improvements consistent with the proviso of the Florida Statutes, Florida Administrative Code, and the locally adopted proportionate share ordinance.

Along with including the recommended conditions in the development order, Martin County needs to provide a form of guarantee as stated above to meet the minimum criteria for insuring the Florida Department of Community Affairs will not appeal the Development Order. In accordance with the Transportation Standard Rule, Martin County should attach all executed and recorded local government development agreements as exhibits to the development order. A condition specifying compliance with this agreement as a circumstance underlying approval of the project is recommended.

ENVIRONMENTAL AND NATURAL RESOURCES

Uplands

Improved pasture and forested upland communities are the main upland land covers on the 804-acre project site. The property contains 577.3 acres of native upland communities, including 337.6 acres of pine flatwoods, 200.5 acres of palmetto prairie, 19.5 acres of pine-xeric scrub, 3.4 acres of live oak, and 16.3 acres of oak/cabbage palm. The applicant is proposing to protect 150.7 acres of upland natural communities, including pine flatwoods (90.7 acres), palmetto prairie (20.8 acres), pine-xeric scrub (19.5 acres), live oak (3.4 acres), and live oak/cabbage palm (16.3 acres) on the project site as described on Map F1 in the Application for Development Approval for the Indiantown Development of Regional Impact (see Appendix A) and Map H, Master Development Plan. This represents protection of approximately 26 percent of all native upland plant communities on the project site, which is consistent with Council policy. The proposed plan exceeds Council's recommendation that a minimum of 25 percent of the native upland communities be protected on site. The proposed plan protects 100 percent of the rare and unique habitats, including the pine-xeric scrub, live oak, and live oak/cabbage palm communities. The recommended Development Order conditions include provisions for temporary fencing around the Conservation Areas prior to commencing site clearing; preparation of a Conservation Area Management Plan; and removal of nuisance and invasive exotic vegetation.

Wetlands

The project site contains approximately 96 acres of wetlands, including wet prairie (72.3 acres), freshwater marsh (15.1 acres), mixed wetland hardwoods (4.0 acres), exotic wetland hardwoods (3.8 acres), and bay swamp (0.6 acres) as shown on Maps F-1 and F-2 in the ADA for the Indiantown Development of Regional Impact (see Appendix A). The applicant is proposing to preserve and enhance all of the wetlands on the project site after development, as shown on Map H, Master Development Plan. The recommended Development Order conditions include provisions for upland buffers around wetlands, the removal of exotic species, and preparation of a Preserve Area Management Plan to provide maintenance and management procedures for the preserved wetlands on the project site.

Listed Species

Listed species identified on the project site include the Wood Stork (state and federally listed – Endangered), Bald Eagle (state and federally listed – Threatened), Florida Sandhill Crane (state listed – Threatened), Little Blue Heron (state listed – Species of Special Concern), Snowy Egret (state listed – Species of Special Concern), White Ibis (state listed – Species of Special Concern), American alligator (state listed – Species of Special Concern), gopher tortoise (state listed – Species of Special Concern), and Sherman's fox squirrel (state listed – Species of Special Concern).

The recommended Development Order conditions include special provisions to protect the listed species identified on the project site. The developer has committed to establishing a preserve area with a 660-foot radius around the Bald Eagle nest site on the northwest portion of the project site, as shown on Map H, Master Development Plan. The developer is to comply with all management procedures and development restrictions detailed in the U.S. Fish and Wildlife Service National Bald Eagle Management Guidelines referenced in Appendix L. In order to protect Florida Sandhill Cranes, the developer is to maintain foraging habitat around preserved wetlands and comply with all Florida Fish and Wildlife Conservation Commission recommendations regarding the maintenance and management of foraging habitat for this species. In order to protect the gopher tortoise population, the developer is to preserve all of the pine-xeric scrub uplands where the tortoise population is centered; develop a detailed management plan that provides for the protection and relocation of gopher tortoises into the preserve areas identified Map H, Master Development Plan; and comply with the Florida Fish and Wildlife Conservation Commission gopher tortoise protection guidelines. In order to protect the Sherman's fox squirrel, the developer is to protect all of the existing pine-xeric oak, live oak, and live oak/cabbage palm communities on the project site, and plant live oak, slash pine, and cabbage palm trees in landscape areas between the preserve areas to provide additional habitat for the Sherman's fox squirrel. In order to provide foraging habitat for the Wood Stork and other wading birds, the recommended Development Order conditions also include a special condition calling for surface waters created on site to include features specifically designed to concentrate prey during dry down periods. These features are to be consistent with the U.S. Fish and Wildlife Service Habitat Management Guidelines for the Wood Stork (see Appendix D). The details of all protection measures for listed species are to be provided in a Preserve Area Management Plan.

Stormwater Management

The existing surface water features on the site include a series of isolated wetlands, and a small cattle pond located in the north-central portion of the project site. The existing surface water management system is divided into four basins (see Appendix A, Pre-Development Drainage). Stormwater runoff from the project entire site eventually flows to the C-44 Canal via the Troup Indiantown Drainage District canal system and the Rowland Canal.

The proposed surface water management system will consist of a network of inlets, culverts, wet detention ponds, wetlands, and control structures (see Appendix A, Post-Development Drainage). Water quality treatment will be provided within wet detention ponds. Off-site discharges will be directed into the C-44 Canal via the Troup Indiantown Drainage District canal system and the Rowland Canal. The proposed Property Owners Association, Community Development District, or 298 District will own, operate and maintain the proposed drainage system after completion of the development.

The application indicates that the quality of stormwater runoff will meet the requirements of South Florida Water Management District, Martin County, and the Troup Indiantown Drainage District. The quality of post-development water leaving the site is expected to be as good as or better than the pre-development condition. Water quality control devices will cause the discharge of excess flow to occur at a later time than the pre-development condition, allowing for settlement of suspended solids and elimination of potential pollutants. The recommended Development Order conditions provide for the retention of maximum volumes of water on the project site; establishment of a water quality monitoring system to demonstrate that the Troup Indiantown Drainage District canal system, Rowland Canal, C-44 Canal, and adjacent properties will not be negatively impacted by water from the project site; and the use of Best Management Practices to minimize the impact of chemical runoff associated with lawn and landscape maintenance.

Water Supply

Potable water will be supplied to the Indiantown DRI by the Indiantown Company, Inc. The applicant has projected that the total water demand of the project will be 1.52 million gallons per day (MGD) at buildout. The water demand is broken down between potable water demand of 0.537 MGD and non-potable water demand of 0.985 MGD. The utility is expected to have sufficient capacity to meet the demands of this project subject to the entrance into a mutually agreed upon developer agreement between the applicant and the utility. The applicant has indicated the Indiantown Company will operate and maintain the internal water supply system.

The applicant has indicated the Indiantown Company does not supply irrigation quality water to the development. The DRI development will provide for irrigation water through surface water withdrawals from on-site stormwater detention areas or withdrawals from Troup Indiantown Drainage District canals. The developer indicates on-site surficial wells may be installed, subject to South Florida Water Management District approvals, to facilitate the recharge of on-site stormwater detention areas. Currently, there are no existing or proposed wells located on the project site.

The applicant has indicated its intention to use re-use water at the project site when it becomes feasible. The Indiantown Company submitted a water use permit application (No. 050811-7) to the SFWMD to increase their water allocation to meet the demands of this project and other anticipated growth. The recommended Development Order conditions include provisions requiring the use of treated wastewater effluent when it becomes available to the site, xeriscape landscaping, and other water conservation devices and methods.

Wastewater Management

Wastewater generated by the project at buildout is estimated to be 0.537 MGD. The Indiantown Company will provide off-site treatment utilizing its wastewater treatment plant rated at 1.0 MGD. Septic tanks are not proposed for the project. The applicant has

stated Indiantown Company will operate and maintain the internal wastewater collection system.

Solid Waste and Hazardous Materials

According to the Indiantown DRI calculations contained in the ADA, the project will generate approximately 3,036 tons/year of waste at project build-out. The developer has indicated that waste generated will be domestic waste. No industrial, hazardous, medical or other special wastes are anticipated in all phases of development. The recommended Development Order includes a condition requiring the developer to obtain written confirmation from Indiantown Company, Inc. that adequate solid waste disposal services and facilities will be available when needed.

Air Quality

The recommended Development Order conditions include provisions requiring soil treatment techniques appropriate for controlling unconfined particulate emissions during land clearing and site preparation. The purpose of this is to minimize dust production and soil erosion during land clearing and to prevent soil particulates from becoming airborne between the time of clearing and construction. The development is to comply with all National Pollutant Discharge Elimination System requirements.

HUMAN RESOURCE ISSUES

Revenue Generation Summary

The Indiantown DRI is expected to generate ongoing revenue benefits to Martin County. The projected revenues generated by the DRI include ad valorem taxes, sales taxes, utility taxes, gas taxes, permits, licenses, and impact fees.

At project buildout (2020), the project is estimated to generate over $7.7 million in recurring local revenue. This comprises approximately $6.6 million in ad valorem taxes and about $1.1 million in sales, franchise fees and gas taxes generated by the project.

Development of the project is expected to generate a need for approximately $55.1 million in capital facility outlays for roads and water and wastewater facilities. These capital outlays are the responsibility of the developer. Capital cost impacts for educational facilities have not yet been determined.

Total impact fee revenue from the project generated over the build out period of the development is expected to exceed $8.5 million with the majority from transportation, parks and public buildings impact fees.

Fiscal Impacts

At buildout, the Indiantown DRI is estimated to have a taxable value of approximately $436 million. Staff's fiscal impact analysis of the project estimates annual expenditures made by Martin County on behalf of the residents and employees of the development to be $900 thousand by 2010 and $4.5 million annually at buildout. These expenditures include general government services, police and transportation. These expenditures are contrast with projected revenues of $700 thousand by 2010 and $6.4 million at buildout, generating an initial negative net fiscal operating impact of $200 thousand in 2010 and a positive impact of $2.9 million at buildout. The present value of the net total fiscal impact of the project for Martin County over a 20 year time period is estimated at $4.5 million (see Appendix K, Fiscal Impact Analysis).

Housing

The Indiantown DRI is designed as a 1,650 dwelling unit master-planned community, including one mixed use stand-alone Neighborhood Center which will include approximately 30,000 SF of commercial and office uses along with residential units and a community neighborhood green. The applicant indicates the residential portion of the total project will include housing of various densities and price ranges including single family, townhomes and multi-family units for sale. No rental housing units are proposed for the development. Higher residential densities will be focused in the Neighborhood Center.

The Indiantown DRI is expected to create approximately 100 new full-time jobs on site by end of Phase 1 in 2010. This level of permanent employment will, in turn, generate a demand for some 39 housing units spread across very low, low and moderate income households as illustrated. The applicant's analysis suggests worker households can afford to purchase a home or rent an apartment based upon the following affordability thresholds:

Applicant's Housing Demand and Affordability Thresholds

Income Group	Demand	Maximum Income Limits[1]	Affordability Thresholds[2]	
			Purchase Price	Rent
Very Low	5	$26,200	$75,377	$514
Low	21	$41,900	$126,650	$918
Moderate	13	$61,000	$199,153	$1,489
Total	**39**			

[1] United States Department of Housing and Urban Development (HUD) FY 2004 Median Family Income of $50,800 for Fort Pierce-Port St. Lucie Metropolitan Statistical Area.
[2] Affordability limits for home prices (for-sale housing) and maximum rental rates by income group.

Staff has reviewed the analysis and has adjusted the affordability thresholds to reflect the HUD 2006 Income Limits for Port St. Lucie – Fort Pierce Metropolitan Statistical Area, which incorporates Martin County. These adjusted affordability thresholds are:

TCRPC Housing Demand and Adjusted Affordability Thresholds

Income Group	Demand	Maximum Income Limits[1]	Affordability Thresholds[2]	
			Purchase Price	Rent
Very-low	5	$27,300	$72,000	$683
Low	21	$43,680	$140,000	$1,092
Moderate	13	$65,520	$231,000	$1,638
Total	**39**			

[1] HUD FY 2006 Median Family Income of $54,600 for Fort Pierce-Port St. Lucie Metropolitan Statistical Area.
[2] Affordability limits for home prices (for-sale housing) and maximum rental rates by income group.

The applicant has stated in the ADA that home pricing is expected to conform to the following parameters:

Single-Family Units:

1,350 square foot model – starting at $205,000;
2,100 square foot model – starting at $255,000; and
3,400 square foot model – starting at $317,000.

Multi-Family Units: Starting at $186,000.

If provided, the for-sale multi-family dwelling units and the smaller single-family units would offset some of the affordable housing demand generated for moderate income worker households created by the Indiantown DRI. Very low and low income housing demand cannot be met at these suggested price levels.

The applicant's affordable housing needs analysis concluded the supply of off-site for-sale and rental housing units available more than offsets the affordable housing demand generated by the non-residential portion of the Indiantown DRI. The applicant's analysis also indicates the proposed project will generate a significant need for housing affordable to low-income households. The following table shows the applicant's estimates for very low income, low income, and moderate income adequate housing need for the project at build out:

	Housing Demand	Housing Supply	Housing Surplus (+) Housing Need (-)
Very Low Income	5	55	(50)
Low Income	21	15	-6
Moderate Income	13	33	(20)

The Indiantown DRI will generate an adequate housing need for six units of low-income housing which cannot be accommodated on site or within a reasonable proximity to the

development. The applicant should therefore mitigate for this unmet housing demand by providing six units of low-income housing in some combination of rental and/or for sale units at the TCRPC adjusted affordability threshold of $140,000 for for-sale units and $1,092 for rental units. Council's *Attainable Housing Toolkit* (Appendix J) may be referenced as a guide for the creation of workforce housing.

Schools

The Indiantown DRI proposes an entirely new residential and mixed-use development upon property currently utilized for agricultural purposes or maintained as native habitat. According to data provided in the ADA, the project proposes 1,650 new dwelling units. Based on the student generation rate provided by the Martin County School District, the project is expected to generate a total of roughly 427 new students as follows:

191 elementary students
103 middle school students
133 high school students

Existing schools in and around Indiantown have insufficient capacity to accommodate the new students from the project, and the geographic separation of Indiantown from the coastal areas in the County make bussing students to the coast infeasible. To accommodate the new students from the Indiantown DRI, state and local school requirements require the construction of new school facilities in the Indiantown area.

The School District has no new school sites in the vicinity of the Indiantown DRI, and it has no funding for construction of new schools in the area in its five-year facilities plan. Accordingly, the School District has requested the developer dedicate buildable acreage suitable for new school construction within the area and pay the proportionate share of capital costs for constructing new schools to support the development (see correspondence from the Martin County School District included in Appendix B, dated October 24 and December 6, 2006). More specifically, the School District recommends the developer take the following actions:

1. Adopt a development agreement with the Martin County School District that assures the following financial and land area contributions[1]:

   a. a proportionate share of all costs and land area necessary for the construction of 25.4% of a new elementary school (to accommodate

[1] According to current Martin County School District estimates, the cost and net buildable acreage of new educational facilities in 2006 are as follows: Elementary School = $24 Million (15 acres); Middle School = $46 (30 acres) Million; High School = $72 Million (60 acres). These figures would be adjusted by the School District for future phases of the development given cost escalations and inflation.
2 Current Martin County school impact fees are $4,555 for single family and $4,374 for multi-family dwelling units.

the anticipated 191 new elementary school students), including furniture, fixtures, and equipment;

b. a proportionate share of all costs and land area necessary for the construction of 8.6% of one new high school (to accommodate the anticipated 103 new middle school students), including furniture, fixtures, and equipment; and

c. a proportionate share of all costs and land area necessary for the construction of 7.4% of one new high school (to accommodate the anticipated 133 new high school students), including furniture, fixtures, and equipment.

Based on this recommendation, the developer would contribute approximately $15.4 Million and eleven acres of buildable property to the Martin County School District to fund the proportionate share of impacts generated by the proposed development. The School District further suggests the developer be reimbursed for school impact fees that would be otherwise required of the residential units constructed in the DRI. According to the current Martin County impact fee schedule, the estimated impact fee credit for the 1,650 dwelling units proposed in the DRI (1,222 single-family and 428 multi-family per the ADA) is estimated to be approximately $7.4 Million in current year dollars[2]

It should be noted the issue of developer land dedication and proportionate share payment schedules for schools is still a subject of debate locally between the large landowners in Indiantown and the Martin County School District (see Appendix B Letter from Centex Homes to TCRPC, dated December 4, 2006). Because the School District does not have an inventory of vacant, buildable school sites in the Indiantown area of the County, and further, as the supply of vacant land suitable for school construction is rapidly diminishing, the School District places priority on proportionate share "payment" in the form of vacant land suitably sized to accommodate entire school sites. Although no agreements have been reached in this regard, the School Board and landowners are committed to resolving these issues.

As referenced in Council's educational facilities policy analysis in Appendix B, a developer agreement between the Martin County School District and the developer which assigns development costs and acreage contribution as described above would be wholly consistent with the adopted Martin County Comprehensive Plan, School District Capital Facilities Plan, and Strategic Regional Policy Plan. Further, a direct financial and acreage contribution by the developer to create the schools necessitated by the proposed development, with an emphasis on "payment" in the form of vacant land area, is the most appropriate mechanism to ensure the project's impacts will be mitigated without jeopardizing the ability for the School District to maintain projected capacities and facilities in Martin County.

Police and Fire Protection

No specific location has been identified on-site for the provision of a new police station. The applicant has estimated total population of the project at build out to be approximately 4,339 persons. Staff has confirmed with the Martin County Sheriff's Office their use of a ratio of 2.2 deputies per 1,000 residents to calculate manpower needs. Based on this ratio and the project's build out population of 4,339, the project will generate a need for approximately 9.5 deputies. The recommended Development Order conditions include provisions that no building take place until such time as the applicant receives written confirmation from the Martin County Sheriff's Office that it has adequate facilities and personnel to serve the Indiantown DRI.

No location has been identified on-site for the provision of a new fire station. Staff has confirmed with Martin County Emergency Services Department that a new fire station site totaling 2.5 buildable acres will be required to accommodate the anticipated demands for fire protection services from this DRI and other projected development. The new fire station site would be located close to the intersection of Osceola Street and Citrus Boulevard. Staff has also confirmed with Martin County Emergency Services Department their intention to negotiate a development agreement with the applicant that provides for funding of necessary facilities and equipment to meet the demand of the project.

Hurricane Preparedness

The proposed development is not within the Coastal High Hazard and Storm Surge zone within Martin County. In the event of a significant hurricane (Category 3 or above), the proposal describes a strategy to mitigate impacts to County regular shelter resources by encouraging the DRI population to shelter-in-place. At the request of Martin County Division of Emergency Management, the DRI proposes to mitigate regular shelter space impacts through encouraging that all civic buildings within the development be built to shelter code according to Red Cross Standard 4496. With proposed development of 1,650 residential units (estimated 4,339 persons) there will be an increased need for public and special needs shelter space capacity. According to the 2003 Treasure Coast Regional Hurricane Evacuation Study, a worst case scenario estimates up to twenty percent (868 persons) of the development's non-vulnerable population is expected to evacuate. Approximately twenty percent (174 persons) of this group of evacuees will seek public shelter locally. Martin County Division of Emergency Management's Comprehensive Emergency Management Plan indicates a LOS demand of 500 special needs spaces needed countywide. Dividing the demand by the total county population (140,300) yields approximately 0.0036 special needs evacuees per county population. The estimated special needs population is 16 persons (960 square feet) at project build-out and will impact County special needs shelters significantly. Special needs shelter space has been increased from 40 square feet to a provision of 60 square feet to accommodate the client as well as space allowance for caregivers, medical staff and equipment.

Parks and Recreation

The ADA for the Indiantown DRI indicates that the proposed project includes a 15-acre neighborhood park with playfields and other recreational amenities, several neighborhood pools and tot lots, in addition to approximately 10 neighborhood greens for informal recreational use. The proposed plan of development shows the park site collocated with the school site on the east side of the Eagle Preserve (see Map H, Master Development Plan).

The Martin County Parks and Recreation Department has raised the issue that the proposed park site is not appropriate, because lighted fields and recreational activities at the park could disturb Bald Eagle nesting activities in the adjacent preserve area. Furthermore, the Martin County Comprehensive Plan indicates that at least 20 developable acres is the recommended size of a community park. A community park typically serves about 10,000 people. The Indiantown DRI is projecting a population of 4,339 persons, and the adjacent Quillen DRI is projecting a population of 5,040 persons. Therefore, the combined population of the Indiantown and Quillen DRIs justify the need for one 20-acre community park to serve both developments.

The recommended Development Order includes a condition calling for the developer to provide a plan approved by Martin County for the provision of neighborhood and community recreational sites and facilities to meet the demand created by residential development in the project. Neighborhood parks should serve as prominent visual and social focal points of each neighborhood, and provide for informal, non-programmed recreational activities. At a minimum, one 20-acre community park to serve area residents of the Quillen and Indiantown Developments of Regional Impact should be established. The intent of this condition is for the Quillen and Indiantown Developments of Regional Impact to jointly plan and fund the community park and recreational facilities.

Historic and Archaeological Sites

A cultural resource assessment survey of the Indiantown property was conducted in 2004. No archaeological resources were discovered during this survey. The survey concludes that the Indiantown DRI will have no effect on any cultural resources that are listed, determined eligible, or considered potentially eligible for listing in the National Register of Historical Places. The recommended Development Order conditions require construction to stop in the event of discovery of any archaeological artifacts. Proper protection is to be provided to the satisfaction of Martin County and the Division of Historical Resources, Florida Department of State.

GENERAL CONDITIONS OF APPROVAL

The Florida Department of Community Affairs rules require the Development Order to incorporate the Application for Development Approval by reference, recite the quantities of uses approved, phasing and buildout dates, provide a termination date, and provide for biennial reports. The expiration date should be set to allow reasonable time for completion of all development and compliance with all conditions in the Development Order. Enough time should be allowed between the buildout date and the expiration date for the developer to request any needed extension to the buildout date. These requirements can be met by including the following conditions in the Development Order:

Application for Development Approval

1. The Indiantown Development of Regional Impact Application for Development Approval is incorporated herein by reference. It is relied upon, but not to the exclusion of other available information, by the parties in discharging their statutory duties under Chapter 380, Florida Statutes. Substantial compliance with the representations contained in the Application for Development Approval, as modified by Development Order conditions, is a condition for approval.

   For purposes of this condition, the Application for Development Approval shall include the following items:

   a. Application for Development Approval dated September 2005; and

   b. Supplemental information dated February 2006 and July 2006.

Commencement and Process of Development

2. In the event the developer fails to commence significant physical development within four years from the effective date of the Development Order, development approval shall terminate and the development shall be subject to further Development of Regional Impact review by the Treasure Coast Regional Planning Council, Florida Department of Community Affairs, and Martin County pursuant to Section 380.06, Florida Statutes. However, this time period shall be tolled during the pendency of any appeal pursuant to Section 380.07, Florida Statutes. For the purpose of this paragraph, construction shall be deemed to have initiated after placement of permanent evidence of a structure (other than a mobile home) on a site, such as the pouring of slabs or footings or any work beyond the stage of excavation or land clearing, such as the construction of roadways or other utility infrastructure.

Phasing

3. The phasing of the Indiantown Development of Regional Impact is approved as follows:

Phase[1]	Years[2]	Residential (DU)	Retail (SF)	Office (SF)
1	2005-2010	653	10,000	20,000
2	2010-2015	744	0	0
3	2015-2020	253	0	0
Total	2005-2020	1,650	10,000	20,000

[1] This table is not intended to restrict the amount of development by phase, provided the Development Order in its entirety is followed.
[2] The years are specified in the Application for Development Approval.

Buildout Date

4. The Indiantown Development of Regional Impact shall have a buildout date of December 31, 2020, unless otherwise amended pursuant to the conditions of this Development Order and Section 380.06, Florida Statutes.

Termination Date

5. This Development Order shall expire on December 31, 2027, unless extended as provided in Section 380.06(19)(c), Florida Statutes.

Transfer of Approval

6. Notice of transfer of all or a portion of the subject property shall be filed with the Martin County Board of County Commissioners. Prior to transfer, the transferee shall assume in writing on a form acceptable to the County Attorney, any and all applicable commitments, responsibilities, and obligations pursuant to the Development Order. The intent of this provision is to ensure that subsequent property transfers do not jeopardize the unified control, responsibilities, and obligations required of the project as a whole.

Biennial Report

7. The biennial report required by subsection 380.06(18), Florida Statutes, shall be submitted every two years on the anniversary date of the adoption of the Development Order to the Martin County, Treasure Coast Regional Planning Council, Florida Department Community Affairs, and such additional parties as may be appropriate or required by law. The contents of the report shall include those items required by this Development Order and Rule 9J-2.025(7), Florida Administrative Code. The Martin County Growth Management Director shall be the local official assigned the responsibility for monitoring the development and enforcing the terms of the Development Order.

General Provisions

8. Any modifications or deviation from the approved plans or requirements of this Development Order shall be made according to and processed in compliance with the requirements of Section 380.06(19), Florida Statutes and Rule 9J-2, Florida Administrative Code.

9. The definitions found in Chapter 380, Florida Statutes shall apply to this Development Order.

10. Reference herein to any governmental agency shall be construed to mean any future instrumentality that may be created or designated as a successor in interest to, or which otherwise possesses the powers and duties to any referenced governmental agency in existence on the effective date of this Development Order.

11. This Development Order shall be binding upon the developer and its assignees or successors in interest.

REGIONAL PLANNING

Master Development Plan

12. Prior to final approval of any site plan application for the Indiantown Development of Regional Impact, the County should require the developer to create a Master Development Plan to demonstrate conformance with the Indiantown Community Redevelopment Plan. At a minimum, the Master Development Plan should provide for: 1) each neighborhood to include a mix of all housing ranges and types, and an interconnected network of streets, sidewalks and greenways; 2) ingress/egress points in and out of the proposed development as identified on Map H, Master Development Plan for the Indiantown Development of Regional Impact dated June 27, 2006, and on the Vision Plan of the Indiantown Community Redevelopment Plan; and 3) one Neighborhood Center as defined by the Indiantown Community Redevelopment Plan to contain a mix of uses such as retail office, residential, civic, and recreational uses developed around a central green or plaza. Based on the general goals of the Vision for a Livable Indiantown contained in the Indiantown Community Redevelopment Plan, the Master Development Plan for the Indiantown Development of Regional Impact should clearly establish a better-integrated and well-planned mix of land uses that: 1) establishes the neighborhood and district as the fundamental units of development for creating the plan; 2) provides for a predictable network of streets and blocks; 3) reduces land consumed for development; 4) minimizes the public cost for providing services; 5) reduces dependency on the automobile; 6) encourages and accommodates public transit; 7) addresses the special needs of children and the elderly; 8) incorporates a well-located system of parks, greens and civic sites; 9) reduces impacts on the natural environment; 10) creates linkages and connections between Conservation Areas; 11) reduces the need to consume energy; 12) provides for a variety of housing types to support residents of diverse ages, incomes, family

sizes, and lifestyles; 13) provides for a highly interconnected network of walkable streets; and 14) demonstrates complementary and compatible land use relationships to adjacent properties related to scale, use, street networks, water management systems, and public open space and park systems.

At a minimum, the Master Development Plan should also be consistent with the following: 1) the goals, strategies and policies contained in the Strategic Regional Policy Plan; and 2) Components of the Traditional Urban Neighborhood – Authentic Mixed Use for DRIs provided in Appendix I of the Treasure Coast Regional Planning Council Assessment Report for the Indiantown Development of Regional Impact.

Town Planning

13. To assure a mixed-use, compact, and pedestrian/bicycle-friendly environment, ready to accommodate various modes of public transportation, the developer should provide the following to Martin County prior to approval of the final site plan for each phase of development within the Indiantown Development of Regional Impact:

    a. A Compendium of Street Sections similar to the example provided in Appendix H of the Treasure Coast Regional Planning Council Assessment Report for the Indiantown Development of Regional Impact should be established for this property to regulate allowable shapes and sizes of streets; placement of parking, street trees, street lights and furniture, buildings and utilities, and pavement and sidewalk widths; and to ensure that streets do not become physical barriers between neighborhoods.

    b. Detailed neighborhood plans depicting the location of the building types required in the Indiantown Design Guidelines including: commercial, office, mixed use, apartment/condominium house, single family rear and side yard, and row houses.

    c. A detailed plan for each of the building types proposed in each neighborhood and district consistent with the Indiantown Design Guidelines. Plans should identify building type, placement, height, parking quantity and placement, and appropriate and authentic architectural style.

    d. The applicant, subject to local government approval, can make modifications to Map H that will not trigger a Notice of Proposed Change such as the location, size, arrangement and design of neighborhoods and districts, squares, parks, greens, civic sites and uses, trails, local streets and driveways, aesthetic features, edge treatments, water bodies, and other design components that: 1) do not substantially change the character or impacts of the project; and 2) are consistent with the town planning and urban design principles outlined in Components of the Traditional Urban Neighborhood – Authentic Mixed Use for DRIs provided in Appendix I of the Treasure Coast Regional Planning Council Assessment Report for the Indiantown Development of Regional Impact.

e. A plan to provide a disclosure to future prospective property owners and residents concerning noise levels associated with jet engine testing at the existing Pratt & Whitney facility in northern Palm Beach County.

To the extent that the foregoing provisions are included in any applicable Martin County Regulations for the property, such additional plans are not required.

TRANSPORTATION

Rights of Way

14. No final site plan approval for Indiantown Development of Regional Impact shall be issued until right-of-way within the project along CR 609 (Allapattah Road), SR 710 (Warfield Boulevard), and all intersections thereof, has been dedicated free and clear of all liens and encumbrances to Martin County as necessary and consistent with Article 4, Division 19, Roadway Design, of the Martin County Land Development Regulations, Martin County Code. Prior to buildout of the project, if S.W. Indian Mound Drive becomes necessary, the developer will work with Martin County to establish and dedicate right-of-way for the road and all intersections thereof free and clear of all liens and encumbrances.

External Roadway Improvements

15. No final site plan approval shall be issued until either: 1) contracts have been let for the roadway with the lane geometry presented below; or 2) a local government development agreement consistent with sections 163.3220 through 163.3243, Florida Statutes has been executed and attached as an exhibit to the Development Order; or 3) the developer has paid or has entered into a binding agreement to pay its proportionate fair share pursuant to section 163.3180(12), Florida Statutes or Chapter 9J-2.045(7)(a)3, Florida Administrative Code, as applicable. Prior to June 1, 2007, acceptable surety for this improvement shall be provided to the Palm Beach County Land Development Division, the applicant shall pay their proportionate fair share under section 163.3180(12), Florida Statutes, or the improvement shall be included in the Palm Beach County Five-Year Road Program:

    a) Build Seminole Pratt-Whitney Road between its current terminus at SR 710 (Beeline Highway) and its current terminus at Northlake Boulevard with a two-lane cross section.

    Since Palm Beach County has taken this segment of Seminole Pratt-Whitney Road out of its five-year capital improvements plan, Palm Beach County and Treasure Coast Regional Planning Council will allow the developer to resubmit a traffic analysis for the Development of Regional Impact eliminating this segment and redistributing traffic onto the existing roadway network. This will be done after the Treasure Coast Regional Planning Council assessment report but prior to Martin County approving the development order. Therefore, this condition may be

eliminated prior to approval by Martin County.

16. No final site plan approval shall be issued for development that generates more than 126 net external two-way p.m. peak hour trips or after December 31, 2007, whichever comes last, until either: 1) contracts have been let for the roadway with the lane geometry presented below; or 2) a local government development agreement consistent with sections 163.3220 through 163.3243, Florida Statutes has been executed and attached as an exhibit to the Development Order; or 3) the developer has paid or has entered into a binding agreement to pay its proportionate fair share pursuant to section 163.3180(12), Florida Statutes or Chapter 9J-2.045(7)(a)3, Florida Administrative Code, as applicable; or 4) a Level of Service Variance has been approved by Florida Department of Transportation which accommodates project traffic throughout the buildout date; or 5) another type of Level of Service modification has been approved which accommodates project traffic throughout the buildout date; or 6) the improvement has been included in the first three years of the Martin County Five-Year Road Program or the Florida Department of Transportation Five-Year Work Program.

    a) Widen SR 710 (Warfield Boulevard) between CR 726 (Citrus Boulevard) and SR 76 (Kanner Highway) to a four-lane divided cross section. This section includes the bridge consistent with the Indiantown Community Redevelopment Plan.

17. No final site plan approval shall be issued for development that generates more than 121 net external two-way p.m. peak hour trips or after December 31, 2008, whichever comes last, until either: 1) contracts have been let for the roadway with the lane geometry presented below; or 2) a local government development agreement consistent with sections 163.3220 through 163.3243, Florida Statutes has been executed and attached as an exhibit to the Development Order; or 3) the developer has paid or has entered into a binding agreement to pay its proportionate fair share pursuant to section 163.3180(12), Florida Statutes or Chapter 9J-2.045(7)(a)3, Florida Administrative Code, as applicable; or 4) a Level of Service Variance has been approved by Florida Department of Transportation which accommodates project traffic throughout the buildout date; or 5) another type of Level of Service modification has been approved which accommodates project traffic throughout the buildout date; or 6) the improvement has been included in the first three years of the Martin County Five-Year Road Program or the Florida Department of Transportation Five-Year Work Program.

    a) Widen SR 710 (Warfield Boulevard) between CR 609 (Allapattah Road) and Vanburen Avenue to a four-lane divided cross section, consistent with the Indiantown Community Redevelopment Plan.

18. No final site plan approval shall be issued for development that generates more than 911 net external two-way p.m. peak hour trips or after December 31, 2012, whichever comes last, until either: 1) contracts have been let for the roadway with the lane

geometry presented below; or 2) a local government development agreement consistent with sections 163.3220 through 163.3243, Florida Statutes has been executed and attached as an exhibit to the Development Order; or 3) the developer has paid or has entered into a binding agreement to pay its proportionate fair share pursuant to section 163.3180(12), Florida Statutes or Chapter 9J-2.045(7)(a)3, Florida Administrative Code, as applicable; or 4) a Level of Service Variance has been approved by Florida Department of Transportation which accommodates project traffic throughout the buildout date; or 5) another type of Level of Service modification has been approved which accommodates project traffic throughout the buildout date; or 6) the improvement has been included in the first three years of the Martin County Five-Year Road Program or the Florida Department of Transportation Five-Year Work Program.

a) Widen SR 710 (Warfield Boulevard) between Fox Brown Road and Martin Luther King Boulevard to a four-lane divided cross section, consistent with the Indiantown Community Redevelopment Plan.

19. No final site plan approval shall be issued for development that generates more than 911 net external two-way p.m. peak hour trips or after December 31, 2011, whichever comes last, until either: 1) contracts have been let for the roadway with the lane geometry presented below; or 2) a local government development agreement consistent with sections 163.3220 through 163.3243, Florida Statutes has been executed and attached as an exhibit to the Development Order; or 3) the developer has paid or has entered into a binding agreement to pay its proportionate fair share pursuant to section 163.3180(12), Florida Statutes or Chapter 9J-2.045(7)(a)3, Florida Administrative Code, as applicable; or 4) a Level of Service Variance has been approved by Florida Department of Transportation which accommodates project traffic throughout the buildout date; or 5) another type of Level of Service modification has been approved which accommodates project traffic throughout the buildout date; or 6) the improvement has been included in the first three years of the Martin County Five-Year Road Program or the Florida Department of Transportation Five-Year Work Program.

a) Widen SR 710 (Warfield Boulevard) between Martin Luther King Boulevard and CR 609 (Allapattah Road) to a four-lane divided cross section, consistent with the Indiantown Community Redevelopment Plan.

20. No final site plan approval shall be issued for development that generates more than 209 net external two-way p.m. peak hour trips or after December 31, 2011, whichever comes last, until either: 1) contracts have been let for the roadway with the lane geometry presented below; or 2) a local government development agreement consistent with sections 163.3220 through 163.3243, Florida Statutes has been executed and attached as an exhibit to the Development Order; or 3) the developer has paid or has entered into a binding agreement to pay its proportionate fair share pursuant to section 163.3180(12), Florida Statutes or Chapter 9J-2.045(7)(a)3, Florida Administrative Code, as applicable; or 4) a Level of Service Variance has been

approved by Florida Department of Transportation which accommodates project traffic throughout the buildout date; or 5) another type of Level of Service modification has been approved which accommodates project traffic throughout the buildout date; or 6) the improvement has been included in the first three years of the Martin County Five-Year Road Program, the Palm Beach County Five-Year Road Program, or the Florida Department of Transportation Five-Year Work Program.

a) Widen SR 710 between SR 76 (Kanner Highway) and Indiantown Road to a four-lane divided cross section.

21. No final site plan approval shall be issued for development that generates more than 280 net external two-way p.m. peak hour trips or after December 31, 2011, whichever comes last, until either: 1) contracts have been let for the roadway with the lane geometry presented below; or 2) a local government development agreement consistent with sections 163.3220 through 163.3243, Florida Statutes has been executed and attached as an exhibit to the Development Order; or 3) the developer has paid or has entered into a binding agreement to pay its proportionate fair share pursuant to section 163.3180(12), Florida Statutes or Chapter 9J-2.045(7)(a)3, Florida Administrative Code, as applicable; or 4) a Level of Service Variance has been approved by Florida Department of Transportation which accommodates project traffic throughout the buildout date; or 5) another type of Level of Service modification has been approved which accommodates project traffic throughout the buildout date; or 6) the improvement has been included in the first three years of the Palm Beach County Five-Year Road Program or the Florida Department of Transportation Five-Year Work Program.

a) Widen SR 710 (Beeline Highway) between Indiantown Road and Pratt-Whitney Road to a four-lane divided cross section.

22. No final site plan approval shall be issued for development that generates more than 1,063 net external two-way p.m. peak hour trips until either: 1) contracts have been let for the roadway with the lane geometry presented below; or 2) a local government development agreement consistent with sections 163.3220 through 163.3243, Florida Statutes has been executed and attached as an exhibit to the Development Order; or 3) the developer has paid or has entered into a binding agreement to pay its proportionate fair share pursuant to section 163.3180(12), Florida Statutes or Chapter 9J-2.045(7)(a)3, Florida Administrative Code, as applicable; 4) the improvement has been included in the first three years of the Martin County Five-Year Road Program or the Florida Department of Transportation Five-Year Work Program.

a) Widen SR 76 (Kanner Highway) between CR 711 and Locks Road to a four-lane divided cross section.

23. No final site plan approval shall be issued for development that generates more than 1,238 net external two-way p.m. peak hour trips or after December 31, 2014, whichever comes last, until either: 1) contracts have been let for the roadway with the

lane geometry presented below; or 2) a local government development agreement consistent with sections 163.3220 through 163.3243, Florida Statutes has been executed and attached as an exhibit to the Development Order; or 3) the developer has paid or has entered into a binding agreement to pay its proportionate fair share pursuant to section 163.3180(12), Florida Statutes or Chapter 9J-2.045(7)(a)3, Florida Administrative Code, as applicable. Prior to December 31, 2011, acceptable surety for this improvement shall be provided to the Palm Beach County Land Development Division, the applicant shall pay their proportionate fair share under section 163.3180(12), F.S., or the improvement shall be included in the Palm Beach County Five-Year Road Program:

a) Widen Seminole Pratt-Whitney Road between SR 710 (Beeline Highway) and PGA Boulevard extension with a four-lane divided cross section.

Since Palm Beach County has taken this segment of Seminole Pratt-Whitney Road out of its five-year capital improvements plan, Palm Beach County and Treasure Coast Regional Planning Council will allow the developer to resubmit a traffic analysis for the Development of Regional Impact eliminating this segment and redistributing traffic onto the existing roadway network. This will be done after the Treasure Coast Regional Planning Council assessment report but prior to Martin County approving the development order. Therefore, this condition may be eliminated prior to approval by Martin County.

Intersection Improvements

24. Commencing in January 2011, signal warrant analyses shall be performed at the following intersections:

- CR 726 (Citrus Boulevard) and SR 710 (Warfield Boulevard)
- SR 76 (Kanner Highway) and SR 710 (Warfield Boulevard) - Ramps

Signal warrant analyses shall be continued on an annual basis until all signals are warranted. Should signalization not be warranted by the time the final certificate of occupancy has been issued, this property shall be relieved of this condition of approval. The analysis shall be performed during the peak season and presented to and approved by Martin County and the Florida Department of Transportation.

Additional building permits shall not be issued after one year of the analysis showing a traffic signal is warranted until contracts are let for installation of the warranted signal including the appropriate lane geometry, pavement markings, signing, lighting, and the like as approved and shall be consistent with the Indiantown Community Redevelopment Plan.

25. No final site plan approval shall be issued for development that generates more than 126 net external two-way p.m. peak hour trips or after December 31, 2007, whichever comes last, until contracts have been let for the following intersection improvements:

a) SR 710 (Warfield Boulevard) and CR 726 (Citrus Boulevard)
Add southbound right-turn lane
Add second eastbound thru lane
Add second westbound thru lane
Add westbound right-turn lane

b) SR 710 (Warfield Boulevard) and SR 76 (Kanner Highway) – Ramps
Add second eastbound thru lane
Add second westbound thru lane

The intersection improvements above shall be done at the same time as improvements to SR 710 (Warfield Boulevard) included in Condition 16 and shall be consistent with the Indiantown Community Redevelopment Plan.

26. No final site plan approval shall be issued for development that generates more than 121 net external two-way p.m. peak hour trips or after December 31, 2008, whichever comes last, until contracts have been let for the following intersection improvements:

a) SR 710 (Warfield Boulevard) and CR 609 (Allapattah Road)
Add second eastbound thru lane
Add second westbound thru lane
Add westbound right-turn lane
Signalize

The intersection improvements above shall be done at the same time as improvements to SR 710 (Warfield Boulevard) included in Condition 17 and shall be consistent with the Indiantown Community Redevelopment Plan.

27. No final site plan approval shall be issued for development that generates more than 911 net external two-way p.m. peak hour trips or after December 31, 2012, whichever comes last, until contracts have been let for the following intersection improvements:

a) SR 710 (Warfield Boulevard) and Fox Brown Road
Add second eastbound thru lane
Add second westbound thru lane

b) SR 710 (Warfield Boulevard) and Martin Luther King Boulevard
Add second eastbound thru lane
Add second westbound thru lane

The intersection improvements above shall be done at the same time as improvements to SR 710 (Warfield Boulevard) included in Condition 18 and shall be consistent with the Indiantown Community Redevelopment Plan.

28. No final site plan approval shall be issued for development that generates more than 280 net external two-way p.m. peak hour trips or after December 31, 2011, whichever comes last, until contracts have been let for the following intersection improvements:

    a) SR 710 (Beeline Highway) and Indiantown Road
       Add second thru lane on SR 710 (Beeline Highway), both directions

    b) SR 710 (Beeline Highway) and Seminole Pratt-Whitney Road
       Add second northbound thru lane
       Add second southbound thru lane
       Add eastbound right-turn lane
       Add southbound right-turn lane

    The intersection improvements above shall be done at the same time as improvements to SR 710 (Beeline Highway) included in Condition 21.

29. No final site plan approval shall be issued for development that generates more than 1,063 net external two-way p.m. peak hour trips until contracts have been let for the following intersection improvements:

    a) SR 76 (Kanner Highway) and CR 711 (Pratt-Whitney Road)
       Add second thru lane on SR 76 (Kanner Highway), both directions
       Add southbound right-turn lane on SR 76 (Kanner Highway)
       Add northbound right-turn lane on SR 76 (Kanner Highway)

    The intersection improvements above shall be done at the same time as improvements to SR 76 (Kanner Highway) included in Condition 22.

Access Driveways

30. At a minimum, Indiantown Development of Regional Impact shall have the following connections to the external roadway network consistent with Map H included in the Application for Development Approval:

    - Five connections to CR 609 (Allapattah Road)
    - Two connections to SW Indian Mound Drive
    - Four connections to American Avenue
    - Two connections to 150th Street
    - One connection to 151st Street
    - One connection to Osceola Street
    - One connection to SR 710 (Warfield Boulevard)

31. At a minimum, the following lane geometry and signalization, as needed, shall be provided consistent with the Indiantown Community Redevelopment Plan at the following intersections at the time of construction of the roads within the project:

a) CR 609 (Allapattah Road) and Main Project Entrance

Northbound	One right-turn lane
Southbound	One left-turn lane
Westbound	One right-turn lane
	One left-turn lane

b) SR 710 (Warfield Boulevard) and Main Project Entrance

Eastbound	One left-turn lane
Westbound	One right-turn lane
Southbound	One right-turn lane
	One left-turn lane
Signalize	

If these improvements cannot be accomplished, a reanalysis of traffic at the proposed driveways shall be presented and approved by Martin County in consultation with the Treasure Coast Regional Planning Council. Modifications to this condition of approval and related changes to Map H are not subject to the exceptions provided for under Condition 13.d. and will require a Notice of Proposed Change (NOPC) pursuant to Section 380.06 (19), Florida Statutes.

Other Issues

32. A trip generation analysis shall be prepared by the applicant and approved by Martin County prior to each site plan approval. The trip generation analysis shall present calculations for both a.m. and p.m. peak hour and shall be performed using trip generation rates included in the latest available Institute of Transportation Engineers Trip Generation Report as well as land uses included in the application for development approval. The trip generation analysis shall include internal capture and passer-by, if appropriate, to determine net trips generated by the development. The trip generation shall be cumulative and include all previous site plan approvals. Development order conditions shall be evaluated using the trip generation analysis to determine triggering of any transportation conditions.

33. During the site plan approval process, a traffic study shall be submitted to Martin County to determine, as a minimum:

a) lane geometry for internal roadways and their intersections;
b) timing of signalization improvements, if appropriate; and
c) consistency with the Indiantown Community Redevelopment Plan.

34. The Biennial Report required by subsection 380.06(18), Florida Statutes, shall be submitted every two years on the anniversary date of the adoption of the development order and continued every other year thereafter. The Biennial Status Report shall indicate the status (schedule) of guaranteed transportation network improvements. This Biennial Status Report shall be submitted to Martin County, Palm Beach County, Florida Department of Transportation, Treasure Coast Regional Planning Council and the Department of Community Affairs as part of the Development of Regional Impact Biennial Report.

    The Biennial Status Report shall list all roadway improvements needed to be constructed, the guaranteed date of completion for the construction of each needed improvement, the party responsible for the guaranteed construction of each improvement, and the form of the binding commitment that guarantees construction of each improvement. Additionally, this report shall include a trip generation study determining new external traffic during the p.m. peak hour due to the existing development. The trip generation shall be used to evaluate triggering of transportation conditions.

    No further final site plan approval for Indiantown Development of Regional Impact shall be issued at the time the Biennial Status Report reveals that any needed transportation improvement included in the Development Order is no longer scheduled or guaranteed, or has been delayed in schedule such that it is not guaranteed to be in place and operational, or under actual construction for the entire improvement consistent with the timing criteria established in this Development Order.

ENVIRONMENTAL AND NATURAL RESOURCES

Upland Preservation

35. The developer shall preserve 150.7 acres of upland natural communities, including pine flatwoods and palmetto prairie (111.5 acres), pine-xeric scrub (19.5 acres), live oak (3.4 acres), and live oak/cabbage palm (16.3 acres) on the project site as described on Map F1 in the Application for Development Approval for the Indiantown Development of Regional Impact and Map H, Master Development Plan. The intent of this condition is to provide protection of upland natural communities, to provide habitat for wildlife, and to assist in improving water quality by buffering wetlands and water bodies. The continued viability and maintenance of the preserve areas shall be assured through a Conservation Easement with Martin County or the South Florida Water Management District. The easement shall be properly executed and recorded prior to issuance of building permits for any portion of the project.

36. The developer shall install temporary fencing around the preserve areas prior to commencing site clearing adjacent to the preserve areas. The fencing shall clearly identify and designate the boundaries of the preserve areas and minimize the potential disturbance of the preserve areas during land clearing and construction. The

temporary fencing shall be established at least 10 feet outside of the boundaries of the preserve areas and shall remain in place until the completion of the finish grading on the area adjacent to the fencing.

37. The developer shall prepare a Preserve Area Management Plan for the preserve areas, upland buffers, and wetlands identified on the Indiantown Development of Regional Impact Map H, Master Development Plan. The plan shall: 1) identify management procedures and provide a schedule for their implementation; 2) include procedures for maintaining suitable habitat for state and federally listed species; 3) include methods to remove nuisance and exotic vegetation and any other species that are determined to threaten the natural communities; and 4) include plans to permanently mark the preserve areas and allow only limited access for passive recreation, education, or scientific study. The management plan shall be approved by Martin County in consultation with the U.S. Fish and Wildlife Service, Florida Fish and Wildlife Conservation Commission, and South Florida Water Management District prior to the initiation of site clearing activities.

Wetlands

38. The developer shall preserve and enhance the approximate 96 acres of wetlands shown on Maps F-1 and F-2 in the Application for Development Approval for the Indiantown Development of Regional Impact and Map H, Master Development Plan. The preserved and enhanced wetlands shall be protected within a Conservation Easement established with Martin County or the South Florida Water Management District. The easement shall be properly executed and recorded prior to issuance of building permits for any future portion of the project. Details of the wetland maintenance and enhancement procedures and management schedule shall be provided in the Preserve Area Management Plan.

39. The developer shall preserve or create a buffer zone of native upland edge vegetation around all preserved wetlands on site. The upland buffers shall be restored to a natural condition if invaded by exotic vegetation or impacted by agricultural activities. The buffer zones shall include canopy, understory, and ground cover of native upland species. The upland buffers shall be designed to be consistent with the buffer requirements of Martin County. During construction, the upland buffers adjacent to preserved wetlands shall be clearly marked prior to the commencement of construction activities to ensure those areas are protected. Details of the upland buffer maintenance and enhancement procedures and management schedule shall be provided in the Preserve Area Management Plan.

Listed Species

40. In order to protect the Bald Eagle on the project site, the developer shall preserve and manage the area identified as Eagle Preserve on Map H, Master Development Plan. The developer shall comply with all management procedures and development restrictions detailed in the U.S. Fish and Wildlife Service National Bald Eagle

Management Guidelines referenced in Appendix L of the Treasure Coast Regional Planning Council Assessment Report for the Indiantown Development of Regional Impact. The plan shall be approved by the U.S. Fish and Wildlife Service prior to the initiation of site clearing on the project site. Details of the Bald Eagle protection measures shall be provided in the Preserve Area Management Plan.

41. In order to protect Florida Sandhill Cranes on the project site, the developer shall maintain foraging habitat around wetlands preserved on the project site. The developer shall comply with all Florida Fish and Wildlife Conservation Commission recommendations regarding the maintenance and management of foraging habitat for this State listed threatened species. Details of the Florida Sandhill Crane protection measures and methods provide foraging habitat shall be provided in the Preserve Area Management Plan.

42. In order to protect the gopher tortoise population on the project site, the developer shall develop a detailed management plan that provides for the protection and relocation of gopher tortoises into the preserve areas identified on the Indiantown Development of Regional Impact Map H, Master Development Plan. The developer shall comply with the Florida Fish and Wildlife Conservation Commission gopher tortoise protection guidelines. Details of the gopher tortoise protection measures shall be provided in the Preserve Area Management Plan.

43. In order to protect the Sherman's fox squirrel on the project site, the developer shall protect the existing pine-xeric oak, live oak, and live oak/cabbage palm communities as described on Map F1 in the Application for Development Approval for the Indiantown Development of Regional Impact and Map H, Master Development Plan. Additionally, live oak, slash pine, and cabbage palm trees shall be planted in landscape areas between the preserve areas to provide additional habitat for the Sherman's fox squirrel. Details of the Sherman's fox squirrel protection measures and landscape plans to provide additional habitat between the preserve areas shall be provided in the Preserve Area Management Plan.

44. The developer shall maintain Wood Stork foraging habitat on site by ensuring no additional net loss of wetland function and value. All surface waters created on the site, where appropriate, shall include features specifically designed to provide preferred foraging habitat for this species. The features should include areas designed to concentrate prey during dry down periods. The developer shall comply with all recommendations regarding the design and creation of foraging habitat for this federally endangered species contained in the U.S. Fish and Wildlife Service Habitat Management Guidelines for the Wood Stork in the Southeastern Region, provided in Appendix D of the Treasure Coast Regional Planning Council Assessment Report for the Indiantown Development of Regional Impact. Details of the Wood Stork protection measures and methods to create and maintain foraging habitat shall be provided in the Preserve Area Management Plan.

45. In the event that it is determined that any additional representative of a state or federally listed plant or animal species is resident on, or otherwise significantly dependent upon the project site, the developer shall cease all activities which might negatively affect that individual population and immediately notify Martin County. The developer shall provide proper protection to the satisfaction of the Martin County, U.S. Fish and Wildlife Service, and Florida Fish and Wildlife Conservation Commission.

Exotic Species

46. Prior to obtaining building permits for any future structure located on a particular development parcel, the developer shall remove from that parcel all Melaleuca, Brazilian pepper, Old World climbing fern, Australian pine, downy rose-myrtle, and any other nuisance and invasive exotic vegetation listed under Category I of the Florida Exotic Pest Plant Council. Removal shall be in a manner that minimizes seed dispersal by any of these species. There shall be no planting of these species on site. Methods and a schedule for the removal of exotic and nuisance species should be approved by Martin County. The entire site, including wetlands and conservation areas, shall be maintained free of these species in perpetuity.

Stormwater Management

47. The developer shall design and construct a stormwater management system to retain the maximum volumes of water consistent with South Florida Water Management District and Troup Indiantown Drainage District criteria for flood control. At a minimum, all discharged water from the surface water management system shall meet the water quality standards of Florida Administrative Code Rule 17-3.

48. All elements of the stormwater management system shall be designed to prevent negative impacts to adjacent areas and to the receiving bodies of water. The developer shall establish a permanent water quality monitoring system to demonstrate that the Troup Indiantown Drainage District canal system, Rowland Canal, C-44 Canal, and adjacent properties will not be negatively impacted by water from the project site. The proposed plans for the water quality monitoring system shall be approved by Martin County in consultation with South Florida Water Management District prior to the construction of the surface water management system. Results of the water quality monitoring shall be included in the Development of Regional Impact biennial reports.

49. The developer shall work with Martin County to minimize the amount of impervious surface constructed for automobile parking on the project site. The developer and the County should consider the use of pervious parking lot materials where feasible.

50. The surface water management system shall utilize Best Management Practices to minimize the impact of chemical runoff associated with lawn and landscape maintenance. The developer shall coordinate with the South Florida Water

Management District to formulate and implement Best Management Practices to reduce the use of pesticides and fertilizers throughout the project.

51. Maintenance and management efforts required to assure the continued viability of all components of the surface water management system shall be the financial and physical responsibility of the developer, a community development district, or other entity acceptable to Martin County. Any entities subsequently replacing the developer shall be required to assume the responsibilities outlined above.

Water Supply

52. No residential subdivision plat shall be recorded nor final site plan approved for any development parcel until the developer has provided written confirmation from the Indiantown Company, Inc. that: 1) adequate capacity of treated potable water is available to serve the development parcel; and 2) the developer will provide the necessary water system extensions to serve the project when needed.

53. The preferred source of irrigation water shall be treated wastewater effluent at such time as this source is made available to the site. The project shall be equipped with an irrigation water distribution system to provide reclaimed water to all domestic residential lots when it becomes available. No individual home wells shall be constructed on the project site. Prior to availability of a sufficient supply of reclaimed water, other water supply sources may be used for landscape irrigation subject to meeting South Florida Water Management District permitting criteria in effect at the time of permit application.

54. In order to reduce irrigation water demand, xeriscape landscaping shall be implemented throughout the project. At a minimum, the xeriscape landscaping shall meet the requirements of Martin County.

55. The project shall utilize ultra-low volume water use plumbing fixtures, self-closing and/or metered water faucets, xeriscape landscape techniques, and other water conserving devices and/or methods specified in the Water Conservation Act, Section 553.14, Florida Statutes. These devices and methods shall meet the criteria outlined in the water conservation plan of the public water supply permit issued to the Indiantown Company, Inc. by the South Florida Water Management District.

Wastewater Management

56. No residential subdivision plat shall be recorded nor final site plan approved for any development parcel until the developer has provided written confirmation from the Indiantown Company Inc. that: 1) adequate capacity for wastewater treatment is available to serve the development parcel; 2) the developer has provided the necessary internal reuse water infrastructure to serve the project; and 3) the developer will provide the necessary wastewater system extensions to serve the project when needed.

Solid Waste and Hazardous Materials

57. No residential subdivision plat shall be recorded nor final site plan approved for any development parcel until the developer has provided written confirmation from Indiantown Company, Inc. that adequate solid waste disposal services and facilities will be available when needed. Development shall only occur concurrently with the provision of adequate solid waste disposal services and facilities.

Air Quality

58. During land clearing and site preparation, soil treatment techniques appropriate for controlling unconfined particulate emissions shall be undertaken. If construction on a parcel will not begin within thirty days of clearing, the soil shall be stabilized until construction of the parcel begins. Cleared areas may be sodded, seeded, landscaped, mulched, or stabilized by other means as may be permitted by Martin County. Minimal clearing for access roads, survey lines, fence installation, or construction trailers and equipment staging areas is allowed without the need for soil stabilization. The purpose of this condition is to minimize dust production and soil erosion during land clearing and to prevent soil particulates from becoming airborne between the time of clearing and construction. The development shall comply with all National Pollutant Discharge Elimination System requirements.

HUMAN RESOURCE ISSUES

Housing

59. The developer shall provide 6 workforce housing units on the Indiantown Development of Regional Impact affordable to low income worker households at the following affordability thresholds illustrated in the following table:

Affordability[1] Threshold Calculation for Workforce Housing Units

Income Level	Income	(Rent)/Mortgage[2]	Affordability Thresholds[3]	
			Purchase Price	Rent
Very Low (< 50%)	$27,300	($683) $432	$72,000	$683
Low (50-80%)	$43,680	($1,092) $842	$140,000	$1,092
Moderate (80-120%)	$65,520	($1,638) $1,388	$231,000	$1,638

[1] Housing that is affordable to families earning from 50% to 120% of the Area Median Income. Area Median Income is based on the most recent figures for the Port St. Lucie-Fort Pierce Metropolitan Statistical Area as reported annually by the United States Department of Housing and Urban Development. For 2006 the Port St. Lucie-Fort Pierce AMI was $54,600.

[2] Assumes 5% down, 6.5% interest, 30-year mortgage, and taxes and insurance at $250 monthly.

[3] 2006 affordability limits for home prices (for-sale housing) and maximum rental rates by income group based on a family of four. The sales prices and rental rates for workforce housing units should be recalculated annually for each household income level.

By December 31, 2010, the developer shall provide a plan approved by Martin County for carrying out the provisions of this Development Order Condition, consistent with Martin County's adopted Affordable and Workforce housing policies, in effect at that time. At a minimum, the plan should describe: 1) how affordability will be maintained for a period of at least 20 years; 2) a program that would restrict the sale or resale of individual workforce housing units only to qualified households; 3) a program for setting resale prices for individual workforce housing units; 4) a formula for shared equity appreciation; and 5) the standards for affordability and all adjustments to the calculation of affordability. The provision or allowance of accessory apartments on individual building lots shall be counted towards meeting the requirement for the provision of workforce housing. Accessory units shall not be counted against the total number of units proposed for the Indiantown Development of Regional Impact.

Schools

60. No residential subdivision plat shall be approved nor residential final site plan approved for any development parcel until the developer has secured a development agreement with the Martin County School Board. For the proposed total development program of 1,650 dwelling units, with current student generation rates for the Indiantown area of Martin County, the developer shall enter into a development agreement with the Martin County School Board that mandates one of the following options:

    1) Option One: The developer contributes a proportionate share of all costs and land area necessary to construct the following school facilities to be built according to current State of Florida and Martin County School Board standards and operated and maintained by the Martin County School District:

        a) 25.4 percent of all costs necessary to construct one new elementary school (average size = 750 students), including furniture, fixtures, and equipment;

        b) 8.6 percent of all costs necessary to construct one new middle school (average size = 1,200 students), including furniture, fixtures, and equipment; and

        c) 7.4 percent of all costs necessary to construct one new high school (average size = 1,800 students), including furniture, fixtures, and equipment; or

2) Option Two: The developer contributes a proportionate share of costs and land area to be determined by the Martin County School Board for the construction of school facilities necessitated by the proposed development.

With either option, the priority shall be placed on the Martin County School Board's ability to acquire suitably-sized property to accommodate entire school facilities (e.g., 15 buildable acres for an elementary school, 30 for a middle school, and 60 for a high school). The development agreement with the Martin County School Board shall provide for a formula for the reimbursement of educational impact fees that would normally be assessed on dwelling units within the proposed development.

61. Only charter schools which are approved by the Martin County School Board in advance of issuance of a development order may be relied upon by the developer to mitigate part or all of the project's educational impacts. In addition, all such charter schools shall adhere to the following development, operational, and design standards, which shall be included in the charter contract:

a. All charter schools shall be reviewed and approved by the Martin County School Board and all relevant state review authorities.

b. No charter schools shall be populated and operated in a manner that will negatively affect the desegregation balance in Martin County.

c. All charter schools shall be built according to the State Requirements for Educational Facilities standards set forth in Florida Statutes.

d. All charter schools shall follow the building policies and practices of the Martin County School District, including but not limited to architecture, building materials, and structural hardening.

e. All charter schools shall be eligible for inclusion in the inventory of emergency shelters for Martin County.

f. Unless otherwise agreed to by the Martin County School Board, the core facilities for all charter schools, including but not limited to cafeteria, media center, administrative offices, and land area available for recreational uses, parking areas, and stormwater retention, shall be sized to accommodate the standard educational facility sizes of the Martin County School Board as follows:

Elementary School:	750 student stations
Middle School:	1,200 student stations
High School:	1,800 student stations

g. All charter schools shall be located along publicly-owned roadways, with safe bicycle and pedestrian access for students, and be accessible to any member of the general public.

Police and Fire Protection

62. No residential subdivision plat shall be recorded nor final site plan approved for any development parcel until the developer has received written confirmation from the Martin County Office of the Sheriff indicating that adequate facilities and police protection are in place to serve the development parcel. The methodology used to determine the demand created as a result of the project and the standards used to determine adequate police protection shall be approved by the Martin County Office of the Sheriff.

63. No residential subdivision plat shall be recorded nor final site plan approved for any development parcel until the developer has received written confirmation from Martin County that there are adequate Fire and Emergency Medical Services to serve the development parcel. The methodology used to determine the demand created as a result of the project and the standards used to determine adequate fire rescue services shall be reviewed by the Martin County Emergency Services Department and approved by Martin County.

Hurricane Preparedness

64. The developer shall mitigate emergency public shelter impacts through providing a combination of safe spaces within each home encouraging sheltering-in-place by residents and/or constructing community hurricane shelter spaces or duel use of a facility constructed or retrofitted to State of Florida hurricane code within the development. The hurricane shelter mitigation techniques provided shall be approved by Martin County Division of Emergency Management and be consistent with Chapter 9J-2.0256(5) (a), Florida Administrative Code and with Red Cross Standards 4496.

65. The developer shall pay a proportionate share payment to Martin County Department of Public Safety, Division of Emergency Management to mitigate the projected demand and impact on special needs shelter space. The amount of special needs public hurricane evacuation shelter space (960 square feet) shall be recalculated to the satisfaction of Martin County Division of Emergency Management if age restrictions are established in any part of the Indiantown Development of Regional Impact. Special needs hurricane shelter mitigation techniques provided shall be approved by Martin County Division of Emergency Management and be consistent with Chapter 9J-2.0256(5) (a), Florida Administrative Code. If the Development Order is changed to allow an alternate number of residential units, then the numbers in this condition would change proportionately. The intent of these conditions is to ensure that adequate special needs shelter space is available at all time to meet the demand of Indiantown Development of Regional Impact residents.

Parks and Recreation

66. No residential subdivision plat shall be recorded nor final site plan approved for any development parcel until the developer has provided a plan approved by Martin County for the provision of neighborhood and community recreational sites and facilities to meet the demand created by residential development in the project. Neighborhood parks should serve as prominent visual and social focal points of each neighborhood, and provide for informal, non-programmed recreational activities. At a minimum, one 20-acre community park to serve area residents of the Quillen and Indiantown Developments of Regional Impact should be established. The community park should include recreational facilities as described in the Recreational Element of the Martin County Comprehensive Plan. The intent of this condition is for the Quillen and Indiantown Developments of Regional Impact to jointly plan and fund the community park and recreational facilities. Neighborhood and community recreational facilities shall be available to serve projected demand in accordance with the plan approved by the Martin County Parks and Recreation Department.

Historic and Archaeological Sites

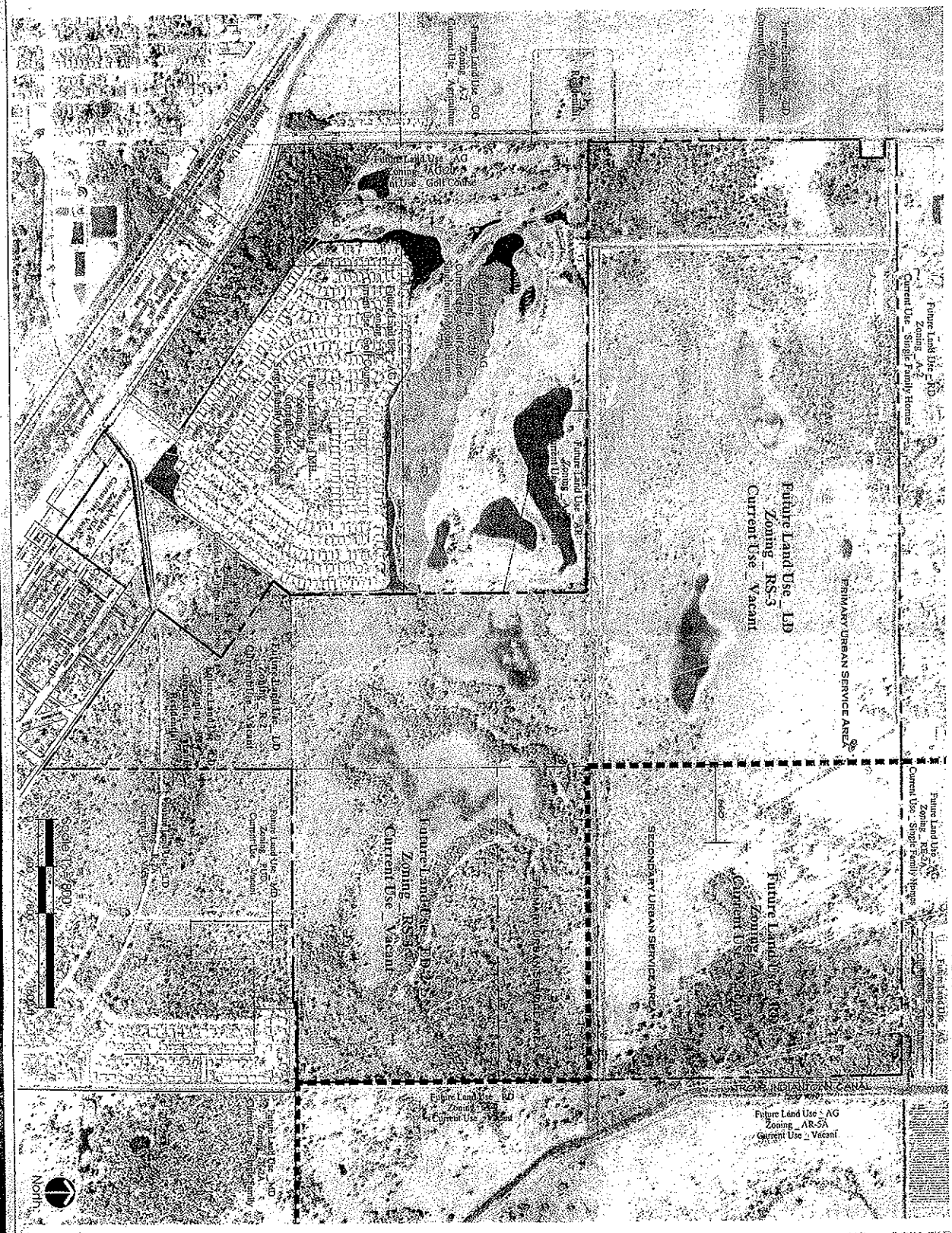
67. In the event of discovery of any archaeological artifacts during construction of the project, construction shall stop in the area of discovery and immediate notification shall be provided to Martin County and the Division of Historical Resources, Florida Department of State. Proper protection shall be provided to the satisfaction of the Martin County and the Division of Historical Resources.

APPENDIX A

Maps

This appendix contains the following maps related to the Indiantown DRI:

Land Use A-2
Vegetation/Preserve Acreages A-3
Wetlands A-4
Listed Species Habitat A-5
Pre-Development Drainage A-6
Post-Development Drainage A-7
Existing Highway Network A-8


Future Land Use _ LD
Zoning _ RS-3
Current Use _ Vacant
PRIMARY URBAN SERVICE AREA
SECONDARY URBAN SERVICE AREA
Future Land Use _ AG
Zoning _ AR-5A
Current Use _ Vacant
Future Land Use _ RD
Zoning _ A-2
Current Use _ Single Family Homes
Future Land Use _ AG
Zoning _ AGD
Current Use _ Golf Course
Future Land Use _ MR
Zoning _ RS-3
Current Use _ Vacant
Future Land Use _ HD
Zoning _ RS-3
Current Use _ Vacant
Future Land Use _ AG
Zoning _ A-2
Current Use _ Agriculture
Future Land Use _ AG
Zoning _ RE-2.5
Current Use _ Single Family Homes
Future Land Use _ AG
Zoning _ AR-5A
Current Use _ Vacant
Future Land Use _ LD
Zoning _ RS-3

LEGEND

211 IMPROVED PASTURES
15.3 AC.– 37.7% OF COMMUNITY EAGLE PRESERVE

321 PALMETTO PRAIRIES– COMMON NATIVE UPLAND PRESERVE
20.8 AC. PRESERVED – 10% OF HABITAT

411 PINE FLATWOODS– COMMON NATIVE UPLAND PRESERVE
90.7 AC. PRESERVED – 27% OF HABITAT

412 PINE – XERIC OAK– RARE AND UNIQUE HABITAT
19.5 AC .PRESERVED– 100% OF HABITAT

427 LIVE OAK– RARE AND UNIQUE HABITAT
3.4 AC.PRESERVED– 100% OF HABITAT

427/428 LIVE OAK/CABBAGE PALM– RARE AND UNIQUE HABITAT
16.3 AC.PRESERVED– 100% OF HABITAT

611 BAY SWAMPS– WETLANDS
0.6 AC.PRESERVED– 100% OF HABITAT

617 MIXED WETLAND HARDWOODS– WETLANDS
4.0 AC.– 100% OF HABITAT

619 EXOTIC WETLAND HARDWOODS– WETLANDS
3.8 AC.– 100% OF HABITAT

641 FRESHWATER MARSHES– WETLANDS
15.1 AC.– 100% OF HABITAT

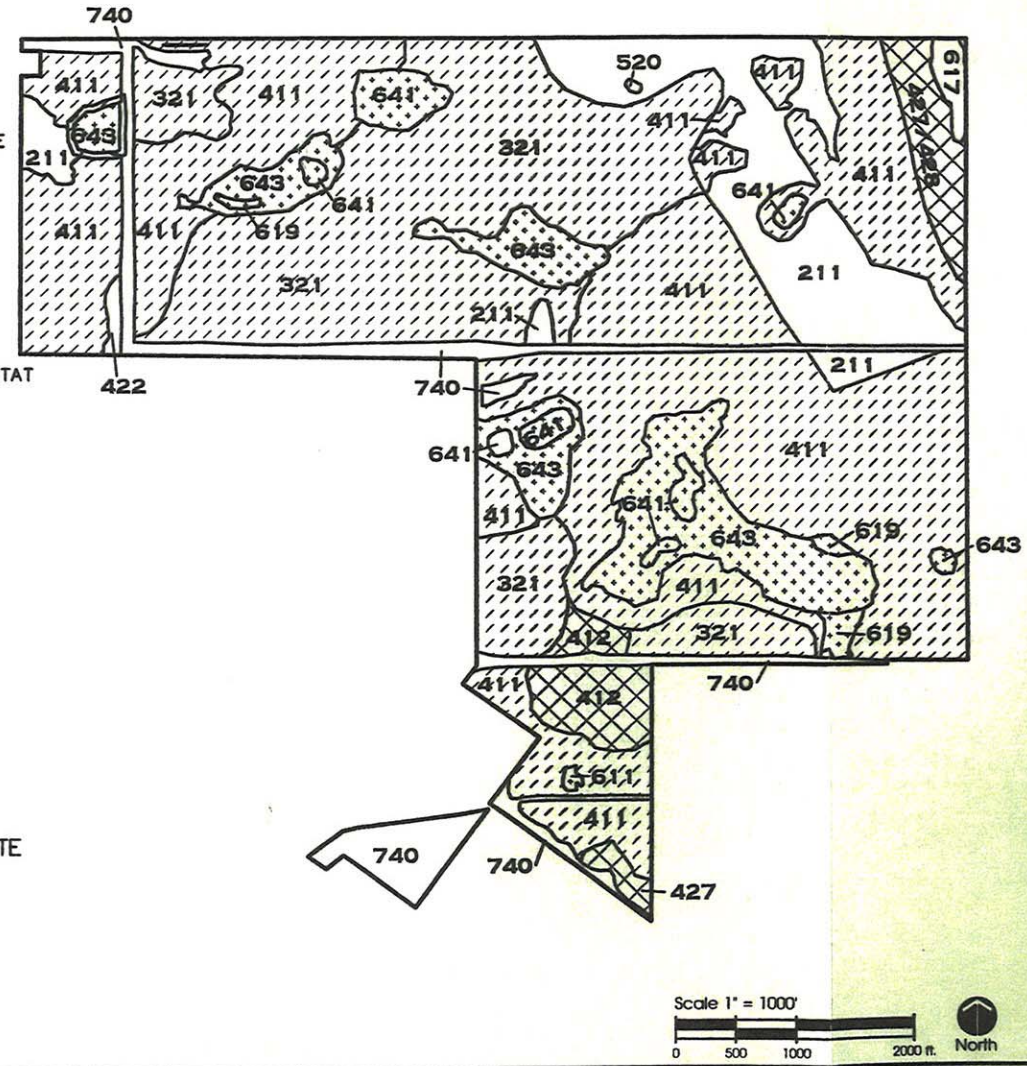
643 WET PRAIRIES– WETLANDS
72.3 AC.– 100% OF HABITAT

WETLAND PRESERVE

COMMON NATIVE UPLAND HABITAT

RARE AND UNIQUE HABITAT

*ALL PRESERVE CALCULATIONS ARE APPROXIMATE



HCG PLANNERS & LANDSCAPE ARCHITECTS

MAP F1
Proposed Preserve Acreages per FLUCCS Categories

EW CONSULTANTS, INC.

Date : February 24, 2006

INDIANTOWN DRI
Martin County, Florida

CENTEX HOMES

A-3

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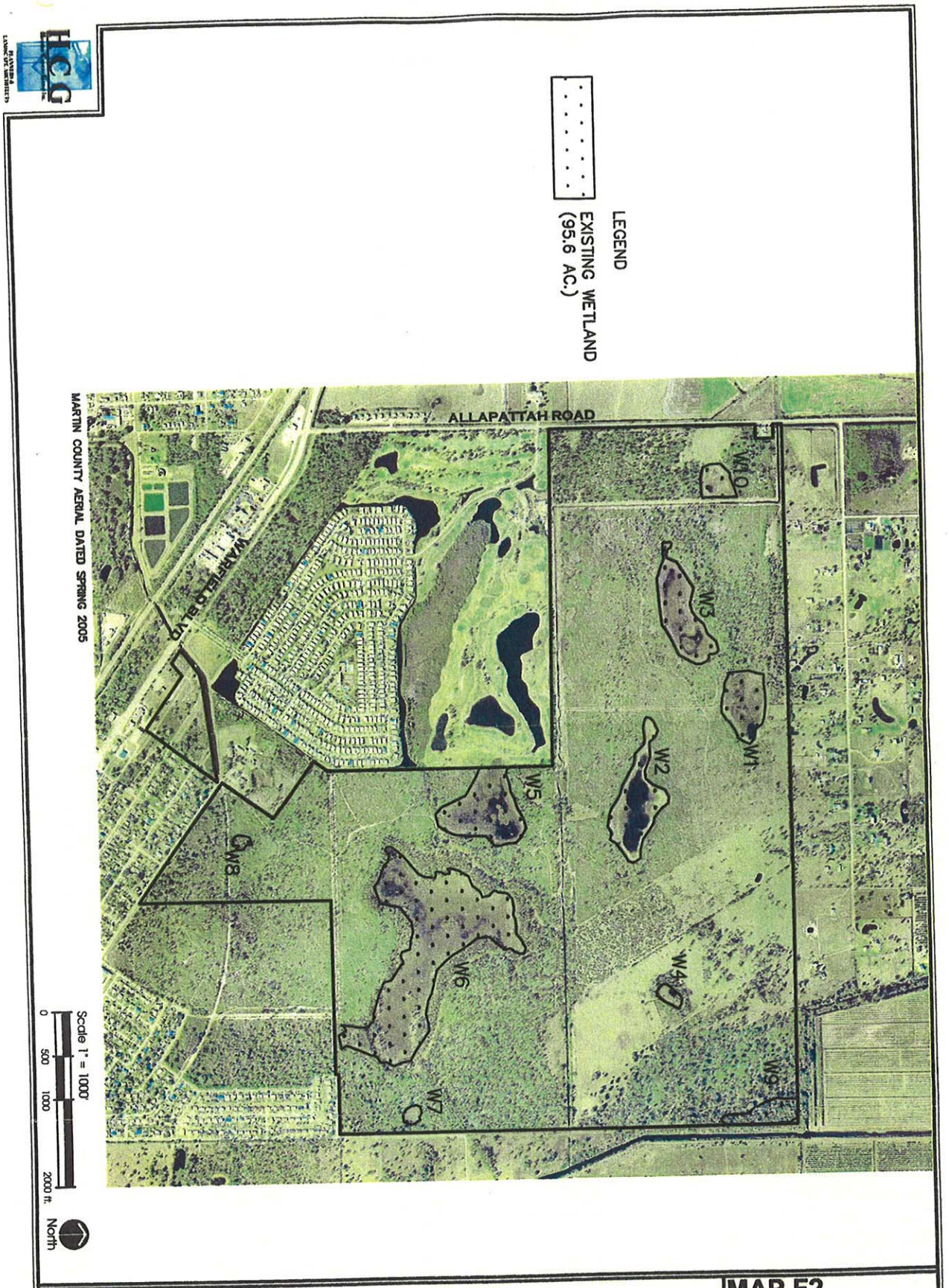

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Fort Pierce, FL 34950

INDIANTOWN DRI

Martin County, Florida

CENTEX HOMES

MAP F2

Wetland Map

EW CONSULTANTS, INC.

Date : April 28, 2006

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West Palm Beach, FL 33409

INDIANTOWN DRI

Martin County, Florida

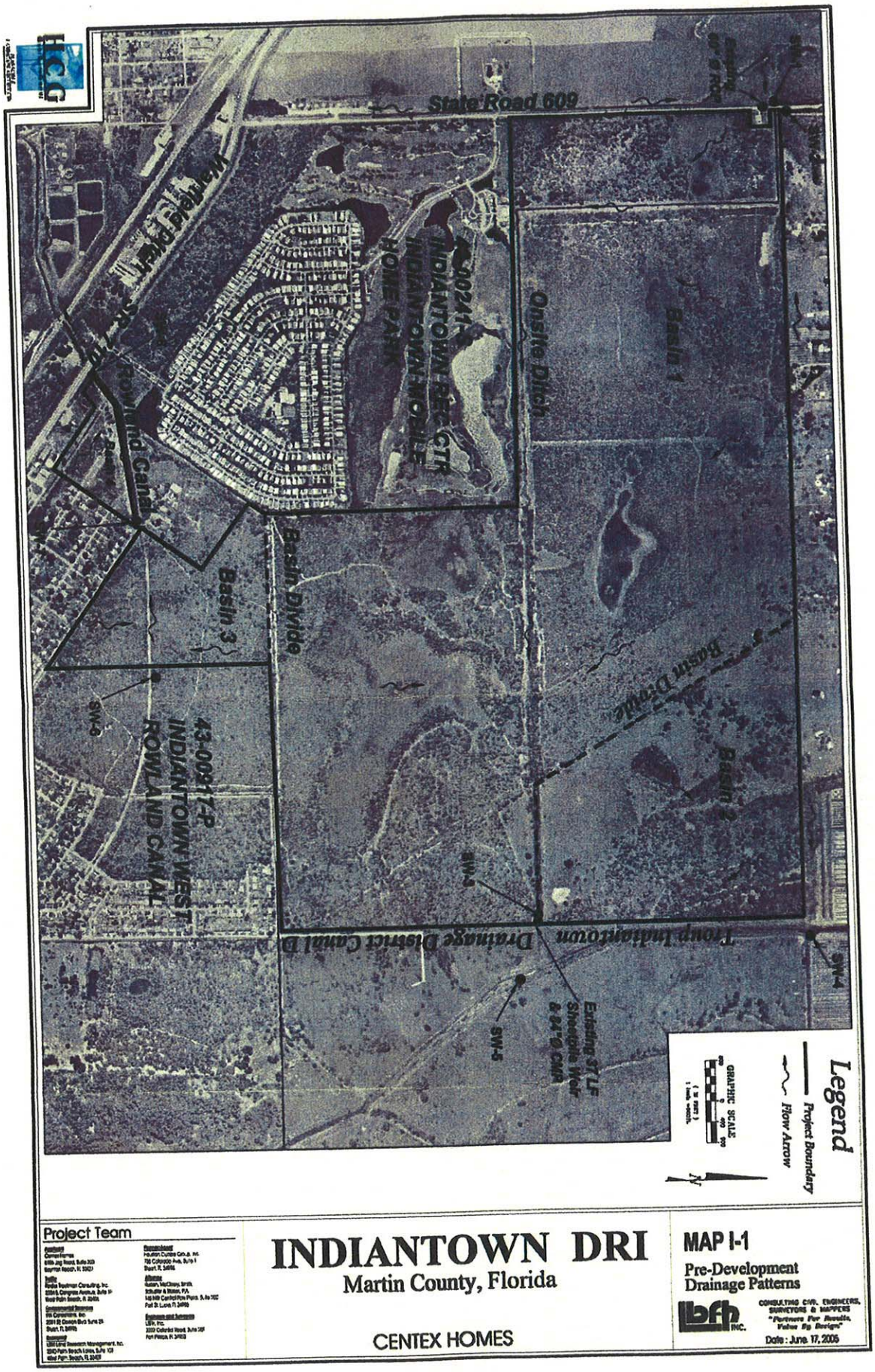
CENTEX HOMES

MAP G

Significant Habitat Map

EW CONSULTANTS, INC.

Date : JUNE 2006



Project Team

INDIANTOWN DRI

Martin County, Florida

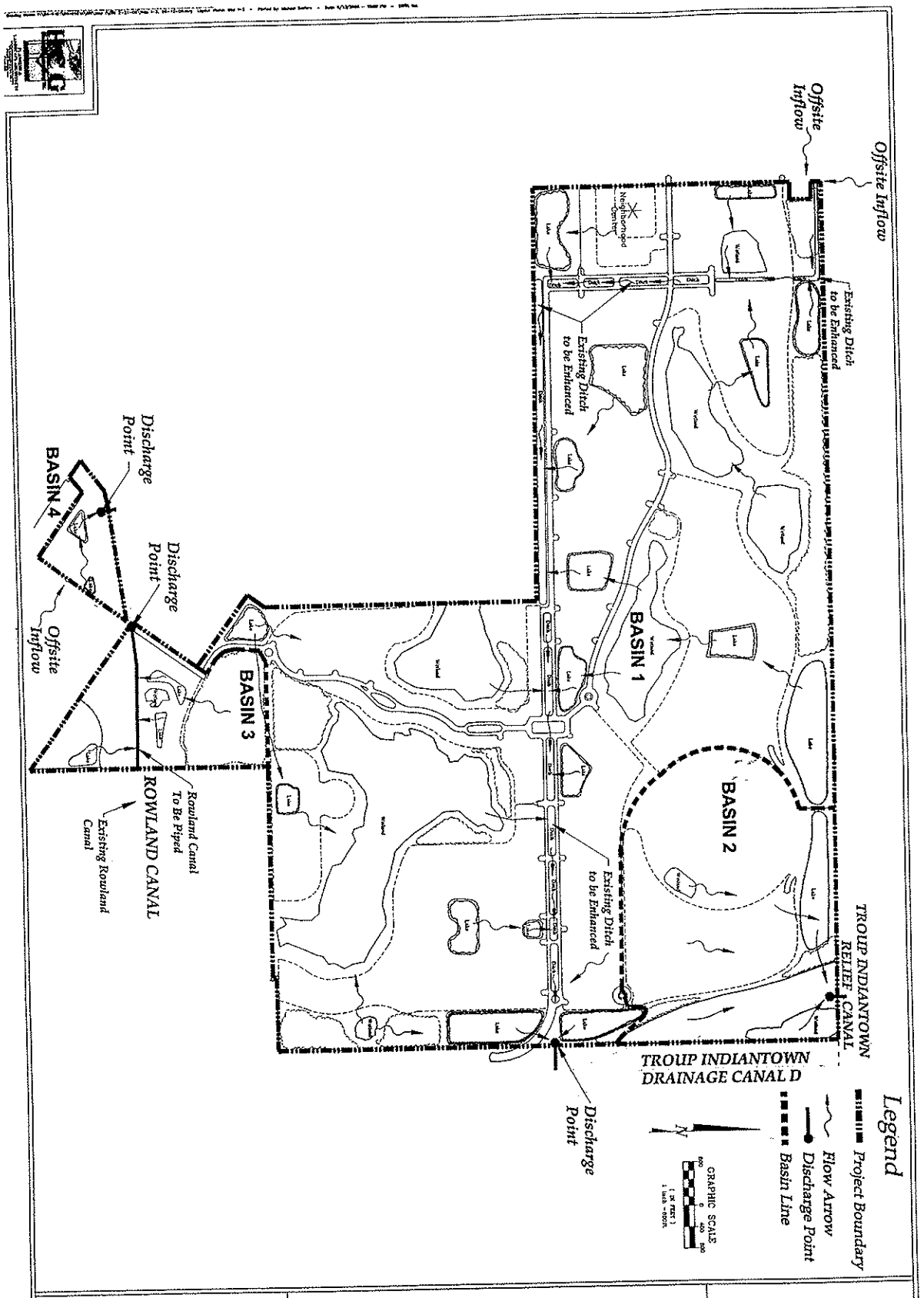
CENTEX HOMES

MAP I-1

Pre-Development Drainage Patterns

lbfh INC. CONSULTING CIVIL ENGINEERS, SURVEYORS & MAPPERS "Partners For Results, Value By Design"

Date : June 17, 2005



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INDIANTOWN DRI

Martin County, Florida

CENTEX HOMES

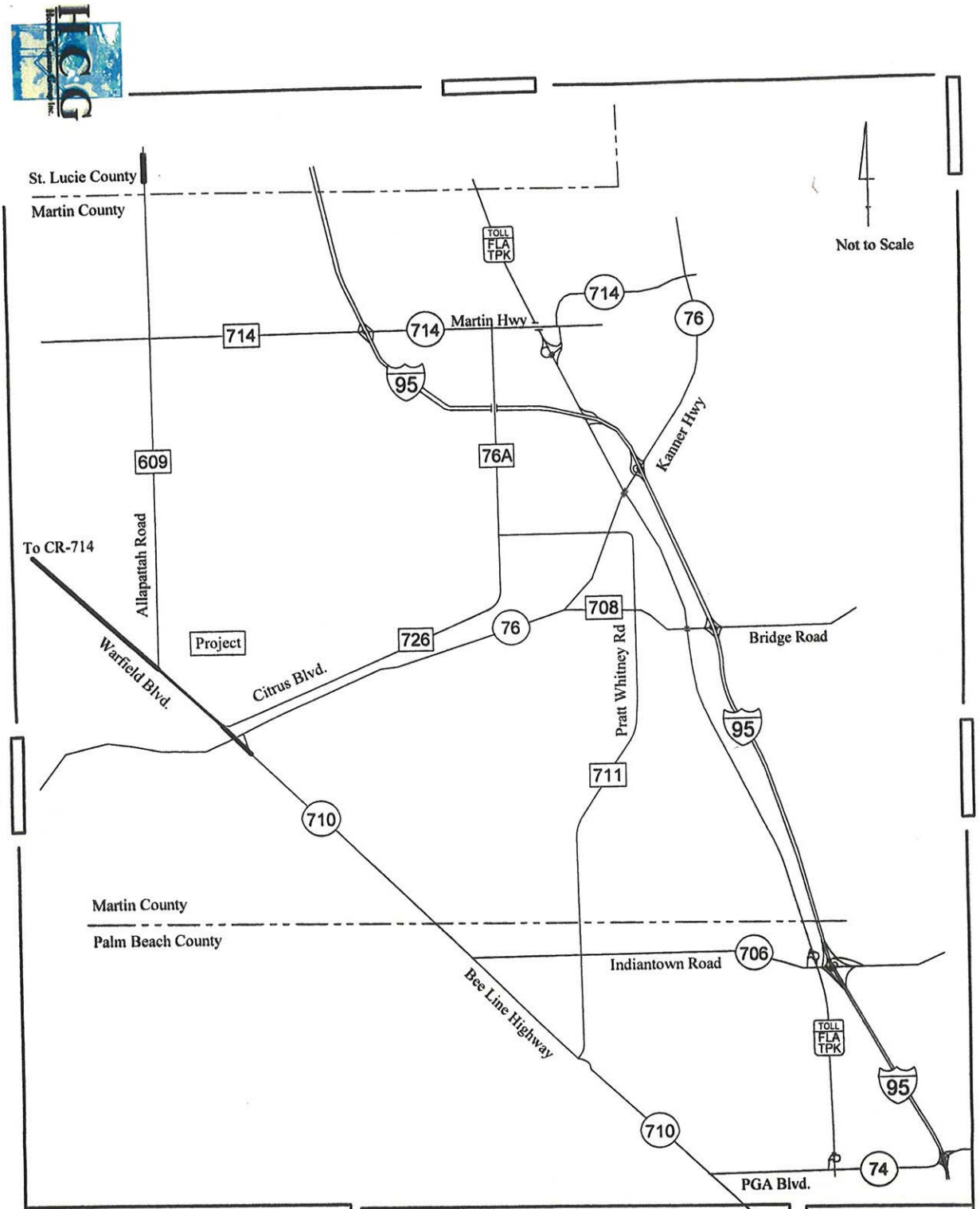
MAP I-2

Post-Development Drainage Patterns

LBFH INC.

CONSULTING CIVIL ENGINEERS, SURVEYORS & MAPPERS
"Partners For Results. Value By Design"

Date : June 15, 2006



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INDIANTOWN DRI

Martin County, Florida

CENTEX HOMES

MAP J

Existing Highway Network

APPENDIX B

Correspondence

This appendix contains correspondence related to the Indiantown DRI:

South Florida Water Management District B-2
Palm Beach County B-15
School Board of Martin County B-17
Centex Homes B-23
Staff Memorandum - Educational Facilities Policy Analysis B-26

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

3301 Gun Club Road, West Palm Beach, Florida 33406 • (561) 686-8800 • FL WATS 1-800-432-2045 • TDD (561) 697-2574
Mailing Address: P.O. Box 24680, West Palm Beach, FL 33416-4680 • www.sfwmd.gov

RECEIVED
AUG 14 2006
TREASURE COAST
REGIONAL PLANNING COUNCIL

LAN 01

August 9, 2006

Mr. Michael Busha, Executive Director
Treasure Coast Regional Planning Council
301 East Ocean Boulevard, Suite 300
Stuart, FL 34994

Dear ~~Mr. Busha~~ Michael:

Subject: Indiantown, DRI No. 05-479

Enclosed is a copy of the District's Impact Assessment Report for the above subject project. The report is a general technical assessment of the project based on information provided by the applicant and does not constitute final finding agency action.

We appreciate this opportunity to participate in the review process. If you have any questions concerning our review of this project, please give me a call at (561) 682-6862.

Sincerely,

James J. Golden, AICP
Senior Planner
Environmental Resource Regulation

/jjg

Enclosure

c: Kev Freeman, Houston Cuozzo Group, Inc.

GOVERNING BOARD

Kevin McCarty, *Chair*
Irela M. Bagué, *Vice-Chair*
Miya Burt-Stewart
Alice J. Carlson
Michael Collins
Nicolás J. Gutiérrez, Jr., Esq.
Lennart E. Lindahl, P.E.
Harkley R. Thornton
Malcolm S. Wade, Jr.

EXECUTIVE OFFICE

Carol Ann Wehle, *Executive Director*

IMPACT ASSESSMENT REPORT

Prepared by

South Florida Water Management District

Issued August 9, 2006

I PROJECT SUMMARY

Project:	Indiantown
Developer:	Centex Homes
SFWMD ID No:	05-479
Location:	S6,31&32/T39&40S/R39E, Martin County
Size:	±804 acres
Existing Land Use:	Agricultural/Undeveloped
Proposed Land Use:	Mixed-use, including Residential (1,650 dwelling units), Commercial/Office (30,000 square feet)
DRI Threshold:	Residential (1,000 dwelling units in Martin County)

II GENERAL PROJECT-RELATED INFORMATION

The Indiantown DRI is a proposed ±804 acre mixed-use development located in south-central Martin County near the northeast corner of S.R. 710/Warfield Boulevard and S.R. 609/Allapattah Road (see Exhibit 1).

The Master Development Plan (see Exhibit 2) proposes the following land uses: Residential (1,650 dwelling units), Commercial/Office (30,000 square feet). Development is scheduled to occur in three phases with build-out in 2020.

III POTENTIAL FOR ADVERSE REGIONAL IMPACTS SUMMARY

Category	Minimal	Significant	Major
Water Use - Potable		X	
Water Use - Non Potable		X	
Surface Water Management - Quantity		X	
Surface Water Management - Quality		X	
Wetlands/Other Surface Waters - Functions	X		

IV CONCLUSIONS AND RECOMMENDATIONS

The available DRI information is not detailed enough for District staff to finalize its evaluation of the proposed project. Unresolved issues that will need to be addressed during the permit application review process include the project's proposed potable and non-potable (landscape irrigation) water supply sources, submittal of detailed design plans and calculations for the proposed surface water management system, establishment of an appropriate control elevation, submittal of a pre versus post development phosphorus load analysis, verification of the quality and function of the wetlands on the project site, potential impacts to listed species, potential impacts to archeological resources, verification of the normal pool water elevations within the on-site wetlands, and provision of upland corridors (see the summaries below and the checklists and footnotes on pages 5 through 10 for additional details).

Water Use

Potable water supply is proposed to be provided by the Indiantown Company. The utility currently does not have an adequate permitted allocation to meet the project's potable water demands. The applicant is proposing to meet the project's non-potable (landscape irrigation) demands by withdrawals from surface and/or ground water sources. Reclaimed water will be used when it becomes available.

For additional details concerning the above as well as permitting requirements, see "Permits" on page 3 and the Water Supply and Development Checklist and Footnotes on pages 5 and 6.

The District is recommending a Development Order Condition (see page 3) requiring that specific conservation measures be incorporated into the project design.

Surface Water Management

Existing surface water features on the project site include a series of isolated wetlands and a small cattle pond located in the north-central portion of the project site.

The proposed surface water management system will consist of a network of inlets, culverts, wet detention ponds, wetlands, and water control structures. Water quality treatment will be provided within the wet detention ponds. Off-site discharges will be directed into the C-44 Canal via the Troup Indiantown Drainage District canal system and the Rowland Canal.

Issues to be resolved prior to issuance of an ERP include establishment of an appropriate control elevation, submittal of detailed design plans and calculations for the proposed surface water management system, and submittal of a phosphorus load analysis.

For additional details concerning the proposed surface water management system design as well as permitting requirements, see "Permits" on page 3 and the Surface Water Management Checklist and Footnotes on pages 7 and 8.

Please note that the SFWMD has initiated rule-making to address potential water quality and quantity impacts from new projects that ultimately discharge to Lake Okeechobee, the Caloosahatchee Estuary and/or the St. Lucie Estuary. Under the proposed Rule, applicants may be required to demonstrate a reduction in the amount of nutrients and volume of water discharged from the proposed development. The current schedule for adoption of this rule, subject to change, is the end of 2007.

Wetlands/Other Surface Waters-Functions

The project site contains approximately 96 acres of wetlands, the majority of which are freshwater marsh wetlands. A lesser acreage of mixed wetland hardwoods also occur on-site. The applicant is proposing to preserve all of the existing on-site wetlands.

Issues to be resolved prior to issuance of an Environmental Resource Permit (ERP) include verification of the quality and function of the wetlands on the project site, potential impacts to listed species, potential impacts to archeological resources, verification of the normal pool water elevations within the on-site wetlands, establishment of an appropriate control elevation, and provision of upland corridors.

For additional details concerning the above as well as permitting requirements, see "Permits" on page 3 and the Environment Checklist and Footnotes on pages 9 and 10.

Permits

This project will require the following District permits prior to commencement of construction:

1. Environmental Resource Permit – for conceptual approval and for construction and operation of the surface water management system for the proposed development and for the proposed impacts to other surface waters.

2. Water Use Permit – for the proposed surface and/or ground water withdrawals for landscape irrigation.

This project may require the following District permit prior to commencement of construction:

3. Water Use Permit - for certain dewatering activities proposed for the construction of project lakes, utilities and/or road or building foundations.

The applicant must meet District criteria in effect at the time of permit application.

Recommended Development Order Condition

1. The project shall utilize ultra-low volume water use plumbing fixtures, self-closing and/or metered water faucets, xeriscape landscape techniques, and other water conserving devices and/or methods. These devices and methods shall meet the criteria outlined in

the water conservation plan of the public water supply permit issued to the Indiantown Company, Inc. by the South Florida Water Management District.

V DISCLAIMER

This review has been performed by the South Florida Water Management District to provide the Treasure Coast Regional Planning Council with a general technical assessment of the water-related impacts of this project from the District's perspective. It is a technical review of the project based on the information provided by the DRI applicant. It is not a permit under Chapter 373, F.S., nor is it a commitment for said permits. This review does not constitute final agency action and it is not binding on this agency. Permit evaluation, pursuant to Chapter 373, F.S., will be based upon the criteria in effect and the information available at the time of permit application. Consequently, the applicant is advised that this could result in a change in the District's technical assessment from that which is contained in this review.

Further, this review is not intended to restrict any formal District comments and/or objections that may be issued on the proposed comprehensive plan amendments associated with this DRI. During the formal plan amendment review process, pursuant to Chapter 9J-5, F.A.C., the District will perform a detailed evaluation of all water resource-related issues associated with this proposal and will provide its formal comments and/or objections to the Florida Department of Community Affairs (DCA).

SUBJECT: **WATER SUPPLY AND DEVELOPMENT** - Indiantown, DRI No. 05-479

Proposed Potable Water Source: Indiantown Company, Inc. (see footnote #1)
Permit No.: 43-00041-W
Expiration Date: November 14, 2007
Permitted Allocation: 36.48 MGM/355 MGY
Current Usage: 22 MGM/240 MGY
Projected Demand of DRI: 16.35 MGM/196.2 MGY

Proposed Non-Potable Water Sources: On-site lakes/wells/reclaimed water
Projected Demand of DRI: 47.43 MGM/360 MGY

	ACCEPTABLE RESPONSE IN APPLICATION	RESOLVABLE AT PERMIT TIME		MAJOR REGIONAL ISSUES
		MINOR	MAJOR	
I. PROJECTED DEMANDS OF PROJECT				
A. POTABLE WATER				
1. Use Generation Rates	X			
2. Conservation Practices	X			
B. NON-POTABLE WATER				
1. Use Generation Rates	X			
2. Conservation Practices	X			
3. Wastewater Reuse		X(2)		
II. WATER USE IMPACTS				
A. ON-SITE				
1. Proposed Sources				
a. Groundwater			X(3)	
b. Surface Water			X(3)	
c. Wastewater Reuse		X(2)		
d. Reverse Osmosis	N/A			
2. Resource Capability			X(3)	
3. Impacts				
a. Salt Water Intrusion	N/A			
b. Pollution/Contamination			X(3)	
c. Environmental			X(3)	
B. OFF-SITE				
1. Verification of Availability from Utility			X(4)	
2. Resource Capability	X		X(5)	
3. Impacts				
a. Salt Water Intrusion	N/A			
b. Pollution/Contamination	X			
c. Environmental			X(5)	
d. Other Legal Users	X			

FOOTNOTES: See following page.

WATER SUPPLY AND DEVELOPMENT FOOTNOTES:

(1) District staff is currently reviewing an application (No. 050811-7) for a new Water Use Permit submitted by the Indiantown Company, Inc., to supply water to a new proposed service area. The new service area includes the DRI project site.

(2) The applicant has indicated that the Indiantown Company, Inc. has plans to provide reclaimed water to all future developments in Indiantown. The utility has submitted an application to the District for alternative water supply grant funding.

The DRI project site is located in a Critical Water Supply Problem Area. Prior to approval of a Water Use Permit for landscape irrigation for the proposed development, the applicant will be required to provide a feasibility analysis for reclaimed water use. Section 3.2.3 of the Basis of Review (BOR) for Water Use Permits within the South Florida Water Management District (August, 2003) states that in those areas of the District that are designated as Critical Water Supply Problem Areas, pursuant to Chapter 40E-23, F.A.C., reclaimed water is required to be used, unless it is demonstrated by the applicant that its use is not environmentally, economically, or technically feasible.

(3) The applicant has indicated that the proposed on-site surface water management lakes will be used as the primary source for the project's landscape irrigation withdrawals and that Surficial Aquifer System wells may be installed to replace irrigation withdrawals from lakes. Due to the project's projected irrigation demands from the on-site lakes and the Surficial Aquifer System, the proposed withdrawals and subsequent hydrologic alterations have the potential to cause harm to wetlands on-site and adjacent to the project site. During the review of the ADA, the applicant was advised that a new water use permit application will be required for the proposed landscape irrigation withdrawals. At the time of permit application, District staff will evaluate the application for impacts to the resource, existing legal users, wetlands, and existing contamination sites.

(4) During review of the ADA, the applicant provided a letter from the Indiantown Company, Inc., stating a commitment to ensure that the necessary systems will be in place concurrent with the development of the project. The applicant also provided documentation demonstrating that the Indiantown Company, Inc., is the Florida Public Service Commission's certificated utility provider for the planned development. However, the developer agreement to provide service is still being negotiated with the applicant and the response did not include the required correspondence from the utility regarding the ability to provide service during all phases of development.

(5) The utility's Water Use Permit application is currently undergoing technical review. The proposed withdrawals and subsequent hydrologic alterations have the potential to cause harm to wetlands in the vicinity of the utility's proposed wells. Prior to approval of the utility's permit application, the utility must provide the District with assurances that the withdrawals will not cause harm to wetlands.

SUBJECT: **SURFACE WATER MANAGEMENT** - Indiantown, DRI No. 05-479

Drainage Basins: C-44
Receiving Bodies: Rowland Canal

	ACCEPTABLE RESPONSE IN APPLICATION	RESOLVABLE AT PERMIT TIME		MAJOR REGIONAL ISSUES
		MINOR	MAJOR	
I. SYSTEM DESIGN				
A. QUANTITY CONSIDERATIONS				
1. Discharge method, location and route to receiving water		X(1)		
2. Floodplain encroachment		X(1)		
3. Net basin storage		X(1)		
4. Stage/storage			X(1)	
5. Control elevations			X(2)	
6. Water management areas			X(1)	
7. Minimum drainage		X(3)		
8. Overdrainage		X(1)		
9. Outparcels		X(1)		
10. Exfiltration		X(4)		
11. Floor and road protection		X(5)		
12. Passage of upstream flows			X(1)	
13. Capacity of receiving water (pre vs. post)			X(1)	
B. QUALITY CONSIDERATIONS				
1. Standard BMP's			X(1)	
2. Special BMP's				
a. Sensitive receiving waters			X(6)	
b. On-site use of wastewater	N/A			
c. Location of on-site percolation ponds	N/A			
d. Proximity of on-site percolation ponds to SWM system	N/A			
3. Use of natural system	N/A			
4. Hazardous materials				
a. Use/generation	X			
b. Management/disposal	X			
5. Exfiltration systems		X(4)		

FOOTNOTES: See following page

SURFACE WATER MANAGEMENT FOOTNOTES:

(1) At the time of application for an Environmental Resource Permit (ERP), the applicant will need to submit calculations documenting compliance with applicable District criteria.

(2) At the time of application for an ERP, the control elevation will need to be established based on site-specific information (geotechnical analysis, piezometers, etc.) for a non-pumped system.

(3) Minimum drainage and recovery calculations will be required at the time of application for an ERP.

(4) At the time of application for an ERP, exfiltration calculations will be required for any exfiltration facilities proposed for commercial areas within the project site.

(5) Calculations for floor and road protection will be required at the time of application for an ERP.

(6) The proposed project is within the C-44 basin, which is part of the Lake Okeechobee watershed, as defined in Chapter 373.4595(2)(i), F.S. Consequently, a pre versus post development phosphorus load analysis will be required for the proposed project at the time of application for an ERP.

SUBJECT: **ENVIRONMENT** - Indiantown, DRI No. 05-479

WETLANDS ACREAGE SUMMARY*

Total Existing	Presently Impacted	Proposed To Be Preserved	Proposed To Be Altered/Destroyed	Proposed To Be Mitigated	Resulting Net Gain/Loss
100.4	0	100.4	0	0	N/A

* Applicant estimates (subject to verification during permit review)

	ACCEPTABLE RESPONSE IN APPLICATION	RESOLVABLE AT PERMIT TIME MINOR	RESOLVABLE AT PERMIT TIME MAJOR	MAJOR REGIONAL ISSUES
I. **EXISTING SENSITIVE LANDS**				
A. WETLANDS				
1. Quantity	X			
2. Quality		X(1)		
B. UNIQUE HABITAT	X			
C. ENDANGERED SPECIES	X(2)			
D. OTHER (Save Our Rivers; OFWs; aquifer recharge areas; etc.)	X(3)			
II. **IMPACTS OF PRESERVATION/MITIGATION**				
A. QUANTITY	X(4)			
B. QUALITY	X(4)			
C. MANAGEMENT SCHEME (managed elevations, buffers, littoral zones; etc.)		X(5)		
D. ENDANGERED SPECIES/HABITAT	X(6)			
III. **COMPATIBILITY OF PROPOSED LAND USE AND NATURAL CHARACTERISTICS**		X(5)		

FOOTNOTES: See following page.

ENVIRONMENT FOOTNOTES:

(1) District staff has not performed a qualitative assessment of the onsite wetlands. At the time of application for an Environmental Resource Permit (ERP), District staff may require additional information and field verifications concerning the characteristics and functional values of the onsite wetlands.

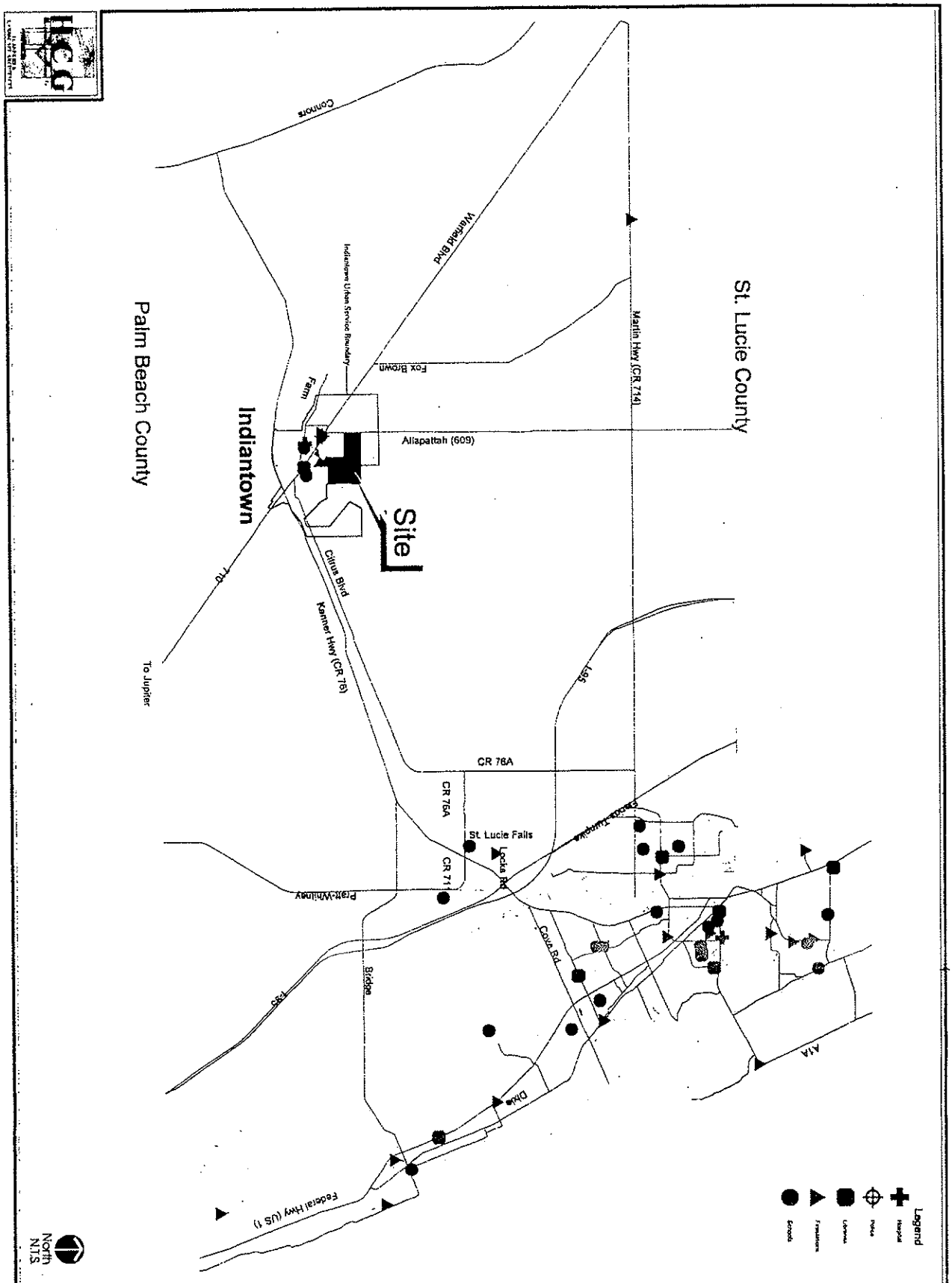
(2) Because of the documented use of the site by listed species, the applicant must continue to coordinate with the appropriate wildlife agencies. The applicant should also provide copies of any correspondence indicating that these agencies do not object to the proposed project.

(3) The applicant must coordinate with the Florida Department of State, Division of Historical Resources. Issues regarding historical or archaeological resources should be resolved and a letter of no objection should be received from the agency before the issuance of a District permit.

(4) No wetland impacts are proposed on the project site. According to the ADA, all of the wetland areas and associated upland buffers located on the project site will be dedicated as conservation areas and placed under a conservation easement. If wetland impacts are proposed in the ERP application, District staff may require additional information and field verifications concerning the characteristics and functional values of the onsite wetlands.

(5) The applicant must demonstrate that the hydrologic condition of the preserved wetland areas will be maintained in the post-development condition. District staff has not verified the normal pool elevations of the onsite wetlands. The elevations will need to be field verified at the time of application and the control elevations of the wetlands and the basins they are located in need to be based on the normal pool water elevations within the onsite wetlands.

(6) Because of the documented use of the site by listed species, efforts should be made to increase the value of the preserved areas to those species (e.g., by providing upland corridors). Upland connections between preserved wetlands should be provided, where possible, to minimize impacts to listed species.



Project Team

Applicant
Centex Homes
2198 Jog Road, Suite 200
Boynton Beach, FL 33437

Traffic
Pinder Troutman Consulting, Inc.
2324 S. Congress Avenue, Suite 1H
West Palm Beach, FL 33406

Environmental Scientists
EW Consultants, Inc.
3081 SE Ocean Blvd. Suite 2B
Stuart, FL 34996

Geotechnical
CMA Land Research Management, Inc.
7240 Palm Beach Lakes, Suite 103
West Palm Beach, FL 33409

Planner/Agent
Houston Cuzzo Group, Inc.
730 Colorado Ave., Suite 1
Stuart, FL 34994

Attorney
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145 NW Central Park Plaza, Suite 200
Port St. Lucie, FL 34986

Engineers and Surveyors
URS, Inc.
2222 Colonial Road, Suite 201
Fort Pierce, FL 34950

INDIANTOWN DRI

Martin County, Florida

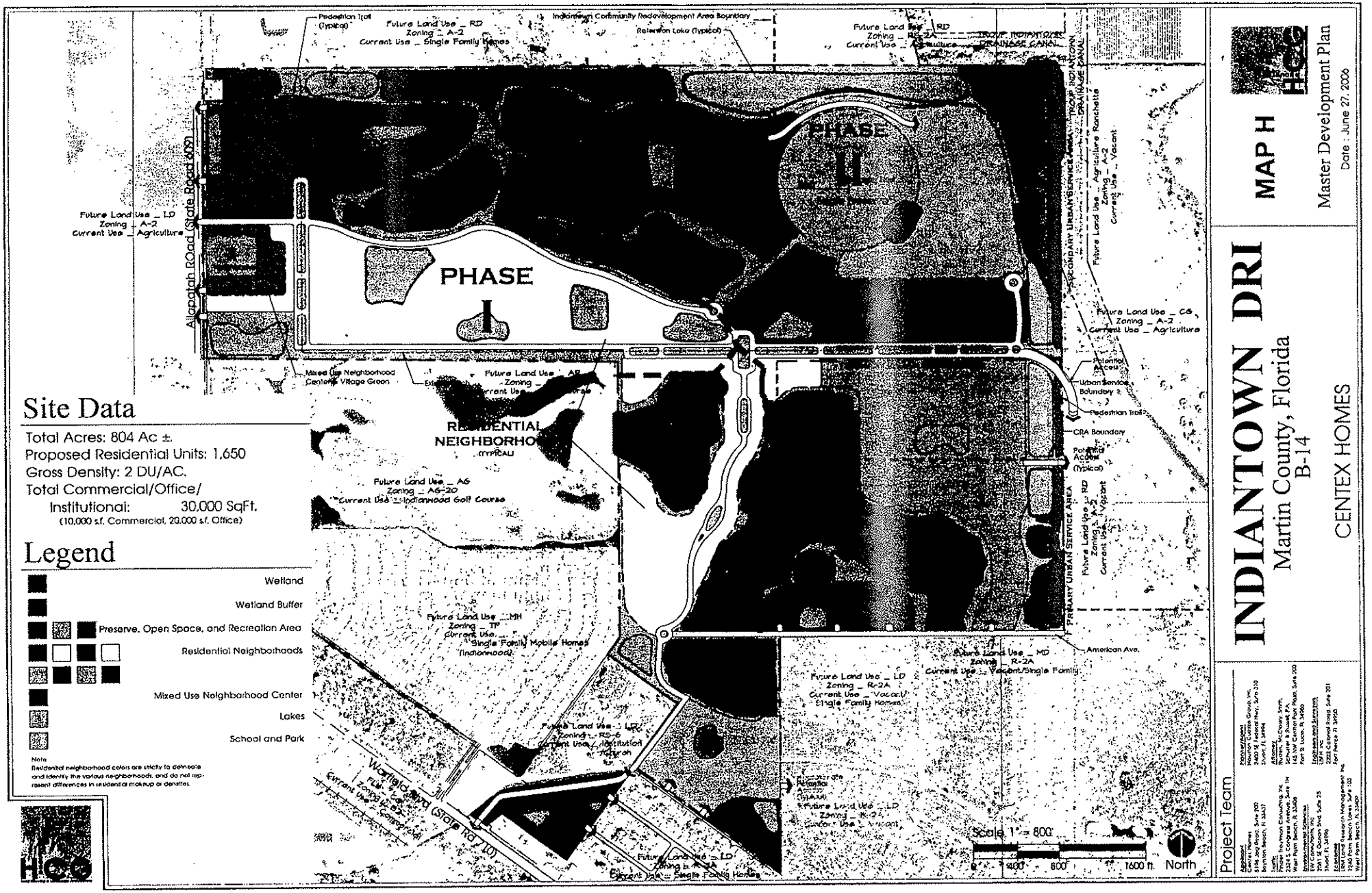
B-13
CENTEX HOMES

MAP A

Location Map

(Prepared by Houston Cuzzo Group, Inc.)

Date : June. 29, 2005



Site Data

Total Acres: 804 Ac ±.
Proposed Residential Units: 1,650
Gross Density: 2 DU/AC.
Total Commercial/Office/
Institutional: 30,000 SqFt.
(10,000 s.f. Commercial, 20,000 s.f. Office)

Legend

- Wetland
- Wetland Buffer
- Preserve, Open Space, and Recreation Area
- Residential Neighborhoods
- Mixed Use Neighborhood Center
- Lakes
- School and Park

Note
Residential neighborhood colors are strictly to delineate and identify the various neighborhoods, and do not represent differences in residential makeup or densities.

INDIANTOWN DRI

Martin County, Florida
B-14

CENTEX HOMES

MAP H

Master Development Plan
Date : June 27, 2006

Project Team

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5196 Jog Road, Suite 700
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Engineer and Surveyor
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Fort Pierce, FL 34950

Residential
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1800 Corporate Centre Blvd.
West Palm Beach, FL 33408

T:\Drawings\2K / South Flors Parcels\MAP H\MAP H 06-27-06.dwg, 6/28/2006 9:58:49 AM, HP Color LaserJet 5500

RECEIVED
SEP 1 8 2006
REGIONAL PLANNING COUNCIL

September 12, 2006

Department of Engineering and Public Works
P.O. Box 21229
West Palm Beach, FL 33416-1229
(561) 684-4000
www.pbcgov.com

Palm Beach County Board of County Commissioners
Tony Masilotti, Chairman
Addie L. Greene, Vice Chairperson
Karen T. Marcus
Jeff Koons
Warren H. Newell
Mary McCarty
Burt Aaronson

County Administrator
Robert Weisman

Mr. Michael J. Busha, AICP
Executive Director
Treasure Coast Regional Planning Council
301 East Ocean Boulevard, Suite 300
Stuart, FL 34994

RE: Indiantown DRI Application for Development Approval
Recommendations for Inclusion in the Final Assessment Report

Dear Mr. Busha:

The Palm Beach County Traffic Division appreciates the opportunity to review the ADA and Sufficiency Responses for the Indiantown DRI and requests that the following conditions of approval be included in the final assessment report to mitigate regional impacts of this proposed development:

1. No building permits shall be issued until construction commences for Seminole Pratt-Whitney Road as a minimum 2-lane cross section from the current terminus at Beeline Highway south to PGA Blvd. extension. (REASON: This facility does not currently exist but was used in all phases for distribution of project traffic)
2. Prior to June 1, 2007, acceptable surety for the road construction listed in Condition 1 above shall be provided to the Palm Beach County Land Development Division, the applicant shall pay their proportionate fair share under §163.3180(12), F.S., or the improvement shall be included in Palm Beach County's 5 Year Road Program.
3. No building permits shall be issued for development that generates more than 716 net external 2-way PM peak hour trips or December 31, 2011, whichever occurs first, until the contract has been let for the construction of Seminole Pratt Whitney Road from the current terminus at Beeline Highway south to PGA Blvd. extension as a four-lane cross section.
4. Prior to December 31, 2008, acceptable surety for the road construction listed in condition 3 above shall either be provided to the Palm Beach County Land Development Division, the applicant shall pay their proportionate fair share under §163.3180(12), F.S., or the improvement shall be included in Palm Beach County's 5 Year Road Program.

"An Equal Opportunity Affirmative Action Employer"

printed on recycled paper

Please contact me at (561) 684-4030 if you have any questions.

Sincerely,
OFFICE OF THE COUNTY ENGINEER

Nicholas P. Uhren, P.E.
Senior Professional Engineer - Traffic Division

NPU:ph

File: Developments – Indiantown DRI

CC: Allan Ennis, P.E., AICP – Asst. Director, PBC Traffic Division

F:\TRAFFIC\Development Review\Correspondence\LTR (Busha) Indiantown DRI-Assessment.doc

Douglas G. Griffin, School Board Attorney

THE SCHOOL BOARD OF MARTIN COUNTY, FLORIDA

500 East Ocean Blvd • Stuart, Florida 34994 • Telephone (772) 219-1200 Ext: 30235 • Facsimile: (772) 219-1227

December 6, 2006

RECEIVED
DEC 07 2006
TREASURE COAST
REGIONAL PLANNING COUNCIL

Kim Delaney
Treasure Coast Regional Planning Council
301 East Ocean Boulevard, Suite 300
Stuart, Florida 34994

RE: ***Indiantown DRI***

Dear Kim:

Please accept this letter in response to your agency's request for clarification and/or update of J. Lisle Bozeman's letter dated October 24, 2006. I am writing because Ms. Bozeman has been out of the office since the time of the request, and I understand that you have an impending agenda distribution deadline. In any event, I am writing to clarify the following points.

1. Since Ms. Bozeman's original letter, the School District staff has resolved to use the student generation rates identified in the School District's latest Educational Impact Fee report for the assessment of impacts of developments on the School District, including proposed developments in the Indiantown area where this project is proposed to be located. The most common student generation rate suggested by that report is .259 students per dwelling unit. Using that student generation rate, we estimate a total number of students from this development to be 427. Of this total number of estimated students, we expect 44.6% to be elementary school students, 24.2% to be middle school students, and 31.2% to be high school students. This distribution yields 191 elementary school students, 103 middle school students, and 133 high school students.

2. I have confirmed with our Facilities Department that the information that Ms. Bozeman provided your agency regarding the estimated cost for construction for each type of School District facility (i.e. $24 million for an elementary school, $46 million for a middle school and $72 million for a high school) does not include the cost of land acquisition.

3. The School Board doesn't own a bank of vacant or partially developed elementary, middle and high school sites in the vicinity of the project that can accommodate all of the demand for school sites that is expected to be required for

Dr. Sara A. Wilcox, Superintendent
School Board Members: Dr. David L. Anderson • Laurie Gaylord • Susan J. Hershey • Nancy Kline • Lorie Shekailo
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the project. As Ms. Bozeman previously advised, the School District's general, minimum standards for school sites are 15 developable acres for an elementary school, 30 developable acres for a middle school and 60 developable acres for a high school. Unfortunately, however, the demand created by this project for land for school sites is far greater than what could ever be accommodated by dedication of a single 11 acre site (based on a theoretical consolidation of 25% of an elementary site, 9% of a middle school site, and 7% of a high school site).

While the demand for the construction component of student stations is more easily divisible into individuals units because of greater flexibility of the School District in meeting that need, the demand created by a project for land is realized in terms of total school sites. In other words, it's relatively easy for the School District to combine funds contributed towards constructing student stations with other resources of the School District, including similar funds contributed from other project, in order to be able to meet the demands created by new projects. On the other hand, when the demand for a high school site is created, for example, it is generally impossible to combine 10% of a high school site contributed off of one project with 10% of a different site contributed off of another project in order to accommodate the demand. As a result, the demand for land created by a project can only be accommodated if the School District already has, or can acquire, each of the types of sites impacted.

This is not to suggest that every project would necessitate the dedication of each type of school site in order for a project to satisfy its demands. The School District only assesses the likelihood, based on whatever solutions that the developer might propose or of which it is independently aware, whether enough land resources are likely to be available to the School District to meet the demand of the project. For example, if plenty of buildable sites of all sizes were reasonably available within the urban services boundaries in the vicinity of the project, then the School District would have little concern that the land impact of the project could be reasonably accommodated. Of course, absent dedication of middle and/or high school sites by the developer, the reality in this situation is that the very projects being considered are removing much of the inventory of larger tracts within the urban services that could be used for middle and high school sites.

The demand for large sites created could also be accommodated if multiple developers in the area collectively dedicated enough large parcels for school use to accommodate the demands. Although the School District has made such requests of this and other developers, no such agreements have been reached. Likewise, if the final development order expressly authorized development of middle and high school sites outside of the urban services boundaries, then the demand for school sites could be reasonably accommodated. In fact, the School District remains open to the consideration of any viable alternatives under which the resulting demand for middle and high school sites created by the project can be met. The School District's priority, however, must remain with the

acquisition, either directly from the developer or other, of whole school sites. We can only say at this time, though, that no such plan has been formally proposed by the developer, or is otherwise in place.

If you have questions, please do not hesitate to contact me.

Sincerely,

Douglas G. Griffin

/dmf

THE SCHOOL BOARD OF MARTIN COUNTY, FLORIDA
FACILITIES DEPARTMENT

500 East Ocean Blvd., Stuart, Florida 34994 • Telephone (772) 219-1200 • Facsimile (772) 221-4912

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Director of Facilities & Planning
Ext. 30475

Garret Grabowski, Construction Manager, Ext: 30265
J. Lisle Bozeman, Capital Projects/Planning Specialist, Ext: 30211
James Copeland, Building Official, (772) 219-1580 Ext: 230
Mark Cocco, Operations Manager, (772) 219-1275
Chris D. Singley, Maintenance Manager, (772) 219-1275

October 24, 2006

Kim DeLaney
Treasure Coast Regional Planning Council
301 East Ocean Boulevard, Suite 300
Stuart, FL 34994

RE: Indiantown DRI

Dear Kim DeLaney:

The Martin County School District has reviewed the proposed Development of Regional Interest, Indiantown DRI, and found the following:

The proposed development consists of approximately 804 acres located in Indiantown, Martin County with 1,650 proposed residential units. The current student generation rate in Indiantown is found to be .62 students per dwelling unit. The school district's educational impact study update of 2005 found the county- wide student generation rate to be .259 students per dwelling unit. The applicant has used a .40 student generation with no supportive documentation but which is an approximate mid-point between the County-wide student generation rate and the current student generation rate found in Indiantown. The school district is currently under contract to determine a more accurate student generation rate for this unique demographic area but it is not available at this time. We anticipate the future student generation rates in Indiantown to be higher than the county-wide .259 students per dwelling unit but lower than the current student generation rate due to changing demographic features. We have also taken into consideration the .405 historic student generation rate from our neighboring county to the north, St. Lucie County, as a measure of the feasibility of using the .40 student generation rate provided by the developer. At the present time, we are acceding to the use of a midpoint student generation rate of .40 students per dwelling unit.

Using the .40 student generation rate per dwelling unit, we estimate the expected total number of students from this development to be 660 students corresponding to the 662 students found in Table 10.3 A.1.2. of the applicant's Second Sufficiency Response.

Of this total number of estimated students, we expect 44.6% to be elementary school students, 24.2% to be middle school students, and 31.2% to be high school students. This distribution yields 295 elementary students, 160 middle school students, and 206 high school students.

Martin County School Board policy sets elementary school size at 750 permanent student stations, middle school size at 1200 permanent student stations and 1800 permanent student stations for high schools. The above distribution indicates that this development will require 39.% of an elementary school, 13 % of a middle school, and 11% of a high school.

Current capacity at existing Indiantown schools is insufficient to meet the anticipated students generated from this project. The elementary school, Warfield, has a permanent FISH capacity, with programmatic adjustments, of 788 student stations using a 100% utilization rate. Current enrollment, accounting for the 5th grade currently housed at the middle school is 719 students or, stated alternatively, 91.3% of capacity is currently filled. If the school is capped in accordance with school district policy at 750 student stations, the school is at 95.9% of filled capacity. There is no capacity available at the nearest elementary schools on the coast and given the geographical distance and age of students, it is not feasible to transport elementary students to any of the remaining 3 elementary schools with a limited amount of unfilled capacity or to the new elementary school to be opened in 2008 in the Palm City area. Please note that the new elementary school to be opened in 2008 is planned to have a capacity of 750 students and will provide enrollment relief to Palm City, Bessey Creek, Crystal Lake, Pinewood, and Seawind Elementary Schools.

Dr. Sara A. Wilcox, Superintendent of Schools
School Board Members: Dr. David L. Anderson • Laurie Gaylord • Susan J. Hershey • Nancy Kline • Lorie Shekailo

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The Indiantown Middle School currently is capped at 450 student stations as part of a master planned remodeling/upgrading of the facility. With programmatic adjustments, this school has a capacity of 405 student stations at 90% utilization. Current enrollment, discounting the 5th graders from Warfield, is 339 students or 84% currently filled capacity. It is not feasible given the geographical distance and age of students, to transport middle school students to the any existing coastal schools that may have unfilled capacity.

There is currently no high school in Indiantown. Approximately 500 students from the Indiantown area are currently bussed to South Fork High School. South Fork High School is currently at 129% filled capacity. The next closest high school, Martin County High School, is also over capacity.

There has been a tentative offer from the developer for an approximately 50 acre school site to mitigate the developments impacts but no agreements have been reached and discussions are on-going.

The School District's current 5-Year Work Program did not anticipate the impacts of this proposed development and no funding source for the construction of the required schools is available unless the funds are diverted from other planned projects. The District's ability to fund new student stations is limited by available capital funding sources which consist primarily of the two mills allowed by statute and impact fee revenues. Impact fees have only recently been raised and have historically contributed a very limited amount to school construction. In order to fund the school construction needed to serve this development, an additional funding source will be necessary.

District Staff Analysis:

Given the lack of available funds and the lack of available school capacity in this area of the county, the School District recommends that the developer contribute the following as a part of the DRI proposal:

1. Dedication of construction-ready buildable school site/s totaling approximately 50 acres to be utilized for educational facilities determined by the School Board
2. A development agreement that assures full financial contribution toward the construction cost of the schools necessary to serve this proposed community – approximately .39 elementary school, .13 middle school and .11 high school. The agreement should ensure that funds are provided in sufficient time to construct the schools when needed to serve the new development.

We appreciate the opportunity to provide comments regarding this proposed DRI and look forward to a continued collaborative effort with the developer and Treasure Coast Regional Planning Council as this DRI is processed. If you have any questions, please call me at (772) 219-1200, ext 30211.

Sincerely,

J. Lisle Bozeman

J. Lisle Bozeman
Capital Projects Planning Specialist
Martin County School District

cc: Dr. Sara Wilcox, Superintendent
Doug Griffin, School Board Attorney
Julie Sessa, Martin, Director of Facilities
Rodger Osborne, Executive Director of Operations
Marshall Skinner, Executive Director of Applied Technology, Career Development & Community Education
Michael J. Busha, Executive Director Treasure Coast Regional Planning Council

CENTEX HOMES

RECEIVED
DEC 05 2006
TREASURE COAST
REGIONAL PLANNING COUNCIL

December 4, 2006

Mr. Michael J. Busha
Executive Director
Treasure Coast Regional Planning Council
301 East Ocean Boulevard, Suite 300
Stuart, FL 34994

RE: Indiantown DRI Application

Dear Michael:

Thank you for the time you spent with us today to review the recommendations that you and your staff are preparing on our project. As we had discussed, I am attaching the calculations of the land acreage requirements needed to accommodate the students to be generated from our project.

Since the time that the School District generated their letter to the Council, they have lowered the student generation rate from the .4 used in their letter to the overall countywide student generation number of .259 per household. I included the land needs from our other projects within Indiantown so that you can see the large difference between our impact, 9.72 acres on the DRI, and what we have offered to the school district of 50 acres. Even if you add the impact from our two PUD's, the acreage required only totals 16.08 acres.

The proportionate share of classroom construction costs noted in the School District's letter is also based upon a .4 student generation rate. We are requesting that the School District revise their letter to your Council to reflect the .259 generation rate that they announced at their workshop on November 14th so that it reflects the current position of the School Board. I have attached a schedule which converts the percentages shown in the letter to the percentages that would be calculated using the .259 student generation rate.

Thank you again for your time and the efforts of all your staff in working with us on our DRI submittal. I truly appreciate the fairness that you bring to the process.

Sincerely,

Kathleen Breland
Vice President

Attachments

3301 Quantum Boulevard, First Floor, Boynton Beach, FL 33426 • www.CentexHomes.com
Phone: 561.536.1000 • Fax: 561.536.1060

Martin County School Land Requirements for Centex Homes Indiantown Projects

INDIANTOWN DRI

Indiantown DRI Total Potential Units	1,650
Countywide Student Generation Rate *	0.259
Students Generated	427

	Student Mix by School Type *	Students by School Type	School Capacity by School Type *	Centex Percentage of New School	Acreage Requirement by School *	Total Acreage Required
Elementary	44.6%	190.4	750	25.4%	15	3.81
Middle	24.2%	103.3	1,200	8.6%	30	2.58
High	31.2%	133.2	1,800	7.4%	45	3.33
		427.0				**9.72**

OTHER CENTEX PROJECTS IN INDIANTOWN

Additional Acreage Requirements from other Centex projects:

Gibb PUD Total Homes	630
Owen's Grove PUD Total Homes	449
	1,079
Countywide Student Generation Rate *	0.259
Students Generated	279

	Student Mix by School Type *	Students by School Type	School Capacity by School Type *	Centex Percentage of New School	Acreage Requirement by School *	Total Acreage Required
Elementary	44.6%	124.4	750	16.6%	15	2.49
Middle	24.2%	67.5	1,200	5.6%	30	1.69
High	31.2%	87.0	1,800	4.8%	45	2.18
		279.0				6.35

Total Acreage Requirements for Indiantown DRI, Gibb PUD and Owen's Grove PUD	16.08

* Note - Student generation numbers, % mix by school type, school acreage requirements and school capacity figures all provided by Martin County School District.

Martin County School District Proportionate Share Calculations for Centex Homes Indiantown Projects

Calculations used by School District in Letter to Treasure Coast Regional Planning Council

		Elementary	Middle	High	Total
% Mix by School Type		44.6%	24.2%	31.2%	100.0%
Indiantown DRI	1,650	736	399	515	1,650
Student Generation = .4/household		0.4	0.4	0.4	
Students Generated from Indiantown DRI		294.40	159.60	206.00	
Total School Capacity		750	1200	1800	
Proportionate Share % at .4 Rate		39.3%	13.3%	11.4%	

Calculations Revised to Reflect New Student Generation Rate Agreed to by School District

Indiantown DRI	1,650	736	399	515	1,650
Student Generation = .259/household		0.259	0.259	0.259	
Students Generated from Indiantown DRI		190.62	103.34	133.39	
Total School Capacity		750	1200	1800	
Proportionate Share % at .4 Rate		25.4%	8.6%	7.4%	

MEMORANDUM	
TO	Peter G. Merritt, Regional Ecologist
FROM	Kim DeLaney, Growth Management Coordinator
DATE	December 6, 2006
RE	Indiantown DRI – Educational Facilities Policy Analysis

The purpose of this memorandum is to provide a policy analysis of educational issues for the proposed Indiantown DRI. This roughly 800-acre project proposes 1,650 new dwelling units in the Indiantown area of western Martin County. Based on the Martin County School District student generation rate (0.259), the project is expected to generate roughly 427 new students as follows: 191 elementary school students, 103 middle school students, and 133 high school students. This is a significant departure from the School District's student populations historically associated with this area. According to current local and state policies, this will generate the demand for 25% of a new elementary school, 9% of a new middle school, and 7% of a new high school. These new school facility demands represent unanticipated construction costs of approximately $15.4 Million in addition to land and infrastructure costs, according to current School District estimates.

MARTIN COUNTY SCHOOL DISTRICT – REVIEW SUMMARY

The proposed DRI will require significant and extensive modifications for the School District's current plans and projections for this area. The School District's adopted Capital Construction Plan does not anticipate the impacts of the proposed development, and as a result, it has no funding sources for the planning, design, construction, or infrastructure provision for any of the new school sites necessary to support the impacts of the development in an appropriate manner. In its review of the proposed development, the School District states it has "exhausted all available capital funding sources," and further, funds would either (1) need to be diverted from other planned projects, or (2) new revenue sources must be identified to fund the school facilities necessary to support the proposed development.

For capital construction, the School District has limited funding sources for new school construction. In addition to impact fees, the School District imposes a discretionary two-mil surtax to fund capital operations, including remodeling or renovation of existing facilities and the maintenance of existing facilities. Historically in Martin County, this has left roughly only 10% of these funds over the past decade-plus to fund the construction of new student stations. The discretionary surtax provides an unreliable source of funds for the timely creation of new school facilities for several reasons. First, there is a significant delay in their collection, often exceeding twenty-four months from the completion of new residential units, which compromises the bonding integrity of this funding source. Second, the use of these funds requires State Department of Education approval, which ignores local programmatic measures geared to local student populations (e.g., advanced reading programs, smaller class sizes for specialty programs), therefore reducing the net available capacity of student stations. As a result, local school facilities must often exceed 120% of their "official" DOE capacity before additional student stations can be funded with discretionary dollars. As a result, the discretionary surtax dollars generated by future development cannot be relied upon to fund the

capital educational facilities necessitated by the proposed Indiantown development in a timely manner. Without other funding sources, the impacts from the proposed development will overburden existing school facilities for an unspecified period of time, unfairly impacting the educational quality of existing residents.

In its review of the project, the School District emphasizes its need for larger tracts of land within the County's urban service area to accommodate the impacts of this and other proposed developments in the area. The School District does not maintain an inventory of vacant suitably-sized school sites in the Indiantown area; therefore, it places its priority upon receipt of vacant land area (proportionate share "payment" in the form of land rather than dollars) to maintain the ability to provide school facilities.

Accordingly, in its review of the proposed development, the School District states it has "exhausted all available capital funding sources," and further, funds would either (1) need to be diverted from other planned projects, or (2) new revenue sources must be identified to fund the school facilities necessary to support the proposed development. The District has recommended the developer take the following actions:

(1) Dedicate a proportionate share of costs and land area for all types of schools necessitated by the development, with the priority upon the Martin County School Board's receipt of school sites suitably-sized to accommodate entire school facilities (e.g., fifteen acres of buildable land for an elementary school, thirty for a middle school, and sixty for a high school).

(2) Adopt a development agreement with the Martin County School District that assures financial and land contribution with an appropriate reimbursement for impact fees.

This analysis and recommendation is summarized in the following table.

Indiantown DRI - Educational Facilities Assessment (Financial & Acreage)

# Units		St Gen Rate	Total Students
1,222	SF units	0.259	316
428	MF units	0.259	111
1,650	total units		427

Total Size (ac)
804

Student Breakdown		New Students	School Size	% New School
Elem	45%	191	750	25.41%
Middle	24%	103	1200	8.62%
High	31%	133	1800	7.41%
	total	**427**		

New School Costs		% New Schools from Project	Project School Costs
Elem	$24,000,000	25.41%	$6,099,139
Middle	$46,000,000	8.62%	$3,964,384
High	$72,000,000	7.41%	$5,333,328
		total new school costs	**$15,396,851**

# Units		Impact Fees	Total Impact Fees
1,222	SF units	$4,555	$5,566,210
428	MF units	$4,374	$1,872,072
1,650	total units		**$7,438,282**

Indiantown DRI - Net Educational Facilities Assessment (Financial)

	# DU's	School Costs	Impact Fees	**Net Project Proportionate School Costs for Developer**
Build-Out	1,650	$15,396,851	$7,438,282	**$7,958,569**

Indiantown DRI - Net Educational Facilities Assessment (Acreage)

New School Buildable Acreage		% New Schools from Project	**Project Proportionate Share School Acreage**
Elem	15	25.41%	3.81
Middle	30	8.62%	2.59
High	60	7.41%	4.44
		Net Acreage Needed from Developer	**10.84**

MARTIN COUNTY COMPREHENSIVE PLAN – REVIEW SUMMARY

In the Intergovernmental Coordination Element of the Martin County Comprehensive Plan, Martin County is required to coordinate its Comprehensive Growth Management Plan with the plans of the Martin County School Board and other public entities. Policy 8.e specifically requires applicants requesting County approval of development projects obtain a "statement of no objection" from the School Board prior to final approval by the County. School facilities are also addressed extensively in the Future Land Use Element, which includes public facilities for education among the County's "quality of life standards." The County directs itself to manage growth and development in a fiscally efficient manner which is consistent with the capabilities of the natural and manmade systems and maintains quality of life standards acceptable to its citizens (Goal 4.4.A). Within the Implementation section of the element, the County is required to closely coordinate the timing, intensity, and design of future development by issuing development permits only after all requirements for schools and other infrastructure and services have been assured (Policy 4.6.D.2). Land development is required to "bear a full share of the cost of the provision of the new or expanded capital facilities required by such development" (Policy 4.6.D.6). This requirement is reiterated in Policy 14.4.A.2 whereby future development is required to "pay for the full cost of the capital improvements needed to address the impact of such development." It should be noted the County's Capital Improvements Element assigned a level of service standard to public educational facilities of one student station per enrolled student for elementary, middle, and high school students.

STRATEGIC REGIONAL POLICY PLAN – REVIEW SUMMARY

The Strategic Regional Policy Plan (SRPP) includes several pertinent strategies on this issue that should be noted. Strategies 4.3.2 and 4.3.9 address the coordination school facilities with the impacts of development. These strategies would be furthered by the developer funding the capital costs for school facilities necessitated by the development itself.

CHARTER SCHOOLS

Florida Statutes provides individuals the opportunity to create and operate charter schools in lieu of the traditional public school system. While some charter schools are able to maintain operational capacities, others have been successful initially, but failed to maintain adequate enrollment, thereby leading to their abandonment and conveyance (by default) to local school districts. In these instances, local school districts have "received" both the charter school population (students) as well as the charter school itself (buildings and facilities) if funded with impact fees. While state statutes provide strict regulation for public schools, no such regulation applies to charter school facilities. To prevent disproportionate expenditures of future school district capital funds, all charter school facilities funded with impact fees should be designed to meet the statutory State Requirements for Educational Facilities (SREF) standards. Further, to maintain operating efficiencies for local school districts, such facilities should be designed at their core (common areas, cafeteria, administrative facilities, media center, infrastructure) for the standard operating capacities for various types of schools operated by the local school district (e.g., Martin County School District sizes elementary

schools for 750 students, middle schools for 1,200 students, and high schools for 1,800 students).

CONCLUSION

As recommended by the Martin County School District, a developer agreement between the Martin County School District and the developer which assigns development costs and acreage as described above would be wholly consistent with the adopted School District Capital Facilities Plan, Martin County Comprehensive Plan, and Strategic Regional Policy Plan. Further, a direct financial and land area contribution by the developer to create the schools necessitated by the proposed development, with an emphasis on "payment" in the form of vacant land area, is the most appropriate mechanism to ensure the project's impacts will be mitigated without jeopardizing the ability for the School District to maintain projected capacities and facilities in Martin County.

APPENDIX C

Goals, Strategies and Policies

This appendix contains a summary of the goals, strategies and policies in the SRPP that are most relevant to the project. Please refer to the SRPP for a more complete discussion of regional issues and additional goals, strategies, and policies.

Future of the Region

MASTER PLAN

Goal 4.1: Future development should be part of existing or proposed cities, towns, or villages.

Goal 6.1: Create new neighborhoods and communities.

Goal 10.1: Neighborhoods and communities which are served by a variety of transportation modes.

Goal 15.1: Preferred forms of development which result in downtown redevelopment and infill, the containment of suburban sprawl and the creation of new cities, towns, and villages.

Goal 16.1: The formation of new towns, cities and villages.

Strategy 6.1.1: Encourage the formation of sustainable neighborhoods and communities.

Strategy 7.1.3: Promote improved community planning and urban design.

Strategy 7.2.1: Promote patterns of development which provide better opportunities for the transportation disadvantaged.

Strategy 7.3.1: Reduce vulnerability to natural and man-made disaster events through better transportation, land use and community planning.

Strategy 12.1.1: Encourage patterns of development and programs which improve the independence and self-sufficiency of children.

Strategy 13.1.1: Encourage patterns of development and programs which minimize dependency on the automobile, encourage and accommodate public transit, and reduce vehicle miles traveled and the amount of vehicle emission discharged into the atmosphere.

Strategy 16.1.1: Encourage and facilitate preferred forms of development.

Policy 6.1.1.1: New neighborhoods and districts should contain a balanced, well-planned, compatible mix of land uses appropriately located so that State, local and regional goals are achieved.

Policy 6.1.1.2: New neighborhoods and districts should have compact designs, with a mix of building types.

Policy 6.1.2.3: Require that an urban design study be prepared to evaluate development proposals in the countryside.

Policy 7.1.1.4: Urban design and architectural studies should be performed when evaluating residential and commercial projects. Such studies should analyze building typology and compatibility, land use mix and the overall impact of the project on the surrounding neighborhood or district.

Policy 7.1.3.1: Encourage patterns and forms of development and redevelopment that maximize public transportation alternatives, minimize the use of the Region's collector and arterial roadway network, and reduce the total amount of daily vehicle miles traveled.

Policy 7.2.1.1: Encourage patterns and forms of development and redevelopment and street design that will improve mobility opportunities for transit dependent groups especially the poor, handicapped and young.

Policy 7.3.1.2: Plan and design new development and redevelopment to increase the ability of the internal and external roadway network to accommodate emergency traffic, enhance post disaster recovery efforts, and provide central locations for public shelters and emergency relief centers.

Policy 8.1.1.3: Encourage patterns of development which minimize the public cost for providing services, maximize the use of existing service systems and facilities and take into full consideration environmental/physical limitations.

Policy 9.1.1.1: Encourage patterns of development and programs which reduce dependency on the automobile, encourage and accommodate public transit, and reduce the overall use of fossil fuels.

Policy 10.1.1.1: Plan and design development to effectively accommodate alternative modes of transportation.

Policy 12.1.1.1: Consider the special mobility needs of children in all development proposals.

Policy 12.1.1.2: Encourage the location and provision of schools, parks, recreational and other uses (e.g., retail, civic uses, etc.) within biking or walking distance.

Policy 12.1.1.4: Provide sites for civic uses such as schools, parks and libraries within neighborhoods.

Policy 15.1.3.13: Make non-preferred forms of development occurring in undeveloped areas responsible for the full and true infrastructure costs to support the development through buildout.

Policy 16.1.1.1: Local governments should identify appropriate locations for preferred forms of development.

Policy 16.1.1.2: Future land use plans should be prepared for locations considered appropriate for new towns, cities, villages, neighborhoods and districts.

Transportation

RIGHTS OF WAY

Policy 7.1.1.1: Reserve and protect sufficient road right-of-way on the regional roadway network to provide for an efficient multi-modal transportation system.

EXTERNAL ROADWAY IMPROVEMENTS

Goal 8.1: Public facilities which provide a high quality of life.

Strategy 8.1.1: Provide levels of public services necessary to achieve a high quality of life, cost effective.

Policy 8.1.1.1: All development should take place concurrent with or after the provision of necessary infrastructure and services.

INTERSECTION IMPROVEMENTS

Goal 8.1: Public facilities which provide a high quality of life.

Strategy 8.1.1: Provide levels of public services necessary to achieve a high quality of life, cost effective.

Policy 8.1.1.1: All development should take place concurrent with or after the provision of necessary infrastructure and services.

ACCESS DRIVEWAYS

Goal 7.1: A balanced and integrated transportation system.

Strategy 7.1.3: Promote improved community planning and urban design.

Policy 7.1.3.1: Encourage patterns and forms of development and redevelopment that maximize public transportation alternatives, minimize the use of the Region's collector and arterial roadway network, and reduce the total amount of daily vehicle miles traveled.

ANNUAL REPORTING AND MONITORING

Goal 8.1: Public facilities which provide a high quality of life.

Strategy 8.1.1: Provide levels of public services necessary to achieve a high quality of life, cost effective.

Policy 8.1.1.1: All development should take place concurrent with or after the provision of necessary infrastructure and services.

NEIGHBORHOOD IMPACTS

Policy 7.1.2.1: Assist public and private agencies and entities in implementing TDM strategies that reduce congestion, energy use and the number of single-occupant auto trips.

Policy 7.1.2.2: Give consideration during the planning of transportation system expansion to providing incentives for use of high-occupancy vehicles and alternative modes of transportation (e.g., car pools, van pools, buses, bicycles, etc.).

Policy 7.1.2.3: Increase land use densities and the mix of land uses around commuter rail stations and at strategic locations along designated public transportation corridors where consistent with other local and regional goals and strategies.

Policy 7.1.2.4: Develop and redevelop downtowns and strategic locations along designated public transportation corridors. In order to improve the feasibility of public transportation, residential densities should be no less than 8 units per acre.

Policy 7.1.2.5: Develop a regional roadway system of predictably spaced and interconnected east-west, north-south streets. Ideally, streets should be spaced every one-quarter to one-half mile to offer multiple route choices, disperse traffic, and discourage local travel on interstates and arterials.

Policy 7.1.3.2: Suggests planning development to provide interconnections for pedestrians and public transportation within and between residential areas, schools, employment and retail centers, recreational areas and other public facilities.

Policy 7.1.3.3: An urban design study should be prepared prior to the development and redevelopment of building sites or changes to the street network.

Policy 7.1.3.5: Orient buildings toward streets to create better pedestrian environments.

Policy 7.1.3.6: Locate buildings so they are as convenient and accessible to public transportation facilities and sidewalks as they are to auto parking.

Policy 7.1.3.7: Locate parking to the sides and backs of buildings so that pedestrian access and access from public transportation does not require walking through large parking lots to reach building entrances.

Policy 7.1.3.9: Design and locate parking lots and garages to enhance pedestrianism and the character and attractiveness of the area, and to encourage use of alternate modes of transportation.

Strategy 7.1.4: Encourage public transportation alternatives.

Policy 7.1.4.1: Review and where necessary amend public policy governing parking requirements to support "transit first" policies and to promote public transit as a viable alternative in high density areas, designated public transportation corridors, and central business districts.

Policy 7.1.4.2: Have new development or redevelopment provide transit ridership amenities (shelters, route information, and schedules) and appropriate and effective incentives whenever transit use is assumed or required to maintain acceptable roadway level of service.

Policy 7.1.4.4: Support requests for lower levels of service and establishment of transportation concurrency exception areas in higher density areas, downtowns, and along designated public transportation corridors where it can be demonstrated that levels of mobility and convenience will be maintained or increased through other modes of transportation or land use corrections.

Policy 7.1.4.5: Support development and implementation of corridor management plans which are consistent with the SRPP.

Human Resource Issues

HOUSING

Goal 2.1: An adequate supply of safe and affordable housing to meet the needs of the very low, low, and moderate-income residents of the Region.

Goal 2.2: A range of housing types and affordabilities in proximity to employment and services.

Strategy 2.1.1: Create a planning/regulatory climate which is conducive to the production of affordable housing.

Strategy 2.1.2: Create and expand public/private partnerships among all entities involved in the provision of affordable housing including financial institutions, developers, contractors, government agencies, social service and other non-profit organizations, churches and realtors.

Strategy 2.2.1: Ensure that all areas have a reasonable mix of housing, employment opportunities, and services.

Policy 2.1.1.1: Local governments should reduce unnecessary regulatory barriers which make it more difficult to build affordable housing. Examples of such barriers are large lot sizes, minimum unit size and floor space, and setbacks.

Policy 2.1.1.2: Local governments should allow zero lot line development, cluster development, accessory apartments, high-density zoning, mixed-use buildings, modified site improvement standards, alternate construction techniques, etc.

Policy 2.1.1.4: Local governments should consider the enactment of incentives such as density bonuses, linkage programs, and inclusionary housing policies.

Policy 2.1.1.5: Local governments should designate adequate sites where affordable housing can be developed.

Policy 2.1.2.1: Work closely with non-profit organizations who are interested in sponsoring housing projects which serve very low, low and moderate-income residents.

Environment and Natural Resources

UPLAND PRESERVATION

Strategy 1.1.1: Preserve and manage complete natural systems as a network of connected nature preserves.

Strategy 6.1.1: Preserve and manage natural systems as a network of connected nature preserves and promote the establishment of greenway systems in the region.

Policy 6.7.1.2: Development plans should be designed to maximize the amount of protected habitat. Protected natural communities and ecosystems should be preserved in viable condition with intact canopy, under-story, and ground cover. Where possible, preserve areas should be designed to interconnect with other natural areas that have been set aside for preservation. A restoration and management plan for the protected areas should be developed.

As a minimum baseline measure for consistency with the SRPP, Council strives to achieve protection of 25 percent of upland natural communities in the evaluation of development plans. Council supports the maximum protection of natural communities,

and recommends that more than 25 percent of the upland habitat be preserved where appropriate.

Policy 6.7.1.9: Preserve areas should be designed to protect integrated systems of uplands and wetlands.

Strategy 6.8.1: Preserve areas should be designed and established to protect endangered and potentially endangered species.

Policy 7.1.2.6: Redirect development patterns away from interstates and major arterials to town and neighborhood centers along collector and minor arterials.

Policy 8.1.1.3: Encourage patterns of development which minimize the public cost for providing services, maximize the use of existing service systems and facilities and take into full consideration environmental/physical limitations.

LISTED SPECIES

Strategy 1.1.1: Preserve and manage complete natural systems as a network of connected nature preserves.

Strategy 6.8.1: Preserve areas should be designed and established to protect endangered and potentially endangered species.

Policy 6.8.1.2: All endangered and potentially endangered plant and animal populations should be protected and all habitat of significant value to existing populations of endangered and threatened species should be preserved and protected.

WETLANDS

Policy 6.6.1.1: No activity should be allowed that results in the alteration, degradation, or destruction of wetlands and deepwater habitats, except when:

1. Such an activity is necessary to prevent or eliminate a public hazard;

2. Such an activity would provide direct public benefits which would exceed those lost to the public as a result of habitat alteration, degradation, or destruction;

3. Such an activity is proposed for habitats in which the functions and values currently provided are significantly less than those typically associated with such habitats and cannot be reasonably restored;

4. Such an activity is water dependent or, due to the unique geometry of the site, minimal impact is the unavoidable consequence of development for uses, which are appropriate given site characteristics.

Policy 6.6.1.2: Whenever any wetland or deepwater habitat is degraded or destroyed, mitigation should be provided through the creation of new wetland and deepwater habitat, through the restoration of degraded habitat, or through the enhancement of functions and values provided by existing habitats.

Policy 6.6.1.3: A buffer zone of native upland edge vegetation should be provided and maintained around wetland and deepwater habitats, which are constructed or preserved on new development sites. The buffer zone may consist of preserved or planted vegetation but should include canopy, under-story, and ground cover of native species only. The edge habitat should begin at the upland limit of any wetland or deepwater habitat.

EXOTIC SPECIES

Policy 6.7.1.4: All nuisance and invasive exotic vegetation listed by the Florida Exotic Pest Plant Council should be removed and where appropriate replaced with plant species adapted to existing soil and climatic conditions. Removal should be in such a manner that avoids seed dispersal by any such species. State and federal agencies and local governments should coordinate and assist in the removal and replacement of nuisance exotic pest species.

STORMWATER MANAGEMENT

The following strategy and policies in the SRPP apply to the project:

Strategy 1.1.2: Promote compatibility of urban areas, regional facilities, natural preserves and other open spaces.

Policy 6.3.1.1: All new, reconstructed or substantially expanded storm and surface water management systems should be designed and constructed to meet state water quality standards. Where feasible, retention is the preferred method for treatment of stormwater, recharging the aquifer, and protecting the region's estuaries.

Policy 6.3.1.2: A vegetated and functional littoral zone should be established as part of new surface water management systems where possible. Prior to construction of the surface water management system for any phase of a project, the developer should prepare a design and management plan for the wetland/littoral zone that will be established as part of these systems. The littoral zone established should consist entirely of native vegetation and should be maintained permanently as part of the water management system.

Policy 6.3.1.6: Design drainage systems that maintain the natural discharge pattern of stormwater from a site.

WATER SUPPLY

Goal 8.1: Public facilities which provide high quality of life.

Strategy 8.1.1: Provide levels of public services necessary to achieve a high quality of life, cost effectively.

Policy 8.1.1.1: All development should take place concurrent with or after the provision of the necessary infrastructure and services.

Goal 6.2: A regional water supply managed to provide for all recognized needs on a sustainable basis.

Strategy 6.2.1: Develop and implement water conservation programs.

Policy 6.2.1.1: Use reclaimed wastewater for irrigation and other suitable purposes when such use is determined to be feasible.

Policy 6.2.1.3: Protect natural communities on development sites as a method to reduce the need for irrigation.

Policy 6.2.1.4: In order to protect and conserve the water resources of the Region and southern Florida to ensure the availability for future generations:

1. All landscaping material used on the primary dune system should be composed of native plants adapted to soil and climatic conditions occurring on-site. In all other locations the majority of landscaped areas should be composed of native or drought tolerant plants adapted to soil and climatic conditions occurring on-site.

2. The lowest acceptable quality water should be used to meet nonpotable water demands.

3. Potable water rates should be structured to encourage conservation.

4. All new and expanding wastewater treatment facilities should make reclaimed wastewater available for use in irrigation. Where possible, all new development should rely on wastewater reuse for irrigation.

5. Use of water saving device, irrigation systems, and plumbing fixtures should be required to the maximum extent justified. Where appropriate, existing systems should be retrofitted to make use of the most cost efficient water saving devices.

6. Leak detection programs should be developed and implemented.

WASTEWATER MANAGEMENT

Goal 8.1: Public facilities which provide high quality of life.

Strategy 8.1.1: Provide levels of public services necessary to achieve a high quality of life, cost effectively.

Policy 8.1.1.1: All development should take place concurrent with or after the provision of the necessary infrastructure and services.

HURRICANE PREPAREDNESS

Goal 5.2: Reduced vulnerability to disasters.

Strategy 5.2.1: Utilize land use, transportation, and community planning processes to address vulnerability issues.

Policy 5.2.1.1: Plan and design new development and redevelopment to increase the ability of the internal and external roadway network to accommodate emergency traffic, enhance post disaster recovery efforts, and provide natural central locations for public shelters and emergency relief centers.

Regional Goal 5.3: Adequate and safe shelter within the Region for residents in coastal high hazard and floodplain areas.

Strategy 5.3.1: Provide shelter space for residents of areas susceptible to flooding from the effects of hurricanes and other storms.

Policy 5.3.1.10: In accordance with State, local, and regional hurricane evacuation studies and emergency evacuation plans, require new developments to fully mitigate impacts on existing public shelter capacities by providing additional shelter space which can safely accommodate the development's residents who are likely to seek public shelter locally during a hurricane event.

SOLID WASTE AND HAZARDOUS MATERIALS

Goal 6.3: Protection of water quality and quantity.

Goal 8.1: Public facilities which provide a high quality of life.

Policy 8.1.1.1: All development should take place concurrent with or after the previsions of necessary infrastructure and services.

AIR QUALITY

Goal 13.1: Maintenance of acceptable air quality levels

Strategy 13.1.1: Encourage patterns of development and programs which minimize dependency on the automobile, encourage and accommodate public transit, and reduce

vehicle miles traveled and the amount of vehicle emission discharged into the atmosphere.

Policy 13.1.1.1: Implement practices, which minimize airborne dust and particulate emission.

Strategy 7.1.3: Promote improved community planning and urban design.

Policy 7.1.3.1: Encourage patterns and forms of development and redevelopment that maximize public transportation alternatives, minimize the use of the Region's collector and arterial roadway network, and reduce the total amount of daily vehicle miles traveled.

Policy 7.1.3.4: Reduce VMT per capita by private automobile within the Region through a combination of the following:

(1) provision of public transportation alternatives;

(2) provision of housing opportunities in proximity to employment opportunities;

(3) provision of essential services and recreational opportunities in proximity to demand;

(4) concentration of commercial and other essential services;

(5) provision of a street network designed for the pedestrian the disabled, the automobile and transit;

(6) provision of parking in ways that will encourage pedestrianism and public transportation alternatives;

(7) provision of incentives encouraging infill and downtown redevelopment;

(8) support of public and private sector efforts to carry out TDM strategies that will reduce congestion; and

(9) expansion of commuter rail and intermodal connections.

POLICE AND FIRE PROTECTION

Goal 8.1: Public facilities which provide a high quality of life.

Strategy 8.1.1: Provide levels of public services necessary to achieve a high quality of life, cost effectively.

Policy 8.1.1.1: All development should take place concurrent with or after the provision of necessary infrastructure and services.

HISTORIC AND ARCHAEOLOGICAL SITES

Strategy 15.1.1: Identify and protect archaeological and historical resources in the Region.

ENERGY

Goal 9.1: Decreased vulnerability of the Region to fuel price increases and supply interruptions.

Strategy 9.1.1: Reduce the Region's reliance on fossil fuels.

Policy 9.1.1.1: Encourage patterns of development and programs, which reduce the dependency on the automobile, encourage and accommodate public transit, and reduce the overall use of fossil fuels.

Policy 9.1.1.3: Encourage energy efficient buildings. Strategies should include: 1) proper siting according to solar orientation; b) design of passive architectural systems; c) site designs that provide shade to buildings; d) use of sustainable building materials; and e) use of solar mechanical systems.

ECONOMIC AND FISCAL IMPACTS

Policy 8.1.1.3: Encourage patterns of development, which minimize the public cost for providing services, maximize the use of existing service systems and facilities and take into full consideration environmental/physical limitations.

Policy 8.1.2.2: Give high priority to restoring or establishing new public facilities only in areas that have been designated as locations that will be built following preferred development form principles.

Strategy 3.4.1: Promote patterns of development, which allow public services and facilities to be provided more cost effectively.

Policy 3.4.1.3: Non-preferred forms of development, which occur in undeveloped areas should be responsible for and bear the full and true infrastructure costs to support the development through build out.

Policy 3.4.1.4: Develop a tiered system of impact fees which recognizes cost differences of providing public services to the development based on the size, type, form, location and service demands of the development proposed.

APPENDIX D

Wood Stork Habitat Guidelines

HABITAT MANAGEMENT GUIDELINES FOR THE WOOD STORK IN THE SOUTHEAST REGION

HABITAT MANAGEMENT GUIDELINES FOR THE WOOD STORK IN THE SOUTHEAST REGION

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HABITAT MANAGEMENT GUIDELINES FOR THE WOOD STORK IN THE SOUTHEAST REGION

Introduction

A number of Federal and state laws and/or regulations prohibit, cumulatively, such acts as harrassing, disturbing, harming, molesting, pursuing, etc., wood storks, or destroying their nests (see Section VII). Although advisory in nature, these guidelines represent a biological interpretation of what would constitute violations of one or more of such prohibited acts. Their purpose is to mainain and/or improve the environmental conditions that are required for the survival and well-being of wood storks in the southeastern United States, and are designed essentially for application in wood stork/human activity conflicts (principally land development and human intrusion into stork use sites). The emphasis is to avoid or minimize detrimental human-related impacts on wood storks. These guidelines were prepared in consultations with state wildlife agencies and wood stork experts in the four southeastern states where the wood stork is listed as Endangered (Alabama, Florida, Georgia, South Carolina).

General

The wood stork is a gregarious species, which nests in colonies (rookeries), and roosts and feeds in flocks, often in association with other species of long-legged water birds. Storks that nest in the southeastern United States appear to represent a distinct population, separate from the nearest breeding population in Mexico. Storks in the southeastern U.S. population have recently (since 1980) nested in colonies scattered throughout Florida, and at several central-southern Georgia and coastal South Carolina sites. Banded and color-marked storks from central and southern Florida colonies have dispersed during non-breeding seasons as far north as southern Georgia, and the coastal counties in South Carolina and southeastern North Carolina, and as far west as central Alabama and northeastern Mississippi. Storks from a colony in south-central Georgia have wintered between southern Georgia and southern Florida. This U.S. nesting population of wood storks was listed as endangered by the U.S. Fish and Wildlife Service on February 28, 1984 (*Federal Register* 49(4):7332-7335).

Wood storks use freshwater and estuarine wetlands as feeding, nesting, and roosting sites. Although storks are not habitat specialists, their needs are exacting enough, and available habitat is limited enough, so that nesting success and the size of regional populations are closely regulated by year-to-year differences in the quality and quantity of suitable habitat. Storks are especially sensitive to environmental conditions at feeding sites; thus, birds may fly relatively long distances either daily or between regions annually, seeking adequate food resources.

All available evidence suggests that regional declines in wood stork numbers have been largely due to the loss or degradation of essential wetland habitat. An understanding of the qualities of good stork habitat should help to focus protection efforts on those sites

that are seasonally important to regional populations of wood storks. Characteristics of feeding, nesting, and roosting habitat, and management guidelines for each, are presented here by habitat type.

I. **Feeding habitat.**

A major reason for the wood stork decline has been the loss and degredation of feeding habitat. Storks are especially sensitive to any manipulation of a wetland site that results in either reduced amounts or changes in the timing of food availability.

Storks feed primarily (often almost exclusively) on small fish between 1 and 8 inches in length. Successful foraging sites are those where the water is between 2 and 15 inches deep. Good feeding conditions usually occur where water is relatively calm and uncluttered by dense thickets of aquatic vegetation. Often a dropping water level is necessary to concentrate fish at suitable densities. Conversely, a rise in water, especially when it occurs abruptly, disperses fish and reduces the value of a site as feeding habitat.

The types of wetland sites that provide good feeding conditions for storks include: drying marshes or stock ponds, shallow roadside or agricultural ditches, narrow tidal creeks or shallow tidal pools, and depressions in cypress heads or swamp sloughs. In fact, almost any shallow wetland depression where fish tend to become concentrated, either through local reproduction or the consequences of area drying, may be used by storks.

Nesting wood storks do most of their feeding in wetlands between 5 and 40 miles from the colony, and occasionally at distances as great as 75 miles. Within this colony foraging range and for the 110-150 day life of the colony, and depending on the size of the colony and the nature of the surrounding wetlands, anywhere from 50 to 200 different feeding sites may be used during the breeding season.

Non-breeding storks are free to travel much greater distances and remain in a region only for as long as sufficient food is available. Whether used by breeders or non-breeders, any single feeding site may at one time have small or large numbers of storks (1 to 100+), and be used for one to many days, depending on the quality and quantity of available food. Obviously, feeding sites used by relatively large numbers of storks, and/or frequently used areas, potentially are the more important sites necessary for the maintenance of a regional population of birds.

Differences between years in the seasonal distribution and amount of rainfall usually mean that storks will differ between years in where and when they feed. Successful nesting colonies are those that have a large number of feeding site options, including sites that may be suitable only in years of rainfall extremes. To maintain the wide range of feeding site options requires that many different wetlands, with both relatively short and long annual hydroperiods, be preserved. For example, protecting only the larger wetlands, or those with longer annual hydroperiods, will result in the eventual loss of smaller, seemingly less important wetlands. However, these small scale wetlands are crucial as the only available feeding sites during the wetter periods when the larger habitats are too deeply flooded to be used by storks.

II. Nesting habitat.

Wood storks nest in colonies, and will return to the same colony site for many years so long as that site and surrounding feeding habitat continue to supply the needs of the birds. Storks require between 110 and 150 days for the annual nesting cycle, from the period of courtship until the nestlings become independent. Nesting activity may begin as early as December or as late as March in southern Florida colonies, and between late February and April in colonies located between central Florida and South Carolina. Thus, full term colonies may be active until June-July in south Florida, and as late as July-August at more northern sites. Colony sites may also be used for roosting by storks during other times of the year.

Almost all recent nesting colonies in the southeastern U.S. have been located either in woody vegetation over standing water, or on islands surrounded by broad expanses of open water. The most dominant vegetation in swamp colonies has been cypress, although storks also nest in swamp hardwoods and willows. Nests in island colonies may be in more diverse vegetation, including mangroves (coastal), exotic species such as Australian pine (*Casuarina*) and Brazilian Pepper (*Schinus*), or in low thickets of cactus (*Opuntia*). Nests are usually located 15-75 feet above ground, but may be much lower, especially on island sites when vegetation is low.

Since at least the early 1970's, many colonies in the southeastern U.S. have been located in swamps where water has been impounded due to the construction of levees or roadways. Storks have also nested in dead and dying trees in flooded phosphate surface mines, or in low, woody vegetation on mounded, dredge islands. The use of these altered wetlands or completely "artificial" sites suggests that in some regions or years storks are unable to locate natural nesting habitat that is adequately flooded during the normal breeding season. The readiness with which storks will utilize water impoundments for nesting also suggests that colony sites could be intentionally created and maintained through long-term site management plans. Almost all impoundment sites used by storks become suitable for nesting only fortuitously, and therefore, these sites often do not remain available to storks for many years.

In addition to the irreversible impacts of drainage and destruction of nesting habitat, the greatest threats to colony sites are from human disturbance and predation. Nesting storks show some variation in the levels of human activity they will tolerate near a colony. In general, nesting storks are more tolerant of low levels of human activity near a colony when nests are high in trees than when they are low, and when nests contain partially or completely feathered young than during the period between nest construction and the early nestling period (adults still brooding). When adult storks are forced to leave their nests, eggs or downy young may die quickly (<20 minutes) when exposed to direct sun or rain.

Colonies located in flooded environments must remain flooded if they are to be successful. Often water is between 3 and 5 feet deep in successful colonies during the nesting season. Storks rarely form colonies, even in traditional nesting sites, when they are dry, and may abandon nests if sites become dry during the nesting period. Flooding in colonies may be most important as a defense against mammalian predators. Studies of stork colonies in Georgia and

Florida have shown high rates of raccoon predation when sites dried during the nesting period. A reasonably high water level in an active colony is also a deterrent against both human and domestic animal intrusions.

Although nesting wood storks usually do most feeding away from the colony site (>5 miles), considerable stork activity does occur close to the colony during two periods in the nesting cycle. Adult storks collect almost all nesting material in and near the colony, usually within 2500 feet. Newly fledged storks, near the end of the nesting cycle, spend from 1-4 weeks during the fledging process flying locally in the colony area, and perched in nearby trees or marshy spots on the ground. These birds return daily to their nests to be fed. It is essential that these fledging birds have little or no disturbance as far our as one-half mile within at least one or two quadrants from the colony. Both the adults, while collecting nesting material, and the inexperienced fledglings, do much low, flapping flight within this radius of the colony. At these times, storks potentially are much more likely to strike nearby towers or utility lines.

Colony sites are not necessarily used annually. Regional populations of storks shift nesting locations between years, in response to year-to-year differences in food resources. Thus, regional populations require a range of options for nesting sites, in order to successfully respond to food availability. Protection of colony sites should continue, therefore, for sites that are not used in a given year.

III. **Roosting habitat.**

Although wood storks tend to roost at sites that are similar to those used for nesting, they also use a wider range of site types for roosting than for nesting. Non-breeding storks, for example, may frequently change roosting sites in response to changing feeding locations, and in the process, are inclined to accept a broad range of relatively temporary roosting sites. Included in the list of frequently used roosting locations are cypress "heads" or swamps (not necessarily flooded if trees are tall), mangrove islands, expansive willow thickets or small, isolated willow "islands" in broad marshes, and on the ground either on levees or in open marshes.

Daily activity patterns at a roost vary depending on the status of the storks using the site. Non-breeding adults or immature birds may remain in roosts during major portions of some days. When storks are feeding close to a roost, they may remain on the feeding grounds until almost dark before making the short flight. Nesting storks traveling long distances (>40 miles) to feeding sites may roost at or near the latter, and return to the colony the next morning. Storks leaving roosts, especially when going long distances, tend to wait for mid-morning thermals to develop before departing.

IV. Management zones and guidelines for feeding sites.

To the maximum extent possible, feeding sites should be protected by adherence to the following protection zones and guidelines:

A. There should be no human intrusion into feeding sites when storks are present. Depending upon the amount of screening vegetation, human activity should be no closer than between 300 feet (where solid vegetation screens exist) and 750 feet (no vegetation screen).

B. Feeding sites should not be subjected to water management practices that alter traditional water levels or the seasonally normal drying patterns and rates. Sharp rises in water levels are especially disruptive to feeding storks.

C. The introduction of contaminants, fertilizers, or herbicides into wetlands that contain stork feeding sites should be avoided, especially those compounds that could adversely alter the diversity and numbers of native fishes, or that could substantially change the characteristics of aquatic vegetation. Increase in the density and height of emergent vegetation can degrade or destroy sites as feeding habitat.

D. Construction of tall towers (especially with guy wires) within three miles, or high power lines (especially across long stretches of open country) within one mile of major feeding sites should be avoided.

V. **Management zones and guidelines for nesting colonies.**

A. Primary zone: This is the most critical area, and must be managed according to recommended guidelines to insure that a colony site survives.

1. Size: The primary zone must extend between 1000 and 1500 feet in all directions from the actual colony boundaries when there are no visual or broad aquatic barriers, and never less than 500 feet even when there are strong visual or aquatic barriers. The exact width of the primary zone in each direction from the colony can vary within this range, depending on the amount of visual screen (tall trees) surrounding the colony, the amount of relatively deep, open water between the colony and the nearest human activity, and the nature of the nearest human activity. In general, storks forming new colonies are more tolerant of existing human activity, than they will be of new human activity that begins after the colony has formed.

2. Recommended Restrictions:

a. Any of the following activities within the primary zone, at any time of the year, are likely to be detrimental to the colony:

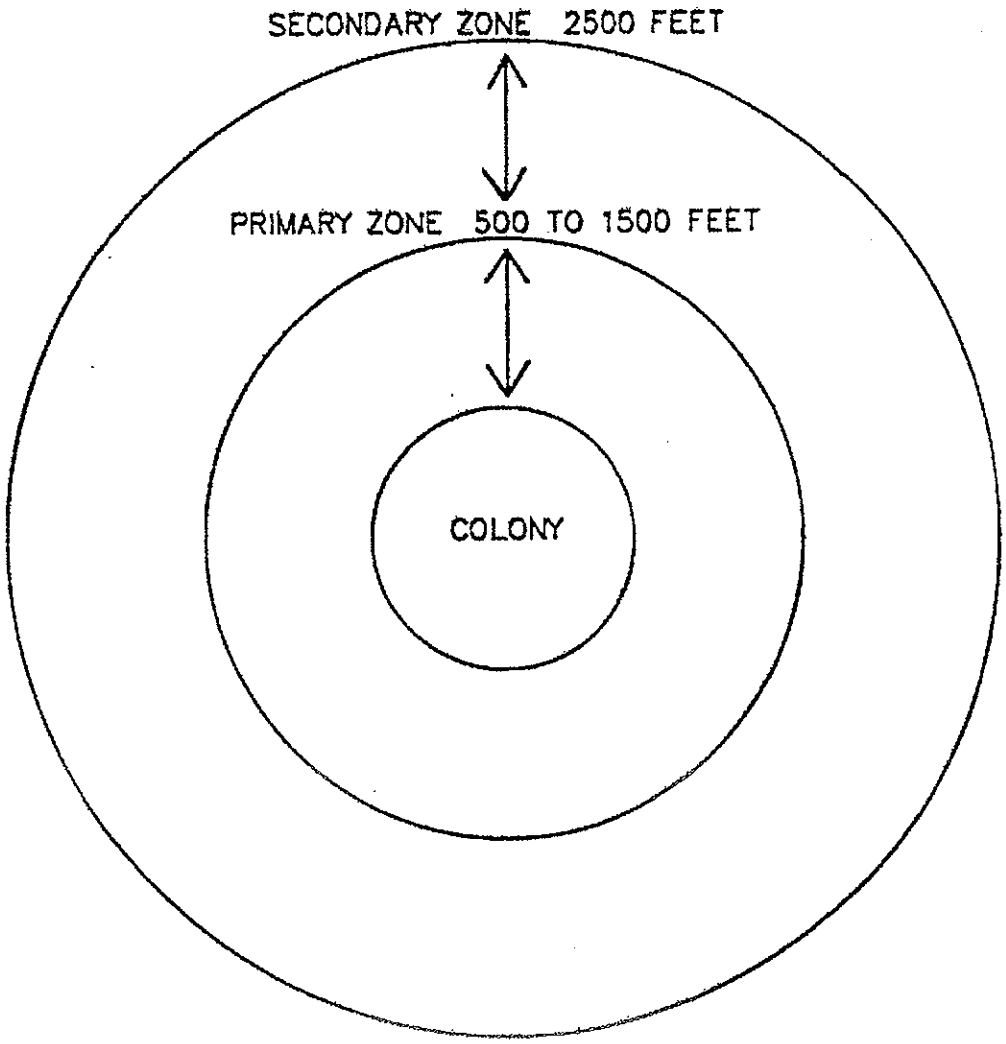
(1) Any lumbering or other removal of vegetation, and

(2) Any activity that reduces the area, depth, or length of flooding in wetlands under and surrounding the colony, except where periodic (less than annual) water control may be required to maintain the health of the aquatic, woody vegetation, and

(3) The construction of any building, roadway, tower, power line, canal, etc.

b. The following activities within the primary zone are likely to be detrimental to a colony if they occur when the colony is active:

(1) Any unauthorized human entry closer than 300 feet of the colony, and


SECONDARY ZONE 2500 FEET
PRIMARY ZONE 500 TO 1500 FEET
COLONY

(2) Any increase or irregular pattern in human activity anywhere in the primary zone, and

(3) Any increase or irregular pattern in activity by animals, including livestock or pets, in the colony, and

(4) Any aircraft operation closer than 500 feet of the colony.

B. Secondary Zone: Restrictions in this zone are needed to minimize disturbances that might impact the primary zone, and to protect essential areas outside of the primary zone. The secondary zone may be used by storks for collecting nesting material, for roosting, loafing, and feeding (especially important to newly fledged young), and may be important as a screen between the colony and areas of relatively intense human activities.

1. Size: The secondary zone should range outward from the primary zone 1000-2000 feet, or to a radius of 2500 feet of the outer edge of the colony.

2. Recommended Restrictions:

a. Activities in the secondary zone which may be detrimental to nesting wood storks include:

(1) Any increase in human activities above the level that existed in the year when the colony first formed, especially when visual screens are lacking, and

(2) Any alteration in the area's hydrology that might cause changes in the primary zone, and

(3) Any substantial (>20 percent) decrease in the area of wetlands and woods of potential value to storks for roosting and feeding.

b. In addition, the probability that low flying storks, or inexperienced, newly-fledged young will strike tall obstructions, requires that high-tension power lines be no closer than one mile (especially across open country or in wetlands) and tall trans-mission towers no closer than 3 miles from active colonies. Other activities, including busy highways and commercial and residential buildings may be present in limited portions of the secondary zone at the time that a new colony first forms. Although storks may tolerate existing levels of human activities, it is important that these human activities not expand substantially.

VI. Roosting site guidelines.

The general characteristics and temporary use-patterns of many stork roosting sites limit the number of specific management recommendations that are possible:

A. Avoid human activities within 500-1000 feet of roost sites during seasons of the year and times of the day when storks may be present. Nocturnal activities in active roosts may be especially disruptive.

B. Protect the vegetative and hydrological characteristics of the more important roosting sites--those used annually and/or used by flocks of 25 or more storks. Potentially, roosting sites may, some day, become nesting sites.

VII. Legal Considerations.

A. Federal Statutes

The U.S. breeding population of the wood stork is protected by the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.)(Act). The population was listed as endangered on February 28, 1984 (49 Federal *Register* 7332); wood storks breeding in Alabama, Florida, Georgia, and South Carolina are protected by the Act.

Section 9 of the Endangered Species Act of 1973, as amended, states that it is unlawful for any person subject to the jurisdiction of the United States to take (defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.") any listed species anywhere within the United States.

The wood stork is also federally protected by its listing (50 CFR 10.13) under the Migratory Bird Treaty Act (167 U.S.C. 703-711), which prohibits the taking, killing or possession of migratory birds except as permitted.

B. State Statutes

1. State of Alabama

Section 9-11-232 of Alabama's Fish, Game, and Wildlife regulations curtails the possession, sale, and purchase of wild birds. "Any person, firm, association, or corporation who takes, catches, kills or has in possession at any time, living or dead, any protected wild bird not a game bird or who sells or offers for sale, buys, purchases or offers to buy or purchase any such bird or exchange same for anything of value or who shall sell or expose for sale or buy any part of the plumage, skin, or body of any bird protected by the laws of this state or who shall take or willfully destroy the nests of any wild bird or who shall have such nests or eggs of such birds in his possession, except as otherwise provided by law, shall be guilty of a misdemeanor...

Section 1 of the Alabama Nongame Species Regulation (Regulation 87-GF-7) includes the wood stork in the list of nongame species covered by paragraph (4). " It shall be unlawful to take, capture, kill, possess, sell, trade for anything of monetary value, or offer to sell or trade for anything of monetary value, the following nongame wildlife species (or any parts or reproductive products of such species) without a scientific collection permit and written permission from the Commissioner, Department of Conservation and Natural Resources,..."

2. State of Florida

Rule 39-4.001 of the Florida Wildlife Code prohibits "taking, attempting to take, pursuing, hunting, molesting, capturing, or killing (collectively defined as "taking"), transporting, storing, serving, buying, selling,

possessing, or wantonly or willingly wasting any wildlife or freshwater fish or their nests, eggs, young, homes, or dens except as specifically provided for in other rules of Chapter 39, Florida Administrative Code.

Rule 39-27.011 of the Florida Wildlife Code prohibits "killing, attempting to kill, or wounding any endangered species." The "Official Lists of Endangered and Potentially Endangered Fauna and Flora in Florida" dated 1 July 1988, includes the wood stork, listed as "endangered" by the Florida Game and Fresh Water Fish Commission.

3. State of Georgia

Section 27-1-28 of the Conservation and Natural Resources Code states that "Except as otherwise provided by law, rule, or regulation, it shall be unlawful to hunt, trap, fish, take, possess, or transport any nongame species of wildlife..."

Section 27-1-30 states that, "Except as otherwise provided by law or regulation, it shall be unlawful to disturb, mutilate, or destroy the dens, holes, or homes of any wildlife;

Section 27-3-22 states, in part, "It shall be unlawful for any person to hunt, trap, take, possess, sell, purchase, ship, or transport any hawk, eagle, owl, or any other bird or any part, nest, or egg thereof...".

The wood stork is listed as endangered pursuant to the Endangered Wildlife Act of 1973 (Section 27-3-130 of the Code). Section 391-4-13-.06 of the Rules and Regulations of the Georgia Department of Natural Resources prohibits harassment, capture, sale, killing, or other actions which directly cause the death of animal species protected under the Endangered Wildlife Act. The destruction of habitat of protected species on public lands is also prohibited.

4. State of South Carolina

Section 50-15-40 of the South Carolina Nongame and Endangered Species Conservation Act states, "Except as otherwise provided in this chapter, it shall be unlawful for any person to take, possess, transport, export, process, sell, or offer of sale or ship, and for any common or contract carrier knowingly to transport or receive for shipment any species or subspecies of wildlife appearing on any of the following lists: (1) the list of wildlife indigenous to the State, determined to be endangered within the State...(2) the United States' List of Endangered Native Fish and Wildlife... (3) the United States' List of Endangered Foreign Fish and Wildlife ..."

U.S. Fish and Wildlife Service
Supplemental
Habitat Management Guidelines
for the
Wood Storks
In The
South Florida Ecological Services
Consultation Area
June 28, 2002

Introduction

The purpose of these supplemental guidelines is to provide assistance to the user in addressing species-specific resource questions for the endangered wood stork (*Mycteria americana*) in south Florida. These supplemental guidelines provide guidance in addressing species effects associated with consultations with the South Florida Ecological Services Office under sections 7 and 10 of the Endangered Species Act of 1973, as amended (87 Stat. 884; 16 U.S.C. 1531 et seq.). These supplemental guidelines are in addition to the *Habitat Management Guidelines for the Wood Stork in the Southeast Region* (HMG - Service 1990), which is the principle guidance that the Service relies on to provide management options for wood stork colony protection and species recovery.

The following discussion is intended to provide the user with some of the basic science and reasoning for the recommended supplemental wood stork habitat management guides. More detailed discussions of the ecology of the wood stork are available in the *South Florida Multi-species Recovery Plan* (Service 1999), *Wood Stork Recovery Plan* (1996), and *Species Profile: Wood Storks on Military Installations in the Southeastern United States* (Mitchell 1999).

Colony

Wood storks nest in colonies and will return to the same colony site for many years so long as the site and the surrounding feeding habitat continues to supply the needs of the birds. Nesting colony life averages 115 to 120 days. Nest sites are generally in woody vegetation over standing water, or on islands surrounded by broad expanses of open water. In south Florida, wood storks generally begin their breeding cycle in November through January with peek activity in December. Nestling dispersal is in late April through early May. In central and north Florida and other northern nesting sites, nesting activities begin in late February through April with nestling dispersal between July through August.

In response to deteriorating habitat conditions in south Florida, nest initiation has shifted to February or March with nestling dispersal in July through August. This shift results in the presence of young in the nest when the May-June rains flood marshes and disperse fish, resulting in loss of nestlings to weather events or starvation of the young from lack of concentrated prey.

Nest Productivity

Researchers (Kahl 1964 and Rodgers *et al.*, 1987) have shown that the more successful nesting efforts by storks result from a combination of average or above-average rainfall during the summer rainy season and an absence of unusually rainy or cold weather during the winter-spring nesting season. This pattern produces widespread and prolonged flooding of summer marshes that maximize production of freshwater fishes, followed by steady drying that concentrate fish during the dry season when storks nest (Kahl 1964). During the summer months, the rains saturate thousands of acres of Florida, and fish are able to reproduce and grow rapidly. By October, the rains taper off and the water recedes. The water areas fragment into hundreds of individual ponds that slowly shrink as the dry season progresses, concentrating the fish.

Successful nesting colonies are also those that have a large number of feeding site options. To maintain the wide range of feeding site options requires that many different wetlands, with both relatively short and long annual hydroperiods be present. During the wet season, wood storks generally feed in the shallow water of the short-hydroperiod wetlands and in coastal habitats during low tide. During the dry season, foraging shifts to longer hydroperiod interior wetlands as they progressively dry down (although usually retaining some surface water throughout the dry season) (Fleming, *et al.*, 1994).

Good feeding conditions usually occur where the water is relatively calm and uncluttered by dense thickets of aquatic vegetation and successful foraging sites are those where the water is between 2 and 15 inches deep. Generally a dropping water level is necessary to concentrate fish in suitable densities. Conversely, a rising water level disperses fish and reduces the value of a site as a feeding habitat. Typical wet season densities of fish range from 50 fish/m^2 in long-hydroperiod wetlands to 10 fish/m^2 in short-hydroperiod wetlands (Loftus and Eklund 1994). Average weight of the fish is 1.73 g (Ogden *et al.* 1980). Based on the above, 5 acres of short hydroperiod wetlands would be necessary to provide the same nutritional needs that one acre of long hydroperiod wetlands would provide. However, each wetland type provides foraging needs during different times of the year and as such, are not interchangeable.

Nesting wood storks do most of their feeding between 5 and 40 miles from the colony. Coulter (1987) found that in a wood stork colony, 62% of foraging areas were within 10 km. Ogden *et al.* (1978) and Coulter (1987) suggest that wood storks generally use foraging sites that are located within about 50 km (31 miles) flight range of the colony. Coulter and Bryan (1993) note that although foraging areas may be 60 to 80 km (37 to 50 miles) from the colony, 85 percent are within 20 km (12.5 miles). The Florida Fish and Wildlife Conservation Commission considers 30 km (18.6 miles) as the core foraging area (CFA) for nesting wood storks (Cox *et al.* 1994).

Successful colonies are also those that have limited human disturbance and those where land-based mammalian predation is limited. If adult storks are forced to leave their nests as a result of human disturbance, eggs or downy young may die quickly (< 20 minutes) when exposed to

direct sun or rain. Rodgers and Smith (1997) have recommended a buffer distance of 100 meters (325 feet) from the nesting colony as the minimum distance for human disturbances.

Land based mammalian predators may also affect nest productivity. Mammalian predators of wood stork nests include a variety of land based animals such as racoons and skunks. Generally, these dry-land predators do not have access to the nesting colony except when water levels below the nests recede or when significant vegetation bridges (dense growths of water hycanthes, water lettuce, etc.) allow direct access to the nesting colony. Successful nesting colonies from land based predators have been characterized as those that are surrounded by large expanses of open water, or those where the nest trees are inundated at the onset of nesting and remain inundated throughout most of the breeding cycle. Successful nesting colonies often have water depths between 3 and 5 feet deep during the nesting season and also go through periodic dry-downs during the tail-end of the dry season. The periodic dry-down facilitates recruitment of nest trees. Therefore, an important parameter in colony success from land-based predation is the hydroperiod (duration that an area is inundated) and hydropattern (depth, timing, flow, and location of surface water) beneath the colony.

Breeding Cycles

In South Florida, wood storks generally begin their breeding cycle in November, with peek activity in December. Nestling dispersal begins in late April and continues through early May. Based on a 120 day nesting cycle, courtship and nest building requires 7 to 10 days, egg laying and incubation requires 25 to 27 days, hatchling growth to thermoregulation (chicks have down and feathers) requires approximately 28 days, growth to fledging requires an additional 42 days, and post fledging to colony dispersal requires 10 to 15 days.

Rodgers and Schwikert (1997) report the greatest period of mortality occurs prior to hatching, with a second large mortality during the nestling period from hatchling to 2 weeks. During these early periods of the breeding cycle, the nest is tended by at least one of the adults with egg protection and feeding of the young shared by both. During early nesting, when downy young are present, the adults may feed the young as often as 10 to 15 times a day. Growth is very rapid with the young at age 14 days, weighing 10 times more than they did at hatching and 25 times heavier at 28 days (Service 2001). Fifty percent of the nestling wood stork's food requirements occur during the middle third of the nestling period (Kahl 1962), which corresponds to age 28 to 56 days.

Conclusion

In review, the Service believes that in order to minimize take of a listed species (loss of nest productivity) and to support recovery efforts for the wood stork, the following supplemental guidance is applicable for protection of the nest colony, primary and secondary zones, CFA, and adult foraging areas. The Service considers actions that affect the nest colony, primary and secondary zones, and CFA as direct effects and actions that affect wetlands outside the CFA as indirect effects.

1. Nest colony

a. No human intrusion within 100 meters (325 feet) during active nesting period (November through August). Range covers pre-drainage Everglades, post-drainage Everglades, and central and northern Florida nesting cycles. Colony entry for maintenance and management actions during other times of the year is acceptable. The nests and nest trees are protected year-round.

b. No reduction in water levels at nest site during active nesting period. Maintain hydroperiod cycle to provide minimum of 2 to 5 feet of standing water below colony during nest activity. Provide for periodic dry-down of nest colony to promote recruitment of new nest trees during latter part of dry weather cycle.

Since nest colony protection from land base predators (raccoons) is based on seasonal wet-dry cycles, coordinate changes in hydrology to match seasonal rainfall events.

1. South Florida hydroperiod - Nest colony flooded late October - early November, gradual drying out of foraging area with colony site dry late April early May. May - June rains begin wet cycle.

2. Central and north Florida hydroperiod - Nest colony flooded late February early May, gradual drying out of foraging area with colony site dry late August early September.

3. For dry island nesting colonies, water levels in the surrounding openwater should be managed to prevent land base predators from access to the colony.

2. Primary Zone - 1,300 feet (400 meters)

The primary zone includes the nest colony and a 1,300 foot radius surrounding the colony. Since some nest colonies can cover several acres in distance, the primary zone can be larger than 1,300 feet. Restrictions in the primary zone follow those listed in the management recommendation in the wood stork HMG (1990). Restrictions in the primary zone include both year-round restrictions and nesting-season restrictions.

a. Year round restrictions include vegetation removal, changes in hydroperiod, and the construction of buildings, roadways, towers, powerlines, or canals. Nuisance species removal and normal maintenance activities may occur outside the nesting season.

b. Nesting season restrictions include unauthorized human entry within 300 feet of colony, an increase or change in pattern of human activity anywhere within the primary zone, an increase or change in pattern of livestock (livestock should be restricted from

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entering colony any time of the year), or aircraft/airboat operation closer than 500 feet of the colony.

3. Secondary Zone - 2,500 feet (750 meters)

The secondary zone is important to storks for collecting nest material, roosting, loafing, and feeding (especially important to newly fledged young). Restrictions in the secondary zone include changes in human activity above existing levels, alterations in area hydrology that might affect hydrology of primary zone, and any decrease in the area of wetlands and woods of potential value to wood storks for roosting and feeding (see core foraging area restrictions, discussed below).

4. Powerline and cell tower restrictions (≤200-foot height) - no closer than 1 mile from rookery.

5. Towers greater than 200 feet - no closer than 3 miles from rookery.

6. Core foraging area (CFA) for Nesting Wood Storks (30 km - 18.6 miles)

The Service's goal in this portion of the protocol is to protect and enhance the foraging habitat for wood storks during the nesting season. For this purpose, the Service believes that the foraging range noted by the FWC is the appropriate distance. Therefore, in order to reduce loss of nest productivity (take of a listed species), the Service recommends the following for wetland alterations within the CFA, which also includes the primary and secondary zones.

a. Wetland enhancement, *i.e.*, exotic species removal and/or hydrological restorations may occur within the primary and secondary zones outside the nesting season and any time of the year for the remainder of the CFA. For wetland enhancements and hydrological restorations, the current and historic ratio of short hydroperiod and long hydroperiod wetlands needs to be identified. The importance of each type of wetland has been discussed and should be the basis for the type of wetlands targeted for restoration purposes.

b. Wetland alterations within the CFA of a wood stork colony need to compensate for the loss of this foraging resource. The Service believes that compensation needs to not only include the replacement of this resource but also needs to include compensation for the growth time (temporal lag) necessary for the new resource to achieve foraging value equal to that provided by the original wetland. The current resource value to the colony may be determined by the use a of wetland functional assessment protocol (use the currently accepted Federal/State assessment protocol). Of particular importance in the evaluation is the type of wetland, *i.e.*, short hydroperiod or long hydroperiod. The Service (1999) describes a short hydroperiod as a two to five month wet/dry cycle, and a long hydroperiod as greater than 5

months. For wetland compensation, providing a short hydroperiod replacement for a long hydroperiod impact does not provide the same functional value to the colony. Also providing functional replacement outside the CFA of the colony does not provide the same resource value to the colony.

7. Adult Foraging Areas, Year Round

In addition to south Florida wetlands providing nutritional needs to wood storks nesting in south Florida, they also provide non-breeding season foraging for north Florida, Georgia, and South Carolina's breeding populations (Service 1996). Typical foraging sites for the wood stork include freshwater marshes, stock ponds, shallow, and seasonally flooded roadside or agricultural ditches, narrow tidal creeks, shallow tidal pools, managed impoundments, and depressions in cypress heads, swamps, and sloughs. Because of their specialized feeding behavior, wood storks forage most effectively in shallow water areas with highly concentrated prey.

Therefore, for actions that affect year-round foraging areas, i.e., those outside the CFA, the Services recommends avoidance where possible, and functional replacement (including a temporal lag factor) for those systems that cannot be avoided. A wetland suitable for wood stork foraging needs to include a mosaic of emergent and shallow open water depressional areas. The emergent component provides nursery habitat for small fish, frogs, and aquatic insects and the shallow, openwater depressional areas provide sites for concentration of the prey during seasonal drying of the wetland. The compensation wetland needs to mimic when possible the historical hydroperiod of the impacted wetland.

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References

Coulter, M.C. 1989. Wood storks of the Birdsville colony and swamps of the Savannah River Plant. 1989 Annual Report. Savannah River Ecology Laboratory, Aiken USA. SREL-38/UC-66e. 284 pp.

Coulter, M.C. 1987. Foraging and breeding ecology of wood storks in east-central Georgia. P.21-27 in Odom, R.R., K.A. Riddleberg and J.C. Ozier (eds), Proc. Third Southeastern Nongame and Endangered Wildlife Symposium. Georgian Department of Natural Resources.

Coulter, M.C., and A.L. Bryan, Jr. 1993. Foraging ecology of wood storks (*Mycteria americana*) in east-central Georgia. I. Characteristics of foraging sites. Colonial Waterbirds 16:59-70.

Cox, J., R. Kautz, M. MacLaughlin, and T. Gilbert. 1994. Closing the Gaps in Florida's Wildlife Habitat Conservation System. Office of Environmental Services. Florida Game and Fresh Water Fish Commission. Tallahassee, Florida. 239 pp.

Fleming, D. M., J. Shortemeyer, W. Hoffman, and D.L. DeAnelis. 1994. Colonial wading bird reproduction in the pre- and post-drainage landscapes of the Everglades. *Oecologia* (in review).

Kahl, M.P., Jr. 1964. Food ecology of the wood stork (*Mycteria americana*) in Florida. Ecological Monographs 34:97-117.

Kahl, M.P., Jr. 1962. Bioenergetics of growth in nestling wood storks. Condor 64:169-183.

Loftus, W.F. and A.M. Ecklund. 1994. Long-term dynamics of an Everglades small-fish assembladge. *In* S. Davis and J. Ogden (eds.), Everglades: The ecosystem and its restoration. St. Lucie Press, Delray Beach, Florida.

Mitchell, W.A. 1999. Species profile: Wood stork (*Mycteria americana*) on military installations in the southeastern United States. Technical Report SERDP-99-2, U.S. Army Engineer Research and Development Center, Vicksburg, MS.

Ogden, J.C., C.H.K. Kale, III, and S.A. Nesbitt. 1980. The influence of annual variation in rainfall and water levels on nesting by Florida populations of wading birds. Transactions of the Linnean Society, N.Y. 9:115-126.

Ogden, J.C., J.A. Kushlan, and J.T. Tilmant. 1978. The food habits and nesting success of wood storks in the Everglades National Park. U.S. Department of the Interior, National Park Service Research Report No. 16. 25 pp.

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Rodgers, J.A. Jr., and S. T. Schwikert. 1997. Breeding success and chronology of wood storks Mycteria americana in northern and central Florida, USA. Ibis 139:76-91.

Rodgers, J.A. Jr., and H.T. Smith. 1997. Buffer zone distances to protect foraging and loafing waterbirds from human disturbance in Florida. Wild. Soc. Bull. 25:139-145.

Rodgers, J.A. Jr., A.S. Wenner, and S.T. Schwikert. 1987. Population dynamics of wood storks in northern and central Florida, USA. Colonial Waterbirds 10:151-156.

U.S. Fish and Wildlife Service. 2001. Wood stork conservation and management for landowners. Brochure produced jointly with the University of Georgia, Savannah River Ecology Laboratory. No. 1448-40181-00-G-090. U.S. Fish and Wildlife Service, Southeast Region, Atlanta GA. 12 pp.

U.S. Fish and Wildlife Service. 1999. South Florida multi-species recovery plan. U.S. Fish and Wildlife, Southeast Region, Atlanta GA.

U.S. Fish and Wildlife Service. 1996. Revised recovery plan for the U.S. breeding population of the wood stork. U.S. Fish and Wildlife Service, Southeast Region, Atlanta GA. 28 pp.

U.S. Fish and Wildlife Service. 1990. Habitat management guidelines for the wood stork in the Southeast Region. U.S. Fish and Wildlife Service, Southeast Region, Atlanta GA. 9 pp.

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APPENDIX E

Florida Exotic Pest Plant Council's 2005

List of Invasive Species

Purpose of the List: *To focus attention on --*

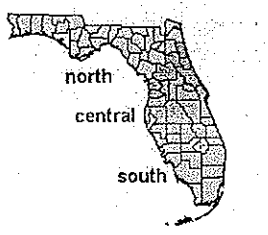
- the adverse effects exotic pest plants have on Florida's biodiversity and plant communities,
- the habitat losses from exotic pest plant infestations,
- the impacts on endangered species via habitat loss and alteration,
- the need to prevent habitat losses through pest-plant management,
- the socio-economic impacts of these plants (e.g., increased wildfires in certain areas),
- changes in the seriousness of different pest plants over time,
- the need to provide information that helps managers set priorities for control programs.

DEFINITIONS: *Exotic*—a species introduced to Florida, purposefully or accidentally, from a natural range outside of Florida. *Native*—a species whose natural range included Florida at the time of European contact (1500 AD). *Naturalized exotic*—an exotic that sustains itself outside cultivation (it is still exotic; it has not "become" native). *Invasive exotic*—an exotic that not only has naturalized but is expanding on its own in Florida plant communities.

Abbreviations used:

for "Gov. list": **P** = Prohibited by Fla. Dept. of Environmental Protection, **N** = Noxious weed listed by Fla. Dept. of Agriculture & Consumer Services, **U** = Noxious weed listed by U.S. Department of Agriculture.

for "Reg. Dis.": **N** = north, **C** = central, **S** = south, referring to each species' current distribution in general



regions of Florida (not its potential range in the state). See following map.

For additional information on distributions of particular species by county, visit the University of South Florida's Atlas of Florida Vascular Plants web site, www.plantatlas.usf.edu. **Many of those species entries also have habit and close-up pictures of the species.**
Additional images for some species may be found at the "Introduced Species" page on the Univ. of Florida Herbarium **website, at Fairchild Tropical Garden's** Virtual Herbarium, and the Godfrey Herbarium database, **Florida State University.**
For other additional information on plants included in this list, see related links and pages at this web site on the home page **menu.**

Category I - Invasive exotics that are altering native plant communities by displacing native species, changing community structures or ecological functions, or hybridizing with natives. *This definition does not rely on the economic severity or geographic range of the problem, but on the documented ecological damage caused.*

Scientific Name	Common Name	EPPC Cat.	Gov. list	Reg. Dist.
Abrus precatorius	rosary pea	I		C, S
Acacia auriculiformis	earleaf acacia	I		S
Albizia julibrissin	mimosa, silk tree	I		N, C
Albizia lebbeck	woman's tongue	I		C, S
Ardisia crenata (= *A. crenulata*)	coral ardisia	I		N, C
Ardisia elliptica (=*A. humilis*)	shoebutton ardisia	I		S
Asparagus aethiopicus (= *A. sprengeri*; *A. densiflorus* misapplied)	asparagus-fern	I		C, S
Bauhinia variegata	orchid tree	I		C, S
Bischofia javanica	bischofia	I		C, S
Calophyllum antillanum (=*C. calaba*; *C. inophyllum* misapplied)	santa maria (names "mast wood," "Alexandrian laurel" used in cultivation)	I		S
Casuarina equisetifolia	Australian pine	I	P	N,C,S
Casuarina glauca	suckering Australian pine	I	P	C, S
Cinnamomum camphora	camphor-tree	I		N,C,S
Colocasia esculenta	wild taro	I		N,C,S
Colubrina asiatica	lather leaf	I		S
Cupaniopsis anacardioides	carrotwood	I	N	C, S
Dioscorea alata	winged yam	I	N	N,C,S
Dioscorea bulbifera	air-potato	I	N	N,C,S
Eichhornia crassipes	water-hyacinth	I	P	N,C,S
Eugenia uniflora	Surinam cherry	I		C, S
Ficus microcarpa (*F. nitida* and *F. retusa* var. *nitida* misapplied)	laurel fig	I		C, S
Hydrilla verticillata	hydrilla	I	P, U	N,C,S
Hygrophila polysperma	green hygro	I	P, U	N,C,S
Hymenachne amplexicaulis	West Indian marsh grass	I		C, S
Imperata cylindrica (*I. brasiliensis* misapplied)	cogon grass	I	N, U	N, C, S
Ipomoea aquatica	waterspinach	I	P, U	C
Jasminum dichotomum	Gold Coast jasmine	I		C, S
Jasminum fluminense	Brazilian jasmine	I		C, S

Lantana camara	lantana, shrub verbena	I		N,C,S
Ligustrum lucidum	glossy privet	I		N, C
Ligustrum sinense	Chinese privet, hedge privet	I		N,C,S
Lonicera japonica	Japanese honeysuckle	I		N,C,S
Lygodium japonicum	Japanese climbing fern	I	**N**	N,C, S
Lygodium microphyllum	Old World climbing fern	I	**N**	C, S
Macfadyena unguis-cati	cat's claw vine	I		N,C, S
Manilkara zapota	sapodilla	I		S
Melaleuca quinquenervia	melaleuca, paper bark	I	**P, N, U**	C, S
Mimosa pigra	catclaw mimosa	I	**P, N, U**	C, S
Nandina domestica	nandina, heavenly bamboo	I		N, C
Nephrolepis cordifolia	sword fern	I		N,C,S
Nephrolepis multiflora	Asian sword fern	I		C, S
Neyraudia reynaudiana	Burma reed, cane grass	I	**N**	S
Paederia cruddasiana	sewer vine, onion vine	I	**N**	S
Paederia foetida	skunk vine	I	**N**	N,C
Panicum repens	torpedo grass	I		N,C,S
Pennisetum purpureum	Napier grass	I		C, S
Pistia stratiotes	waterlettuce	I	**P**	N,C,S
Psidium cattleianum (=P. littorale)	strawberry guava	I		C, S
Psidium guajava	guava	I		C, S
Pueraria montana var. *lobata (=P. lobata)*	kudzu	I	**N, U**	N,C, S
Rhodomyrtus tomentosa	downy rose-myrtle	I	**N**	C, S
Rhoeo spathacea (**see** *Tradescantia spathacea)*				
Rhynchelytrum repens	Natal grass	I		N, C, S
Ruellia tweediana (= *R. brittoniana)*	Mexican petunia	I		N, C, S
Sapium sebiferum (= *Triadeca sebifera)*	popcorn tree, Chinese tallow tree	I	**N**	N, C, S
Scaevola taccada (=Scaevola sericea, S. frutescens)	scaevola, half-flower, beach naupaka	I		C, S
Schefflera actinophylla (=Brassaia actinophylla)	schefflera, Queensland umbrella tree	I		C, S
Schinus terebinthifolius	Brazilian pepper	I	P, N	N, C, S
Senna pendula var. *glabrata (=Cassia coluteoides)*	climbing cassia, Christmas cassia, Christmas senna	I		C, S
Solanum tampicense (=S. houstonii)	wetland night shade, aquatic soda apple	I	**N, U**	C, S
Solanum viarum	tropical soda apple	I	**N, U**	N, C, S

Syngonium podophyllum	arrowhead vine	I		C, S
Syzygium cumini	jambolan, Java plum	I		C, S
Tectaria incisa	incised halberd fern	I		S
Thespesia populnea	seaside mahoe	I		C, S
Tradescantia fluminensis	white-flowered wandering jew	I		N, C
Tradescantia spathacea (= *Rhoeo spathacea, Rhoeo discolor*)	oyster plant	I		S
Urochloa mutica (= *Brachiaria mutica*)	Pará grass	I		C, S

Category II - Invasive exotics that have increased in abundance or frequency but have not yet altered Florida plant communities to the extent shown by Category I species. *These species may become ranked Category I, if ecological damage is demonstrated.*

Scientific Name	Common Name	EPPC Cat.	Gov. list	Reg. Dist.
Adenanthera pavonina	red sandalwood	II		S
Agave sisalana	sisal hemp	II		C, S
Aleurites fordii (= *Vernicia fordii*)	tung oil tree	II		N, C
Alstonia macrophylla	devil-tree	II		S
Alternanthera philoxeroides	alligator weed	II	P	N, C, S
Antigonon leptopus	coral vine	II		N, C, S
Aristolochia littoralis	calico flower	II		N, C
Asystasia gangetica	Ganges primrose	II		C, S
Begonia cucullata	wax begonia	II		N, C
Blechum pyramidatum	green shrimp plant, Browne's blechum	II		N, C, S
Broussonetia papyrifera	paper mulberry	II		N, C
Callisia fragrans	inch plant, spironema	II		C, S
Casuarina cunninghamiana	Australian pine	II	P	C, S
Cecropia palmata	trumpet tree	II		S
Cestrum diurnum	day jessamine	II		C, S
Chamaedorea seifrizii	bamboo palm	II		S
Clematis terniflora	Japanese clematis	II		N, C
Cryptostegia madagascariensis	rubber vine	II		C, S
Cyperus involucratus (*C. alternifolius*	umbrella plant	II		C, S

misapplied)				
Cyperus prolifer	dwarf papyrus	II		C
Dalbergia sissoo	Indian rosewood, sissoo	II		C, S
Elaeagnus pungens	thorny eleagnus	II		N, C
Epipremnum pinnatum cv. Aureum	pothos	II		C, S
Ficus altissima	false banyan, council tree	II		S
Flacourtia indica	governor's plum	II		S
Hemarthria altissima	limpo grass	II		C, S
Hibiscus tiliaceus	mahoe, sea hibiscus	II		C, S
Ipomoea fistulosa (= *I. carnea* ssp. *fistulosa*)	shrub morning-glory	II	**P**	C, S
Jasminum sambac	Arabian jasmine	II		S
Kalanchoe pinnata	life plant	II		C, S
Koelreuteria elegans ssp. *formosana* (= *K. formosana; K. paniculata* misapplied)	flamegold tree	II		C, S
Leucaena leucocephala	lead tree	II		N, C, S
Limnophila sessiliflora	Asian marshweed	II	**P**	N, C, S
Livistona chinensis	Chinese fan palm	II		C, S
Melia azedarach	Chinaberry	II		N,C,S
Merremia tuberosa	wood-rose	II		S
Murraya paniculata	orange-jessamine	II		S
Myriophyllum spicatum	Eurasian water-milfoil	II	**P**	N, C, S
Nymphoides cristata	snowflake	II		C, S
Panicum maximum	Guinea grass	II		C, S
Passiflora biflora	two-flowered passion vine	II		S
Pennisetum setaceum	green fountain grass	II		S
Phoenix reclinata	Senegal date palm	II		C, S
Pittosporum pentandrum	Philippine pittosporum, Taiwanese cheesewood	II		S
Phyllostachys aurea	golden bamboo	II		N, C
Pteris vittata	Chinese brake fern	II		N, C, S
Ptychosperma elegans	solitary palm	II		S
Ricinus communis	castor bean	II		N, C, S
Sansevieria hyacinthoides	bowstring hemp	II		C, S
Scleria lacustris	Wright's nutrush	II		C, S
Sesbania punicea	purple sesban, rattlebox	II		N, C, S
Solanum diphyllum	Two-leaf nightshade	II		N, C, S
Solanum jamaicense	Jamiaca nightshade	II		C
Solanum torvum	susumber, turkey berry	II	**N, U**	N, C, S
Sphagneticola trilobata	wedelia	II		N, C, S

(= *Wedelia trilobata*)				
Stachytarpheta urticifolia (= *S. cayennensis*)	nettle-leaf porterweed	II		S
Syagrus romanzoffiana (= *Arecastrum romanzoffianum*)	queen palm	II		C, S
Syzygium jambos	rose-apple	II		C, S
Terminalia catappa	tropical almond	II		C, S
Terminalia muelleri	Australian almond	II		C, S
Tribulus cistoides	puncture vine, burr-nut	II		N, C, S
Urena lobata	Caesar's weed	II		N, C, S
Vitex trifolia	simple-leaf chaste tree	II		C, S
Washingtonia robusta	Washington fan palm	II		C, S
Wedelia (see *Sphagneticola* above)				
Wisteria sinensis	Chinese wisteria	II		N, C
Xanthosoma sagittifolium	malanga, elephant ear	II		N, C, S

Citation example:

FLEPPC. 2005. List of Florida's Invasive Species. Florida Exotic Pest Plant Council. Internet: http://www.fleppc.org/05list.htm

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APPENDIX F

Transportation Methodology
Indiantown DRI

The Indiantown DRI project consists of approximately 804 acres located east of Allapattah Road (CR 609) in Indiantown, Martin County. Most of the project is located within the Indiantown Community Redevelopment Area (CRA). The preliminary development program for the mixed-use project calls for 1,800 residential units in a mix of single-family units and townhouses.

The project has been master planned in accordance with the Indiantown Community Redevelopment Plan. It is planned to be developed into three phases with phase buildout dates of 2010, 2015, and 2020. The following table summarizes the cumulative development for each phase:

Proposed Cumulative Development program and Phasing Schedule
Indiantown DRI

Land Use	Unit	Phase 1 (2010)	Phase 2 (2015)	Phase 3 (2020)
Single-Family	DUs	372	1,002	1,222
Townhouse	DUs	281	395	428
Commercial	SF	10,000	10,000	10,000
Office	SF	20,000	20,000	20,000
Community Park	Acres	-	25	25
Elementary School	Students	-	750	750

Trip Generation, Distribution and Assignment

Trip generation for the proposed project was determined in accordance with equations contained in the *Institute of Transportation Engineers (ITE) Trip Generation Report, 7th Edition.* The following table summarizes the gross a.m. and p.m. peak hour trip generation, for each development phase:

Gross Trip Generation
Indiantown DRI

Gross Trip Generation	Phase 1 (2010)	Phase 2 (2015)	Phase 3 (2020)
AM Peak Hour			
Total	480	1,232	1,396
In	158	425	465
Out	322	807	931
PM Peak Hour			
Total	728	1,383	1,563
In	397	792	907
Out	331	591	656

Given the mixed use nature of the development, a portion of the trips generated have the potential to be satisfied on site, and will have no impact to the external roadway network. These trips are referred to as internal capture. Internal trips between residential, commercial, parks, and school within the site were estimated for each phase based on the currently proposed development plan. The following table presents internal capture percentages used for each development phase:

Percentages of Internal Capture
Indiantown DRI

Internal Capture	Phase 1 (2010)	Phase 2 (2015)	Phase 3 (2020)
AM Peak Hour	2.1	11.7	10.9
PM Peak Hour	5.1	8.4	7.4

The net trip generation for all phases is presented in the following table:

Net Trip Generation
Indiantown DRI

Net Trip Generation	Phase 1 (2010)	Phase 2 (2015)	Phase 3 (2020)
AM Peak Hour			
Total	470	1,088	1,244
In	153	353	389
Out	317	735	855
PM Peak Hour			
Total	691	1,267	1,447
In	379	734	849
Out	312	533	598

Traffic distribution and assignment was estimated using the Treasure Coast Regional Planning Model which was revised based on local knowledge of the area. The distribution and assignment was agreed to by the review agencies. Figures TR-1 through TR-3 show traffic assignment for Phases 1, 2 and 3.

Significant Impact

Roadway improvements were determined based on the Department of Community Affair's Transportation Standard Rule for DRI's (Rule 9J-2.045, F.A.C.). Based on the rule, roadway improvements are recommended for roadways sections significantly impacted by project traffic which meet the following criteria:

- Project traffic is five percent (5%) or more of the adopted peak-hour/peak direction level of service; and
- Total traffic exceeds the adopted level of service (LOS).

Traffic Study

Background traffic conditions on the surrounding roadway network were projected as the sum of existing traffic volumes, ambient growth in the area, and traffic from committed developments. An area-wide compounded growth rate of 2.79% per year was applied to estimate ambient growth. Traffic from Palm Beach Biotechnology Research Park DRI, Palm Beach Park of Commerce DRI, North County General Aviation Airport, and Pratt Whitney was all considered as part of committed developments.

Project traffic was added to background traffic to estimate total traffic for each phase of development. Tables TR-1 through TR-6 presents the determination of total traffic at buildout of each phase for both the a.m. and the p.m. peak hours.

The analysis for Phase 1 (2010) indicates some significantly impacted links on SR 710 (Warfield Boulevard) are projected to exceed the generalized service volumes. These links were analyzed using the Florida Department of Transportation's HIGHPLAN 2002 Conceptual Planning Analysis Software. The analysis revealed that most of the links along SR 710 (with the exceptions of segments from CR 726 to SR 76 and from CR 609 to Indianwood Road) will operate at adopted levels of service.

Based on the analysis results, roadway and intersection improvements are recommended to maintain level of service standards. Figures TR-4 and TR-5 depict roadway links which require improvements for Phases 1 and 2. There are no roadway improvements necessary in Phase 3.

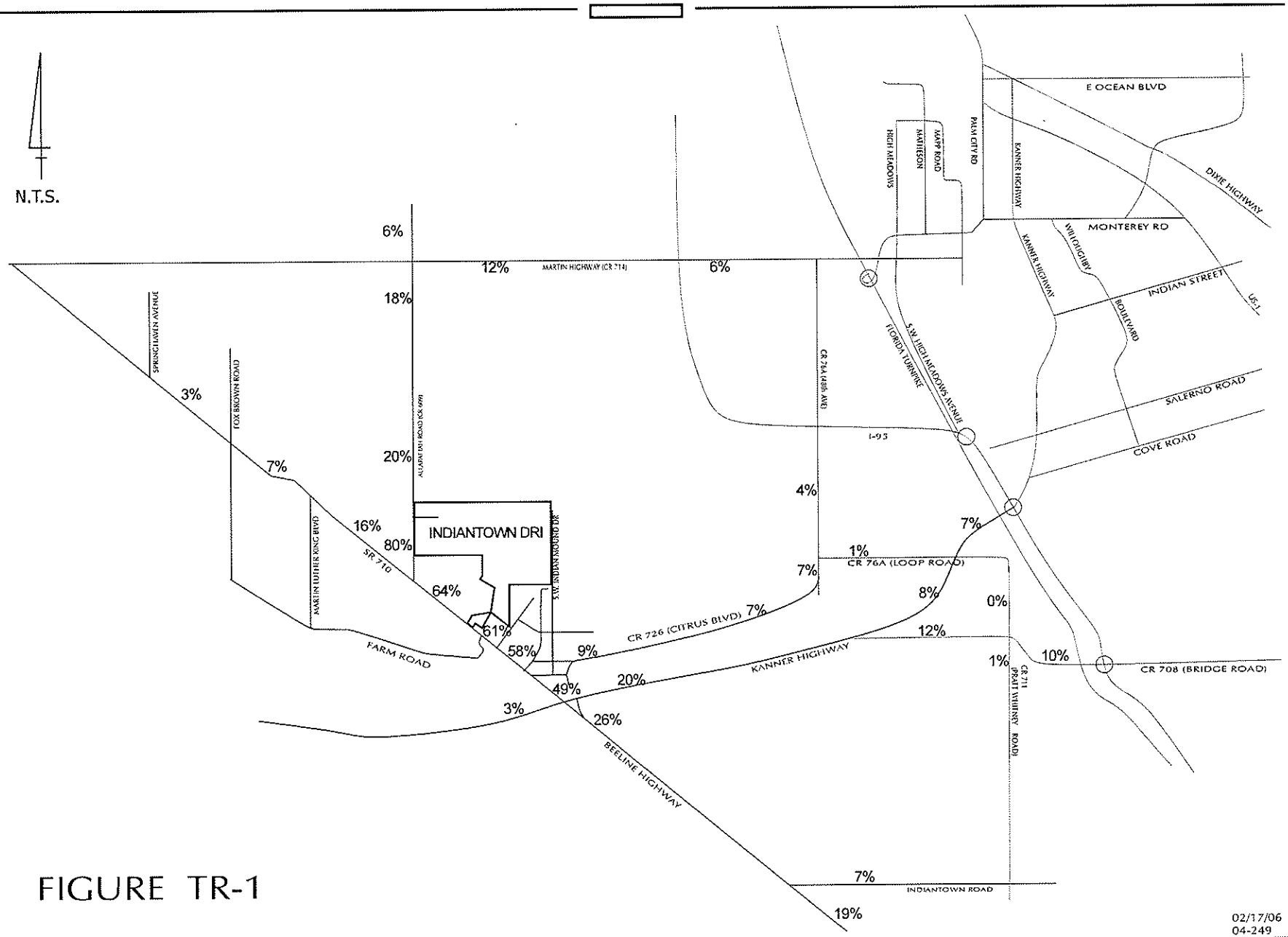
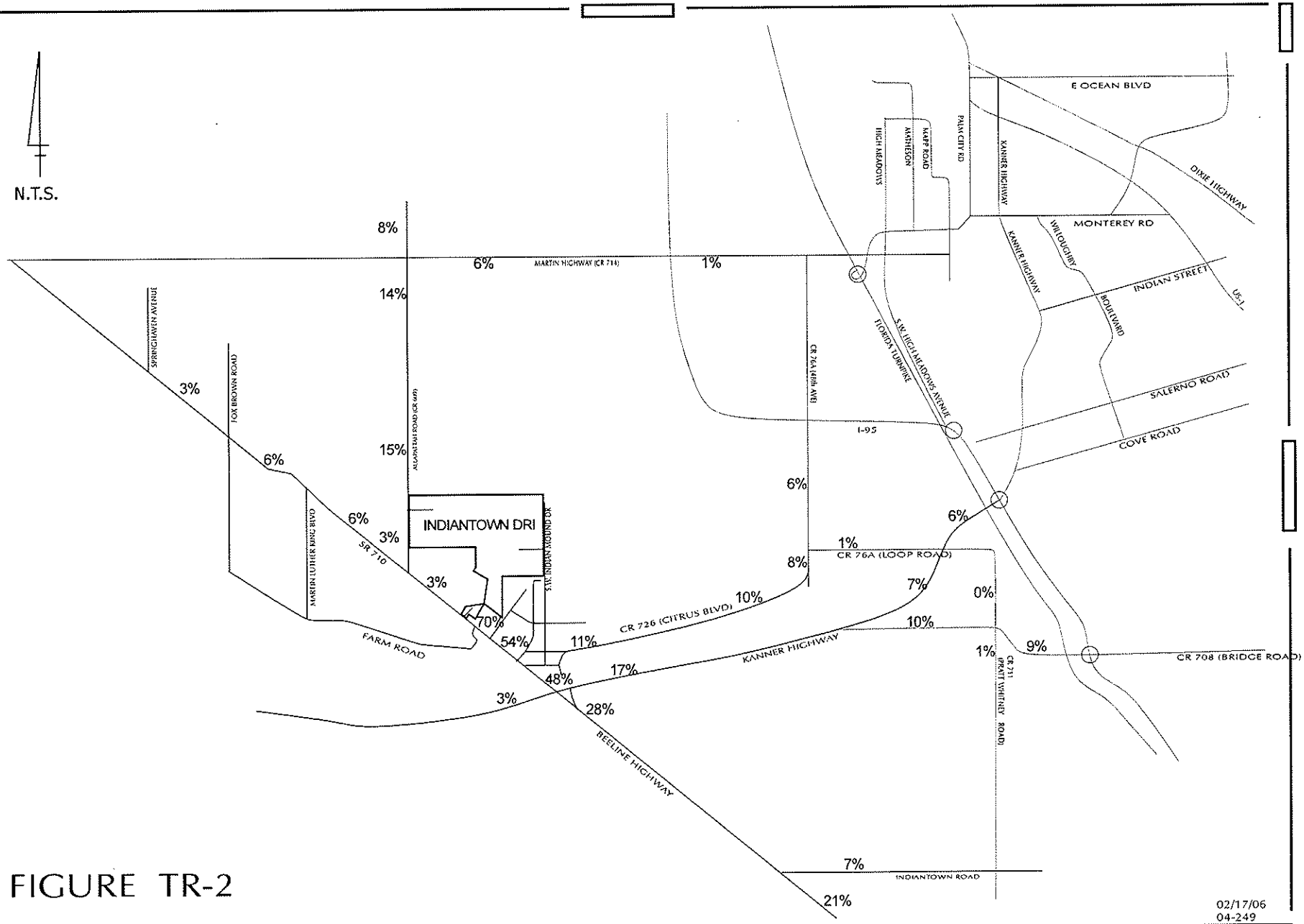


FIGURE TR-1

INDIANTOWN DRI	MAP J - E - 1	PHASE 1 (2010) PROJECT TRAFFIC DISTRIBUTION	PTC

02/17/06
04-249

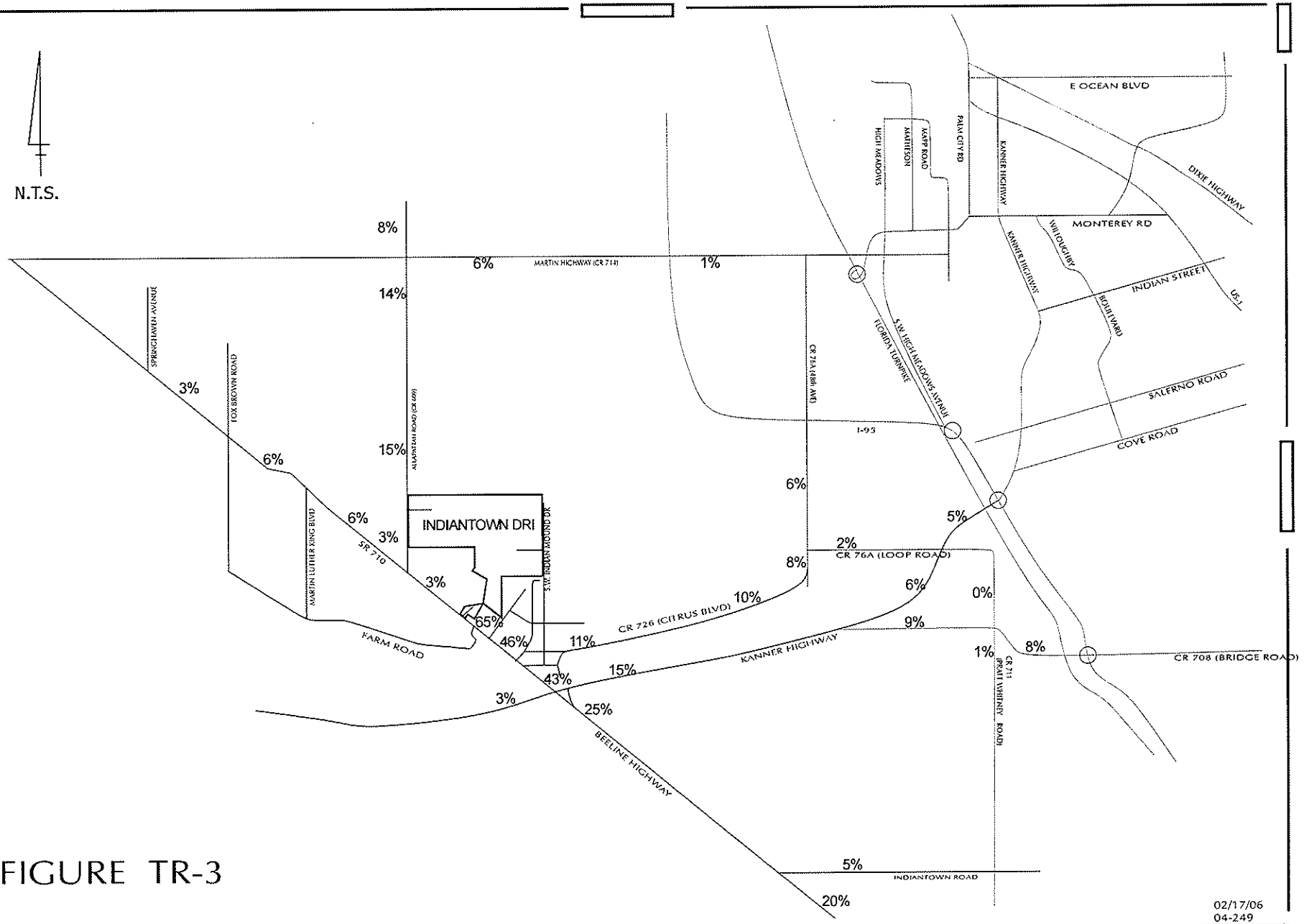


F-6

FIGURE TR-2

02/17/06
04-249

INDIANTOWN DRI	MAP J - E - 2	PHASE 2 (2015) PROJECT TRAFFIC DISTRIBUTION	PTC



F-7

FIGURE TR-3

INDIANTOWN DRI	MAP J - E - 3	PHASE 3 (2020) PROJECT TRAFFIC DISTRIBUTION	PTC

02/17/06
04-249

Table TR-1
Indiantown DRI
AM Peak Hour Directional Analysis - Phase 1 (2010)
With Existing + Committed Lanes

Roadway	Link	Dir	Committed # of Lanes	In/ Out	Existing Traffic 2004/ 2005	Source	Growth 2.79%	PBC Projects Traffic	Project Dist./ Assign	In 153 Out 317	Total Traffic (2010)	LOS Service Volume	Exceeds Generalized Service Volume ?	Project Impact %	Project Impact >5% ?
CR 609 Allapattah Road	SR 710 to Project Site	NB	2L	In	77	1	11	0	80%	122	210	870	no	14.1%	YES
		SB		Out	88	1	13	0	80%	254	355	870	no	29.1%	YES
	Project Site to CR714	NB	2L	Out	77	1	11	0	20%	63	151	870	no	7.3%	YES
		SB		In	88	1	13	0	20%	31	132	870	no	3.5%	no
	CR714 to SLC Line	NB	2L	Out	77	1	11	0	6%	19	107	820	no	2.3%	no
		SB		In	88	1	13	0	6%	9	110	820	no	1.1%	no
	SLC Line to Glades Cutoff Road	NB	2L	Out	77	1	11	0	6%	19	107	480	no	4.0%	no
		SB		In	88	1	13	0	6%	9	110	480	no	1.9%	no
CR 708 (Bridge Road)	SR 76 to CR 711	EB	2L	Out	88	2	16	0	12%	38	142	820	no	4.6%	no
		WB		In	26	2	5	0	12%	18	49	820	no	2.2%	no
	CR 711 to I-95	EB	2L	Out	226	1	33	21	10%	32	312	820	no	3.9%	no
		WB		In	257	1	38	84	10%	15	394	820	no	1.9%	no
CR 714/SR 714 (Martin Hwy.)	CR 609 to I-95	EB	2L	Out	211	3	38	0	12%	38	287	820	no	4.6%	no
		WB		In	200	3	36	0	12%	18	254	820	no	2.2%	no
	I-95 to CR76A	EB	2L	Out	510	1	75	0	6%	19	604	820	no	2.3%	no
		WB		In	511	1	75	0	6%	9	595	820	no	1.1%	no
CR 726 (Citrus Blvd.)	SR 710 to Canal	EB	2L	Out	220	2	39	0	9%	29	288	720	no	4.0%	no
		WB		In	73	2	13	0	9%	14	100	720	no	1.9%	no
	Canal to SR 76A	EB	2L	Out	231	2	41	0	7%	22	294	870	no	2.6%	no
		WB		In	70	2	13	0	7%	11	94	870	no	1.2%	no
CR 76A	SR 714 to CR 726	NB	2L	In	182	2	33	0	4%	6	221	870	no	0.7%	no
		SB		Out	186	2	33	0	4%	13	232	870	no	1.5%	no
SR 710	West of CR 714	EB	2L	In	325	1	58	0	3%	5	388	460	no	1.0%	no
		WB		Out	204	1	37	0	3%	10	251	460	no	2.1%	no
	CR 714 to Fox Brown Road	EB	2L	In	210	2	31	0	3%	5	246	460	no	1.0%	no
		WB		Out	126	2	19	0	3%	10	155	460	no	2.1%	no
	Fox Brown Road to MLK Blvd.	EB	2L	In	339	3	61	0	7%	11	411	460	no	2.3%	no
		WB		Out	312	3	56	0	7%	22	390	460	no	4.8%	no
	MLK Blvd. to CR 609	EB	2L	In	339	3	61	0	16%	24	424	460	no	5.3%	YES
		WB		Out	312	3	56	0	16%	51	419	460	no	11.0%	YES
	CR 609 to Indianwood Rd.	EB	2L	In	409	1	60	6	64%	98	573	690	no	14.2%	YES
		WB		Out	282	1	42	2	64%	203	529	690	no	29.4%	YES
	Indianwood Rd. to Farm Road	EB	4LD	In	438	1	65	21	61%	93	617	1730	no	5.4%	YES
		WB		Out	344	1	51	7	61%	193	595	1730	no	11.2%	YES
	Farm Rd. to CR 726	EB	4LD	Out	415	1	61	42	58%	184	702	1730	no	10.6%	YES
		WB		In	339	1	50	13	58%	89	491	1730	no	5.1%	YES
	CR 726 to SR 76	EB	2L	Out	496	1	73	100	49%	155	824	680	YES	22.8%	YES
		WB		In	352	1	52	26	49%	75	505	680	no	11.0%	YES
	SR 76 to P.B. County Line	EB	2L	Out	423	3	76	161	26%	82	742	680	YES	12.1%	YES
		WB		In	163	3	29	42	26%	40	274	680	no	5.9%	YES

Table TR-1
Indiantown DRI
AM Peak Hour Directional Analysis - Phase 1 (2010)
With Existing + Committed Lanes

Roadway	Link	Dir	Committed # of Lanes	In/ Out	Existing Traffic 2004/ 2005	Source	Growth 2.79%	PBC Projects Traffic	Project Dist./ Assign	In 153 Out 317	Total Traffic (2010)	LOS Service Volume	Exceeds Generalized Service Volume ?	Project Impact %	Project Impact >5% ?
SR 710	P.B. County Line to Indiantown Rd	EB	2L	Out	598	3	107	178	26%	82	965	680	YES	12.1%	YES
		WB		In	252	3	45	46	26%	40	383	680	no	5.9%	YES
	Indiantown Rd to Pratt Whitney Rd	EB	2L	Out	353	2	52	234	19%	60	699	680	YES	8.9%	YES
		WB		In	256	2	38	61	19%	29	384	680	no	4.3%	no
	Pratt Whitney Rd to PGA Blvd.	EB	4LD	Out	561	2	83	473	13%	41	1158	1860	no	2.2%	no
		WB		In	712	2	105	1848	13%	20	2685	1860	YES	1.1%	no
SR 76 (Kanner Highway)	SR 15 to SR 710	EB	2L	In	89	3	16	0	3%	5	110	820	no	0.6%	no
		WB		Out	87	3	16	0	3%	10	113	820	no	1.2%	no
	SR 710 to CR 708	EB	2L	Out	181	3	32	24	20%	63	300	820	no	7.7%	YES
		WB		In	174	3	31	7	20%	31	243	820	no	3.7%	no
	CR 708 to CR 711	EB	2L	Out	163	3	29	4	8%	25	221	870	no	2.9%	no
		WB		In	160	3	29	1	8%	12	202	870	no	1.4%	no
	CR 711 to Locks Rd.	EB	2L	Out	853	3	153	0	7%	22	1028	860	YES	2.6%	no
		WB		In	602	3	108	0	7%	11	721	860	no	1.2%	no
	Locks Rd. to I-95	EB	4LD	Out	853	3	153	4	6%	19	1029	1860	no	1.0%	no
		WB		In	602	3	108	16	6%	9	735	1860	no	0.5%	no
Indiantown Rd	SR 710 to Pratt Whitney Rd	EB	2L	Out	133	2	24	0	7%	22	179	860	no	2.6%	no
		WB		In	94	2	17	0	7%	11	122	860	no	1.2%	no
	Pratt Whitney Rd to Alexander Run	EB	2L	Out	177	2	32	116	6%	19	344	860	no	2.2%	no
		WB		In	356	2	64	426	6%	9	855	860	no	1.1%	no
	Alexander Run to Jupiter Farms Rd	EB	4LD	Out	1505	2	270	107	6%	19	1901	1860	YES	1.0%	no
		WB		In	620	2	111	393	6%	9	1133	1860	no	0.5%	no
Seminole Pratt Whitney Rd	Beeline Hwy to PGA Blvd	NB	2L	In	122	4	22	131	4%	6	281	860	no	0.7%	no
		SB		Out	13	4	2	524	4%	13	552	860	no	1.5%	no

Source (1) TM Count -2005, (2) Link Count -2004/2005, (3) FDOT Link Count-2004, (4) PBC Biotechnology Research Park DRI

Table TR-2
Indiantown DRI
PM Peak Hour Directional Analysis - Phase 1 (2010)
With Existing + Committed Lanes

Roadway	Link	Dir	Committed # of Lanes	In/ Out	Existing Traffic 2004/ 2005	Source	Growth 2.79%	PBC Projects Traffic	Project Dist./ Assign	In 379 Out 312	Total Traffic (2010)	LOS Service Volume	Exceeds Generalized Service Volume ?	Project Impact %	Project Impact >5% ?
CR 609 Allapattah Road	SR 710 to Project Site	NB	2L	In	99	1	15	0	80%	303	417	870	no	34.9%	YES
		SB		Out	117	1	17	0	80%	250	384	870	no	28.7%	YES
	Project Site to CR714	NB	2L	Out	99	1	15	0	20%	62	176	870	no	7.2%	YES
		SB		In	117	1	17	0	20%	76	210	870	no	8.7%	YES
	CR714 to SLC Line	NB	2L	Out	99	1	15	0	6%	19	133	820	no	2.3%	no
		SB		In	117	1	17	0	6%	23	157	820	no	2.8%	no
	SLC Line to Glades Cutoff Road	NB	2L	Out	99	1	15	0	6%	19	133	480	no	3.9%	no
		SB		In	117	1	17	0	6%	23	157	480	no	4.7%	no
CR 708 (Bridge Road)	SR 76 to CR 711	EB	2L	Out	29	2	5	0	12%	37	71	820	no	4.6%	no
		WB		In	57	2	10	0	12%	45	112	820	no	5.5%	YES
	CR 711 to I-95	EB	2L	Out	109	1	16	82	10%	31	238	820	no	3.8%	no
		WB		In	391	1	58	22	10%	38	509	820	no	4.6%	no
CR 714/SR 714 (Martin Hwy.)	CR 609 to I-95	EB	2L	Out	187	3	34	0	12%	37	258	820	no	4.6%	no
		WB		In	218	3	39	0	12%	45	302	820	no	5.5%	YES
	I-95 to CR76A	EB	2L	Out	547	1	81	0	6%	19	647	820	no	2.3%	no
		WB		In	546	1	81	0	6%	23	650	820	no	2.8%	no
CR 726 (Citrus Blvd.)	SR 710 to Canal	EB	2L	Out	82	2	15	0	9%	28	125	720	no	3.9%	no
		WB		In	189	2	34	0	9%	34	257	720	no	4.7%	no
	Canal to SR 76A	EB	2L	Out	103	2	18	0	7%	22	143	870	no	2.5%	no
		WB		In	174	2	31	0	7%	27	232	870	no	3.0%	no
CR 76A	SR 714 to CR 726	NB	2L	In	159	2	29	0	4%	15	203	870	no	1.7%	no
		SB		Out	189	2	34	0	4%	12	235	870	no	1.4%	no
SR 710	West of CR 714	EB	2L	In	277	1	50	0	3%	11	338	460	no	2.5%	no
		WB		Out	428	1	77	0	3%	9	514	460	YES	2.0%	no
	CR 714 to Fox Brown Road	EB	2L	In	181	2	27	0	3%	11	219	460	no	2.5%	no
		WB		Out	295	2	44	0	3%	9	348	460	no	2.0%	no
	Fox Brown Road to MLK Blvd.	EB	2L	In	300	3	54	0	7%	27	381	460	no	5.8%	YES
		WB		Out	345	3	62	0	7%	22	429	460	no	4.7%	no
	MLK Blvd. to CR 609	EB	2L	In	300	3	54	0	16%	61	415	460	no	13.2%	YES
		WB		Out	345	3	62	0	16%	50	457	460	no	10.9%	YES
	CR 609 to Indianwood Rd.	EB	2L	In	454	1	67	1	64%	243	765	690	YES	35.2%	YES
		WB		Out	523	1	77	2	64%	200	802	690	YES	28.9%	YES
	Indianwood Rd. to Farm Road	EB	4LD	In	470	1	69	6	61%	231	776	1730	no	13.4%	YES
		WB		Out	576	1	85	17	61%	190	868	1730	no	11.0%	YES
	Farm Rd. to CR 726	EB	4LD	Out	458	1	68	11	58%	181	718	1730	no	10.5%	YES
		WB		In	559	1	82	34	58%	220	895	1730	no	12.7%	YES
	CR 726 to SR 76	EB	2L	Out	396	1	58	24	49%	153	631	680	no	22.5%	YES
		WB		In	538	1	79	88	49%	186	891	680	YES	27.3%	YES
	SR 76 to P.B. County Line	EB	2L	Out	222	3	40	40	26%	81	383	680	no	11.9%	YES
		WB		In	323	3	58	150	26%	99	630	680	no	14.5%	YES

Table TR-2
Indiantown DRI
PM Peak Hour Directional Analysis - Phase 1 (2010)
With Existing + Committed Lanes

Roadway	Link	Dir	Committed # of Lanes	In/ Out	Existing Traffic 2004/ 2005	Source	Growth 2.79%	PBC Projects Traffic	Project Dist./ Assign	In 379 Out 312	Total Traffic (2010)	LOS Service Volume	Exceeds Generalized Service Volume ?	Project Impact %	Project Impact >5% ?
SR 710	P.B. County Line to Indiantown Rd	EB	2L	Out	257	3	46	47	26%	81	431	680	no	11.9%	YES
		WB		In	449	3	81	177	26%	99	806	680	YES	14.5%	YES
	Indiantown Rd to Pratt Whitney Rd	EB	2L	Out	258	2	38	67	19%	59	422	680	no	8.7%	YES
		WB		In	277	2	41	248	19%	72	638	680	no	10.6%	YES
	Pratt Whitney Rd to PGA Blvd.	EB	4LD	Out	673	2	99	2015	13%	41	2828	1860	YES	2.2%	no
		WB		In	455	2	67	551	13%	49	1122	1860	no	2.6%	no
SR 76 (Kanner Highway)	SR 15 to SR 710	EB	2L	In	145	3	26	0	3%	11	182	820	no	1.4%	no
		WB		Out	89	3	16	0	3%	9	114	820	no	1.1%	no
	SR 710 to CR 708	EB	2L	Out	206	3	37	7	20%	62	312	820	no	7.6%	YES
		WB		In	202	3	36	28	20%	76	342	820	no	9.2%	YES
	CR 708 to CR 711	EB	2L	Out	160	3	29	1	8%	25	215	870	no	2.9%	no
		WB		In	163	3	29	4	8%	30	226	870	no	3.5%	no
	CR 711 to Locks Rd.	EB	2L	Out	776	3	139	0	7%	22	937	860	YES	2.5%	no
		WB		In	979	3	176	0	7%	27	1182	860	YES	3.1%	no
	Locks Rd. to I-95	EB	4LD	Out	776	3	139	15	6%	19	949	1860	no	1.0%	no
		WB		In	979	3	176	4	6%	23	1182	1860	no	1.2%	no
Indiantown Rd	SR 710 to Pratt Whitney Rd	EB	2L	Out	89	2	16	0	7%	22	127	860	no	2.5%	no
		WB		In	113	2	20	0	7%	27	160	860	no	3.1%	no
	Pratt Whitney Rd to Alexander Run	EB	2L	Out	387	2	69	455	6%	19	930	860	YES	2.2%	no
		WB		In	178	2	32	130	6%	23	363	860	no	2.6%	no
	Alexander Run to Jupiter Farms Rd	EB	4LD	Out	786	2	141	424	6%	19	1370	1860	no	1.0%	no
		WB		In	1270	2	228	121	6%	23	1642	1860	no	1.2%	no
Seminole Pratt Whitney Rd	Beeline Hwy to PGA Blvd	NB	2L	In	31	4	6	506	4%	15	558	860	no	1.8%	no
		SB		Out	119	4	21	136	4%	12	288	860	no	1.5%	no

Source (1) TM Count -2005, (2) Link Count -2004/2005, (3) FDOT Link Count-2004, (4) PBC Biotechnology Research Park DRI

Table TR-3
Indiantown DRI
AM Peak Hour Directional Analysis - Phase 2 (2015)
With Existing + Committed Lanes

Roadway	Link	Dir	Committed # of Lanes	In/ Out	Existing Traffic 2004/ 2005	Source	Growth 2.79%	PBC Projects Traffic	Project Dist./ Assign	In 353 Out 735	Total Traffic (2015)	LOS Service Volume	Exceeds Generalized Service Volume ?	Project Impact %	Project Impact >5% ?
CR 609 Allapattah Road	SR 710 to Project Site	NB	2L	In	77	1	24	0	3%	11	112	870	no	1.2%	no
		SB		Out	88	1	28	0	3%	22	138	870	no	2.5%	no
	Project Site to CR714	NB	2L	Out	77	1	24	0	15%	110	211	870	no	12.7%	YES
		SB		In	88	1	28	0	15%	53	169	870	no	6.1%	YES
	CR714 to SLC Line	NB	2L	Out	77	1	24	0	8%	59	160	820	no	7.2%	YES
		SB		In	88	1	28	0	8%	28	144	820	no	3.4%	no
	SLC Line to Glades Cutoff Road	NB	2L	Out	77	1	24	0	6%	44	145	480	no	9.2%	YES
		SB		In	88	1	28	0	6%	21	137	480	no	4.4%	no
CR 708 (Bridge Road)	SR 76 to CR 711	EB	2L	Out	88	2	31	0	10%	74	193	820	no	9.0%	YES
		WB		In	26	2	9	0	10%	35	70	820	no	4.3%	no
	CR 711 to I-95	EB	2L	Out	226	1	72	51	9%	66	415	820	no	8.1%	YES
		WB		In	257	1	81	211	9%	32	581	820	no	3.9%	no
CR 714/SR 714 (Martin Hwy.)	CR 609 to I-95	EB	2L	Out	211	3	75	0	6%	44	330	820	no	5.4%	YES
		WB		In	200	3	71	0	6%	21	292	820	no	2.6%	no
	I-95 to CR76A	EB	2L	Out	510	1	162	0	1%	7	679	820	no	0.9%	no
		WB		In	511	1	162	0	1%	4	677	820	no	0.4%	no
CR 726 (Citrus Blvd.)	SR 710 to Canal	EB	2L	Out	220	2	78	0	11%	81	379	720	no	11.2%	YES
		WB		In	73	2	26	0	11%	39	138	720	no	5.4%	YES
	Canal to SR 76A	EB	2L	Out	231	2	82	0	8%	59	372	870	no	6.8%	YES
		WB		In	70	2	25	0	8%	28	123	870	no	3.2%	no
CR 76A	SR 714 to CR 726	NB	2L	In	182	2	64	0	6%	21	267	870	no	2.4%	no
		SB		Out	186	2	66	0	6%	44	296	870	no	5.1%	YES
SR 710	West of CR 714	EB	2L	In	325	1	115	0	3%	11	451	460	no	2.3%	no
		WB		Out	204	1	72	0	3%	22	298	460	no	4.8%	no
	CR 714 to Fox Brown Road	EB	2L	In	210	2	67	0	3%	11	288	460	no	2.3%	no
		WB		Out	126	2	40	0	3%	22	188	460	no	4.8%	no
	Fox Brown Road to MLK Blvd.	EB	2L	In	339	3	120	0	6%	21	480	460	YES	4.6%	no
		WB		Out	312	3	110	0	6%	44	466	460	YES	9.6%	YES
	MLK Blvd. to CR 609	EB	2L	In	339	3	120	0	6%	21	480	460	YES	4.6%	no
		WB		Out	312	3	110	0	6%	44	466	460	YES	9.6%	YES
	CR 609 to Indianwood Rd.	EB	2L	In	409	1	130	7	3%	11	557	690	no	1.5%	no
		WB		Out	282	1	89	2	3%	22	395	690	no	3.2%	no
	Indianwood Rd. to Project Site	EB	4LD	In	438	1	139	24	7%	25	626	1730	no	1.4%	no
		WB		Out	344	1	109	8	7%	51	512	1730	no	3.0%	no
	Project Site to Farm Rd.	EB	4LD	Out	438	1	139	37	70%	515	1129	1730	no	29.7%	YES
		WB		In	344	1	109	11	70%	247	711	1730	no	14.3%	YES
	Farm Rd. to CR 726	EB	4LD	Out	415	1	131	74	54%	397	1017	1730	no	22.9%	YES
		WB		In	339	1	107	21	54%	191	658	1730	no	11.0%	YES
	CR 726 to SR 76	EB	2L	Out	496	1	157	164	48%	353	1170	680	YES	51.9%	YES
		WB		In	352	1	111	42	48%	169	674	680	no	24.9%	YES
	SR 76 to P.B. County Line	EB	2L	Out	423	3	150	265	28%	206	1044	680	YES	30.3%	YES
		WB		In	163	3	58	66	28%	99	386	680	no	14.5%	YES

Table TR-3
Indiantown DRI
AM Peak Hour Directional Analysis - Phase 2 (2015)
With Existing + Committed Lanes

Roadway	Link	Dir	Committed # of Lanes	In/ Out	Existing Traffic 2004/ 2005	Source	Growth 2.79%	PBC Projects Traffic	Project Dist./ Assign	In 353 Out 735	Total Traffic (2015)	LOS Service Volume	Exceeds Generalized Service Volume ?	Project Impact %	Project Impact >5% ?
SR 710	P.B. County Line to Indiantown Rd	EB	2L	Out	598	3	212	309	28%	206	1325	680	YES	30.3%	YES
		WB		In	252	3	89	77	28%	99	517	680	no	14.5%	YES
	Indiantown Rd to Pratt Whitney Rd	EB	2L	Out	353	2	112	374	21%	154	993	680	YES	22.7%	YES
		WB		In	256	2	81	95	21%	74	506	680	no	10.9%	YES
	Pratt Whitney Rd to PGA Blvd.	EB	4LD	Out	561	2	178	569	12%	88	1396	1860	no	4.7%	no
		WB		In	712	2	226	2249	12%	42	3229	1860	YES	2.3%	no
SR 76 (Kanner Highway)	SR 15 to SR 710	EB	2L	In	89	3	31	0	3%	11	131	820	no	1.3%	no
		WB		Out	87	3	31	0	3%	22	140	820	no	2.7%	no
	SR 710 to CR 708	EB	2L	Out	181	3	64	24	17%	125	394	820	no	15.2%	YES
		WB		In	174	3	62	7	17%	60	303	820	no	7.3%	YES
	CR 708 to CR 711	EB	2L	Out	163	3	58	4	7%	51	276	870	no	5.9%	YES
		WB		In	160	3	57	1	7%	25	243	870	no	2.8%	no
	CR 711 to Locks Rd.	EB	2L	Out	853	3	302	0	6%	44	1199	860	YES	5.1%	YES
		WB		In	602	3	213	0	6%	21	836	860	no	2.5%	no
	Locks Rd. to I-95	EB	4LD	Out	853	3	302	9	6%	44	1208	1860	no	2.4%	no
		WB		In	602	3	213	39	6%	21	875	1860	no	1.1%	no
	I-95 to Lost River Road	EB	4LD	Out	1445	3	511	0	5%	37	1993	1860	YES	2.0%	no
		WB		In	1252	3	443	0	5%	18	1713	1860	no	0.9%	no
Indiantown Rd	SR 710 to Pratt Whitney Rd	EB	2L	Out	133	2	47	0	7%	51	231	860	no	6.0%	YES
		WB		In	94	2	33	0	7%	25	152	860	no	2.9%	no
	Pratt Whitney Rd to Alexander Run	EB	2L	Out	177	2	63	160	6%	44	444	860	no	5.1%	YES
		WB		In	356	2	126	615	6%	21	1118	860	YES	2.5%	no
	Alexander Run to Jupiter Farms Rd	EB	4LD	Out	1505	2	532	141	6%	44	2222	1860	YES	2.4%	no
		WB		In	620	2	219	533	6%	21	1393	1860	no	1.1%	no
Seminole Pratt Whitney Rd	Beeline Hwy to PGA Blvd	NB	2L	In	122	4	43	222	6%	21	408	860	no	2.5%	no
		SB		Out	13	4	5	918	6%	44	980	860	YES	5.1%	YES

Source (1) TM Count -2005, (2) Link Count -2004/2005, (3) FDOT Link Count-2004, (4) PBC Biotechnology Research Park DRI

Table TR-4
Indiantown DRI
PM Peak Hour Directional Analysis - Phase 2 (2015)
With Existing + Committed Lanes

Roadway	Link	Dir	Committed # of Lanes	In/ Out	Existing Traffic 2004/ 2005	Source	Growth 2.79%	PBC Projects Traffic	Project Dist./ Assign	In 734 Out 533	Total Traffic (2015)	LOS Service Volume	Exceeds Generalized Service Volume ?	Project Impact %	Project Impact >5% ?
CR 609 Allapattah Road	SR 710 to Project Site	NB	2L	In	99	1	31	0	3%	22	152	870	no	2.5%	no
		SB		Out	117	1	37	0	3%	16	170	870	no	1.8%	no
	Project Site to CR714	NB	2L	Out	99	1	31	0	15%	80	210	870	no	9.2%	YES
		SB		In	117	1	37	0	15%	110	264	870	no	12.7%	YES
	CR714 to SLC Line	NB	2L	Out	99	1	31	0	8%	43	173	820	no	5.2%	YES
		SB		In	117	1	37	0	8%	59	213	820	no	7.2%	YES
	SLC Line to Glades Cutoff Road	NB	2L	Out	99	1	31	0	6%	32	162	480	no	6.7%	YES
		SB		In	117	1	37	0	6%	44	198	480	no	9.2%	YES
CR 708 (Bridge Road)	SR 76 to CR 711	EB	2L	Out	29	2	10	0	10%	53	92	820	no	6.5%	YES
		WB		In	57	2	20	0	10%	73	150	820	no	9.0%	YES
	CR 711 to I-95	EB	2L	Out	109	1	35	193	9%	48	385	820	no	5.9%	YES
		WB		In	391	1	124	49	9%	66	630	820	no	8.1%	YES
CR 714/SR 714 (Martin Hwy.)	CR 609 to I-95	EB	2L	Out	187	3	66	0	6%	32	285	820	no	3.9%	no
		WB		In	218	3	77	0	6%	44	339	820	no	5.4%	YES
	I-95 to CR76A	EB	2L	Out	547	1	173	0	1%	5	725	820	no	0.7%	no
		WB		In	546	1	173	0	1%	7	726	820	no	0.9%	no
CR 726 (Citrus Blvd.)	SR 710 to Canal	EB	2L	Out	82	2	29	0	11%	59	170	720	no	8.1%	YES
		WB		In	189	2	67	0	11%	81	337	720	no	11.2%	YES
	Canal to SR 76A	EB	2L	Out	103	2	36	0	8%	43	182	870	no	4.9%	no
		WB		In	174	2	62	0	8%	59	295	870	no	6.7%	YES
CR 76A	SR 714 to CR 726	NB	2L	In	159	2	56	0	6%	44	259	870	no	5.1%	YES
		SB		Out	189	2	67	0	6%	32	288	870	no	3.7%	no
SR 710	West of CR 714	EB	2L	In	277	1	98	0	3%	22	397	460	no	4.8%	no
		WB		Out	428	1	151	0	3%	16	595	460	YES	3.5%	no
	CR 714 to Fox Brown Road	EB	2L	In	181	2	57	0	3%	22	260	460	no	4.8%	no
		WB		Out	295	2	93	0	3%	16	404	460	no	3.5%	no
	Fox Brown Road to MLK Blvd.	EB	2L	In	300	3	106	0	6%	44	450	460	no	9.6%	YES
		WB		Out	345	3	122	0	6%	32	498	460	YES	7.0%	YES
	MLK Blvd. to CR 609	EB	2L	In	300	3	106	0	6%	44	450	460	no	9.6%	YES
		WB		Out	345	3	122	0	6%	32	499	460	YES	7.0%	YES
	CR 609 to Indianwood Rd.	EB	2L	In	454	1	144	3	3%	22	623	690	no	3.2%	no
		WB		Out	523	1	166	10	3%	16	715	690	YES	2.3%	no
	Indianwood Rd. to Project Site	EB	4LD	In	470	1	149	9	7%	51	679	1730	no	3.0%	no
		WB		Out	576	1	182	31	7%	37	826	1730	no	2.2%	no
	Project Site to Farm Rd.	EB	4LD	Out	470	1	149	14	70%	373	1006	1730	no	21.6%	YES
		WB		In	576	1	182	51	70%	514	1323	1730	no	29.7%	YES
	Farm Rd. to CR 726	EB	4LD	Out	458	1	145	28	54%	288	919	1730	no	16.6%	YES
		WB		In	559	1	177	102	54%	396	1234	1730	no	22.9%	YES
	CR 726 to SR 76	EB	2L	Out	396	1	125	44	48%	256	821	680	YES	37.6%	YES
		WB		In	538	1	170	165	48%	352	1225	680	YES	51.8%	YES
	SR 76 to P.B. County Line	EB	2L	Out	222	3	78	68	28%	149	517	680	no	21.9%	YES
		WB		In	323	3	114	264	28%	206	907	680	YES	30.2%	YES

Table TR-4
Indiantown DRI
PM Peak Hour Directional Analysis - Phase 2 (2015)
With Existing + Committed Lanes

Roadway	Link	Dir	Committed # of Lanes	In/ Out	Existing Traffic 2004/ 2005	Source	Growth 2.79%	PBC Projects Traffic	Project Dist./ Assign	In 734 Out 533	Total Traffic (2015)	LOS Service Volume	Exceeds Generalized Service Volume ?	Project Impact %	Project Impact >5% ?
SR 710	P.B. County Line to Indiantown Road	EB	2L	Out	257	3	91	79	28%	149	576	680	no	21.9%	YES
		WB		In	449	3	159	304	28%	206	1118	680	YES	30.2%	YES
	Indiantown Rd to Pratt Whitney Rd	EB	2L	Out	258	2	82	98	21%	112	550	680	no	16.5%	YES
		WB		In	277	2	88	372	21%	154	891	680	YES	22.7%	YES
	Pratt Whitney Rd to PGA Blvd.	EB	4LD	Out	673	2	213	2374	12%	64	3324	1860	YES	3.4%	no
		WB		In	455	2	144	640	12%	88	1327	1860	no	4.7%	no
SR 76 (Kanner Highway)	SR 15 to SR 710	EB	2L	In	145	3	51	0	3%	22	218	820	no	2.7%	no
		WB		Out	89	3	31	0	3%	16	136	820	no	2.0%	no
	SR 710 to CR 708	EB	2L	Out	206	3	73	7	17%	91	377	820	no	11.1%	YES
		WB		In	202	3	71	28	17%	125	426	820	no	15.2%	YES
	CR 708 to CR 711	EB	2L	Out	160	3	57	1	7%	37	255	870	no	4.3%	no
		WB		In	163	3	58	4	7%	51	276	870	no	5.9%	YES
	CR 711 to Locks Rd.	EB	2L	Out	776	3	274	0	6%	32	1082	860	YES	3.7%	no
		WB		In	979	3	346	0	6%	44	1369	860	YES	5.1%	YES
	Locks Rd. to I-95	EB	4LD	Out	776	3	274	36	6%	32	1118	1860	no	1.7%	no
		WB		In	979	3	346	9	6%	44	1378	1860	no	2.4%	no
	I-95 to Lost River Road	EB	4LD	Out	1465	3	518	0	5%	27	2010	1860	YES	1.4%	no
		WB		In	1528	3	540	0	5%	37	2105	1860	YES	2.0%	no
Indiantown Rd	SR 710 to Pratt Whitney Rd	EB	2L	Out	89	2	31	0	7%	37	157	860	no	4.3%	no
		WB		In	113	2	40	0	7%	51	204	860	no	6.0%	YES
	Pratt Whitney Rd to Alexander Run	EB	2L	Out	387	2	137	623	6%	32	1179	860	YES	3.7%	no
		WB		In	178	2	63	171	6%	44	456	860	no	5.1%	YES
	Alexander Run to Jupiter Farms Rd	EB	4LD	Out	786	2	278	548	6%	32	1644	1860	no	1.7%	no
		WB		In	1270	2	449	152	6%	44	1915	1860	YES	2.4%	no
Seminole Pratt Whitney Rd	Beeline Hwy to PGA Blvd	NB	2L	In	31	4	11	840	6%	44	926	860	YES	5.1%	YES
		SB		Out	119	4	42	214	6%	32	407	860	no	3.7%	no

Source (1) TM Count -2005, (2) Link Count -2004/2005, (3) FDOT Link Count-2004, (4) PBC Biotechnology Research Park DRI

Table TR-5
Indiantown DRI
AM Peak Hour Directional Analysis - Phase 3 (2020)
With Existing + Committed Lanes

Roadway	Link	Dir	Committed # of Lanes	In/ Out	Existing Traffic 2004/ 2005	Source	Growth 2.79%	PBC Projects Traffic	Project Dist./ Assign	In 389 Out 855	Total Traffic (2020)	LOS Service Volume	Exceeds Generalized Service Volume ?	Project Impact %	Project Impact >5% ?
CR 609 Allapattah Road	SR 710 to Project Site	NB	2L	In	77	1	39	0	3%	12	128	870	no	1.3%	no
		SB		Out	88	1	45	0	3%	26	159	870	no	2.9%	no
	Project Site to CR714	NB	2L	Out	77	1	39	0	15%	128	244	870	no	14.7%	YES
		SB		In	88	1	45	0	15%	58	191	870	no	6.7%	YES
	CR714 to SLC Line	NB	2L	Out	77	1	39	0	8%	68	184	820	no	8.3%	YES
		SB		In	88	1	45	0	8%	31	164	820	no	3.8%	no
	SLC Line to Glades Cutoff Road	NB	2L	Out	77	1	39	0	6%	51	167	480	no	10.7%	YES
		SB		In	88	1	45	0	6%	23	156	480	no	4.9%	no
CR 708 (Bridge Road)	SR 76 to CR 711	EB	2L	Out	88	2	49	0	9%	77	214	820	no	9.4%	YES
		WB		In	26	2	14	0	9%	35	75	820	no	4.3%	no
	CR 711 to I-95	EB	2L	Out	226	1	115	75	9%	77	493	820	no	9.4%	YES
		WB		In	257	1	131	306	9%	35	729	820	no	4.3%	no
CR 714/SR 714 (Martin Hwy.)	CR 609 to I-95	EB	2L	Out	211	3	117	0	6%	51	379	820	no	6.3%	YES
		WB		In	200	3	111	0	6%	23	334	820	no	2.8%	no
	I-95 to CR76A	EB	2L	Out	510	1	261	0	1%	9	780	820	no	1.0%	no
		WB		In	511	1	261	0	1%	4	776	820	no	0.5%	no
CR 726 (Citrus Blvd.)	SR 710 to Canal	EB	2L	Out	220	2	122	0	11%	94	436	720	no	13.1%	YES
		WB		In	73	2	40	0	11%	43	156	720	no	5.9%	YES
	Canal to SR 76A	EB	2L	Out	231	2	128	0	8%	68	427	870	no	7.9%	YES
		WB		In	70	2	39	0	8%	31	140	870	no	3.6%	no
CR 76A	SR 714 to CR 726	NB	2L	In	182	2	101	0	6%	23	306	870	no	2.7%	no
		SB		Out	186	2	103	0	6%	51	340	870	no	5.9%	YES
SR 710	West of CR 714	EB	2L	In	325	1	180	0	3%	12	517	460	YES	2.5%	no
		WB		Out	204	1	113	0	3%	26	343	460	no	5.6%	YES
	CR 714 to Fox Brown Road	EB	2L	In	210	2	107	0	3%	12	329	460	no	2.5%	no
		WB		Out	126	2	64	0	3%	26	216	460	no	5.6%	YES
	Fox Brown Road to MLK Blvd.	EB	2L	In	339	3	188	0	6%	23	550	460	YES	5.1%	YES
		WB		Out	312	3	173	0	6%	51	536	460	YES	11.2%	YES
	MLK Blvd. to CR 609	EB	2L	In	339	3	188	0	6%	23	550	460	YES	5.1%	YES
		WB		Out	312	3	173	0	6%	51	536	460	YES	11.2%	YES
	CR 609 to Indianwood Rd.	EB	2L	In	409	1	209	10	3%	12	640	690	no	1.7%	no
		WB		Out	282	1	144	3	3%	26	455	690	no	3.7%	no
	Indianwood Rd. to Project Site	EB	4LD	In	438	1	224	30	9%	35	727	1730	no	2.0%	no
		WB		Out	344	1	176	9	9%	77	606	1730	no	4.4%	no
	Project Site to Farm Rd.	EB	4LD	Out	438	1	224	50	65%	556	1268	1730	no	32.1%	YES
		WB		In	344	1	176	14	65%	253	787	1730	no	14.6%	YES
	Farm Rd. to CR 726	EB	4LD	Out	415	1	212	100	46%	393	1120	1730	no	22.7%	YES
		WB		In	339	1	173	27	46%	179	718	1730	no	10.3%	YES
	CR 726 to SR 76	EB	2L	Out	496	1	253	215	43%	368	1332	680	YES	54.1%	YES
		WB		In	352	1	180	54	43%	167	753	680	YES	24.6%	YES
	SR 76 to P.B. County Line	EB	2L	Out	423	3	234	344	25%	214	1215	680	YES	31.4%	YES
		WB		In	163	3	90	86	25%	97	436	680	no	14.3%	YES

Table TR-5
Indiantown DRI
AM Peak Hour Directional Analysis - Phase 3 (2020)
With Existing + Committed Lanes

Roadway	Link	Dir	Committed # of Lanes	In/ Out	Existing Traffic 2004/ 2005	Source	Growth 2.79%	PBC Projects Traffic	Project Dist./ Assign	In 389 Out 855	Total Traffic (2020)	LOS Service Volume	Exceeds Generalized Service Volume ?	Project Impact %	Project Impact >5% ?
SR 710	P.B. County Line to Indiantown Rd	EB	2L	Out	598	3	331	408	25%	214	1551	680	YES	31.4%	YES
		WB		In	252	3	139	102	25%	97	590	680	no	14.3%	YES
	Indiantown Rd to Pratt Whitney Rd	EB	2L	Out	353	2	180	481	20%	171	1185	680	YES	25.1%	YES
		WB		In	256	2	131	122	20%	78	587	680	no	11.4%	YES
	Pratt Whitney Rd to PGA Blvd.	EB	4LD	Out	561	2	287	635	11%	94	1577	1860	no	5.1%	YES
		WB		In	712	2	364	2508	11%	43	3627	1860	YES	2.3%	no
SR 76 (Kanner Highway)	SR 15 to SR 710	EB	2L	In	89	3	49	0	3%	12	150	820	no	1.4%	no
		WB		Out	87	3	48	0	3%	26	161	820	no	3.1%	no
	SR 710 to CR 708	EB	2L	Out	181	3	100	24	15%	128	433	820	no	15.6%	YES
		WB		In	174	3	96	7	15%	58	335	820	no	7.1%	YES
	CR 708 to CR 711	EB	2L	Out	163	3	90	4	6%	51	308	870	no	5.9%	YES
		WB		In	160	3	89	1	6%	23	273	870	no	2.7%	no
	CR 711 to Locks Rd.	EB	2L	Out	853	3	472	0	5%	43	1368	860	YES	5.0%	no
		WB		In	602	3	333	0	5%	19	954	860	YES	2.3%	no
	Locks Rd. to I-95	EB	4LD	Out	853	3	472	14	5%	43	1382	1860	no	2.3%	no
		WB		In	602	3	333	57	5%	19	1011	1860	no	1.0%	no
	I-95 to Lost River Road	EB	4LD	Out	1445	3	799	0	4%	34	2279	1860	YES	1.8%	no
		WB		In	1252	3	693	0	4%	16	1961	1860	YES	0.8%	no
Indiantown Rd	SR 710 to Pratt Whitney Rd	EB	2L	Out	133	2	74	0	5%	43	250	860	no	5.0%	no
		WB		In	94	2	52	0	5%	19	165	860	no	2.3%	no
	Pratt Whitney Rd to Alexander Run	EB	2L	Out	177	2	98	197	3%	26	498	860	no	3.0%	no
		WB		In	356	2	197	759	3%	12	1324	860	YES	1.4%	no
	Alexander Run to Jupiter Farms Rd	EB	4LD	Out	1505	2	832	168	3%	26	2531	1860	YES	1.4%	no
		WB		In	620	2	343	640	3%	12	1615	1860	no	0.6%	no
Seminole Pratt Whitney Rd	Beeline Hwy to PGA Blvd	NB	2L	In	122	4	67	328	6%	23	540	860	no	2.7%	no
		SB		Out	13	4	7	1334	6%	51	1405	860	YES	6.0%	YES

Source (1) TM Count -2005, (2) Link Count -2004/2005, (3) FDOT Link Count-2004, (4) PBC Biotechnology Research Park DRI

Table TR-6
Indiantown DRI
PM Peak Hour Directional Analysis - Phase 3 (2020)
With Existing + Committed Lanes

Roadway	Link	Dir	Committed # of Lanes	In/ Out	Existing Traffic 2004/ 2005	Source	Growth 2.79%	PBC Projects Traffic	Project Dist./ Assign	In 849 Out 598	Total Traffic 2020	LOS Service Volume	Exceeds Generalized Service Volume ?	Project Impact %	Project Impact >5% ?
CR 609 Allapattah Road	SR 710 to Project Site	NB	2L	In	99	1	51	0	3%	25	175	870	no	2.9%	no
		SB		Out	117	1	60	0	3%	18	195	870	no	2.1%	no
	Project Site to CR714	NB	2L	Out	99	1	51	0	15%	90	240	870	no	10.3%	YES
		SB		In	117	1	60	0	15%	127	304	870	no	14.6%	YES
	CR714 to SLC Line	NB	2L	Out	99	1	51	0	8%	48	198	820	no	5.8%	YES
		SB		In	117	1	60	0	8%	68	245	820	no	8.3%	YES
	SLC Line to Glades Cutoff Road	NB	2L	Out	99	1	51	0	6%	36	186	480	no	7.5%	YES
		SB		In	117	1	60	0	6%	51	228	480	no	10.6%	YES
CR 708 (Bridge Road)	SR 76 to CR 711	EB	2L	Out	29	2	16	0	9%	54	99	820	no	6.6%	YES
		WB		In	57	2	32	0	9%	76	165	820	no	9.3%	YES
	CR 711 to I-95	EB	2L	Out	109	1	56	258	9%	54	477	820	no	6.6%	YES
		WB		In	391	1	200	70	9%	76	737	820	no	9.3%	YES
CR 714/SR 714 (Martin Hwy.)	CR 609 to I-95	EB	2L	Out	187	3	103	0	6%	36	326	820	no	4.4%	no
		WB		In	218	3	121	0	6%	51	390	820	no	6.2%	YES
	I-95 to CR76A	EB	2L	Out	547	1	280	0	1%	6	833	820	YES	0.7%	no
		WB		In	546	1	279	0	1%	8	833	820	YES	1.0%	no
CR 726 (Citrus Blvd.)	SR 710 to Canal	EB	2L	Out	82	2	45	0	11%	66	193	720	no	9.1%	YES
		WB		In	189	2	105	0	11%	93	387	720	no	13.0%	YES
	Canal to SR 76A	EB	2L	Out	103	2	57	0	8%	48	208	870	no	5.5%	YES
		WB		In	174	2	96	0	8%	68	338	870	no	7.8%	YES
CR 76A	SR 714 to CR 726	NB	2L	In	159	2	88	0	6%	51	298	870	no	5.9%	YES
		SB		Out	189	2	105	0	6%	36	330	870	no	4.1%	no
SR 710	West of CR 714	EB	2L	In	277	1	153	0	3%	25	455	460	no	5.5%	YES
		WB		Out	428	1	237	0	3%	18	683	460	YES	3.9%	no
	CR 714 to Fox Brown Road	EB	2L	In	181	2	92	0	3%	25	298	460	no	5.5%	YES
		WB		Out	295	2	151	0	3%	18	464	460	YES	3.9%	no
	Fox Brown Road to MLK Blvd.	EB	2L	In	300	3	166	0	6%	51	517	460	YES	11.1%	YES
		WB		Out	345	3	191	0	6%	36	572	460	YES	7.8%	YES
	MLK Blvd. to CR 609	EB	2L	In	300	3	166	0	6%	51	517	460	YES	11.1%	YES
		WB		Out	345	3	191	0	6%	36	572	460	YES	7.8%	YES
	CR 609 to Indianwood Rd.	EB	2L	In	454	1	232	3	3%	25	714	690	YES	3.7%	no
		WB		Out	523	1	267	10	3%	18	818	690	YES	2.6%	no
	Indianwood Rd. to Project Site	EB	4LD	In	470	1	240	5	9%	76	791	1730	no	4.4%	no
		WB		Out	576	1	294	20	9%	54	944	1730	no	3.1%	no
	Project Site to Farm Rd.	EB	4LD	Out	470	1	240	14	65%	389	1113	1730	no	22.5%	YES
		WB		In	576	1	294	51	65%	552	1473	1730	no	31.9%	YES
	Farm Rd. to CR 726	EB	4LD	Out	458	1	234	28	46%	275	995	1730	no	15.9%	YES
		WB		In	559	1	286	102	46%	391	1338	1730	no	22.6%	YES
	CR 726 to SR 76	EB	2L	Out	396	1	202	44	43%	257	899	680	YES	37.8%	YES
		WB		In	538	1	275	165	43%	365	1343	680	YES	53.7%	YES
	SR 76 to P.B. County Line	EB	2L	Out	222	3	123	87	25%	150	582	680	no	22.0%	YES
		WB		In	323	3	179	317	25%	212	1031	680	YES	31.2%	YES

Table TR-6
Indiantown DRI
PM Peak Hour Directional Analysis - Phase 3 (2020)
With Existing + Committed Lanes

Roadway	Link	Dir	Committed # of Lanes	In/ Out	Existing Traffic 2004/ 2005	Source	Growth 2.79%	PBC Projects Traffic	Project Dist./ Assign	In 849 Out 598	Total Traffic 2020	LOS Service Volume	Exceeds Generalized Service Volume ?	Project Impact %	Project Impact >5% ?
SR 710	P.B. County Line to Indiantown Rd	EB	2L	Out	257	3	142	101	25%	150	650	680	no	22.0%	YES
		WB		In	449	3	248	371	25%	212	1280	680	YES	31.2%	YES
	Indiantown Rd to Pratt Whitney Rd	EB	2L	Out	258	2	132	121	20%	120	631	680	no	17.6%	YES
		WB		In	277	2	142	443	20%	170	1032	680	YES	25.0%	YES
	Pratt Whitney Rd to PGA Blvd.	EB	4LD	Out	673	2	344	2549	11%	66	3632	1860	YES	3.5%	no
		WB		In	455	2	233	697	11%	93	1478	1860	no	5.0%	YES
SR 76 (Kanner Highway)	SR 15 to SR 710	EB	2L	In	145	3	80	0	3%	25	250	820	no	3.1%	no
		WB		Out	89	3	49	0	3%	18	156	820	no	2.2%	no
	SR 710 to CR 708	EB	2L	Out	206	3	114	7	15%	90	417	820	no	10.9%	YES
		WB		In	202	3	112	28	15%	127	469	820	no	15.5%	YES
	CR 708 to CR 711	EB	2L	Out	160	3	89	1	6%	36	286	870	no	4.1%	no
		WB		In	163	3	90	4	6%	51	308	870	no	5.9%	YES
	CR 711 to Locks Rd.	EB	2L	Out	776	3	429	0	5%	30	1235	860	YES	3.5%	no
		WB		In	979	3	542	0	5%	42	1563	860	YES	4.9%	no
	Locks Rd. to I-95	EB	4LD	Out	776	3	429	48	5%	30	1283	1860	no	1.6%	no
		WB		In	979	3	542	13	5%	42	1576	1860	no	2.3%	no
	I-95 to Lost River Road	EB	4LD	Out	1465	3	810	0	4%	24	2299	1860	YES	1.3%	no
		WB		In	1528	3	845	0	4%	34	2407	1860	YES	1.8%	no
Indiantown Rd	SR 710 to Pratt Whitney Rd	EB	2L	Out	89	2	49	0	5%	30	168	860	no	3.5%	no
		WB		In	113	2	63	0	5%	42	218	860	no	4.8%	no
	Pratt Whitney Rd to Alexander Run	EB	2L	Out	387	2	214	720	3%	18	1339	860	YES	2.1%	no
		WB		In	178	2	98	203	3%	25	504	860	no	3.0%	no
	Alexander Run to Jupiter Farms Rd	EB	4LD	Out	786	2	435	619	3%	18	1858	1860	no	1.0%	no
		WB		In	1270	2	703	175	3%	25	2173	1860	YES	1.4%	no
Seminole Pratt Whitney Rd	Beeline Hwy to PGA Blvd	NB	2L	In	31	4	17	1122	6%	51	1221	860	YES	5.9%	YES
		SB		Out	119	4	66	306	6%	36	527	860	no	4.2%	no

Source (1) TM Count -2005, (2) Link Count -2004/2005, (3) FDOT Link Count-2004, (4) PBC Biotechnology Research Park DRI

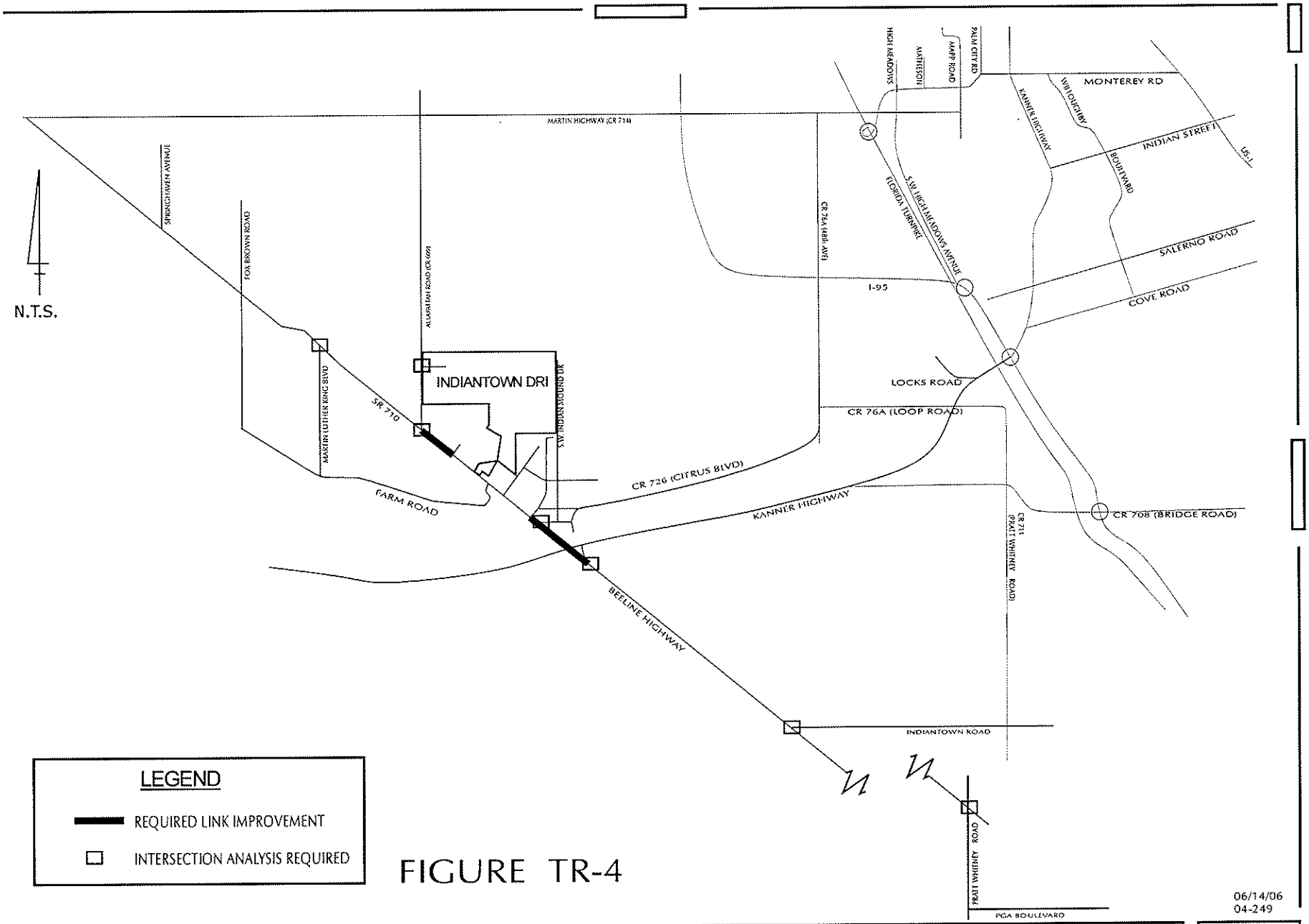


FIGURE TR-4

06/14/06
04-249

INDIANTOWN DRI	MAP J - F - 1	PHASE 1 (2010) REQUIRED LINK IMPROVEMENTS	PTC

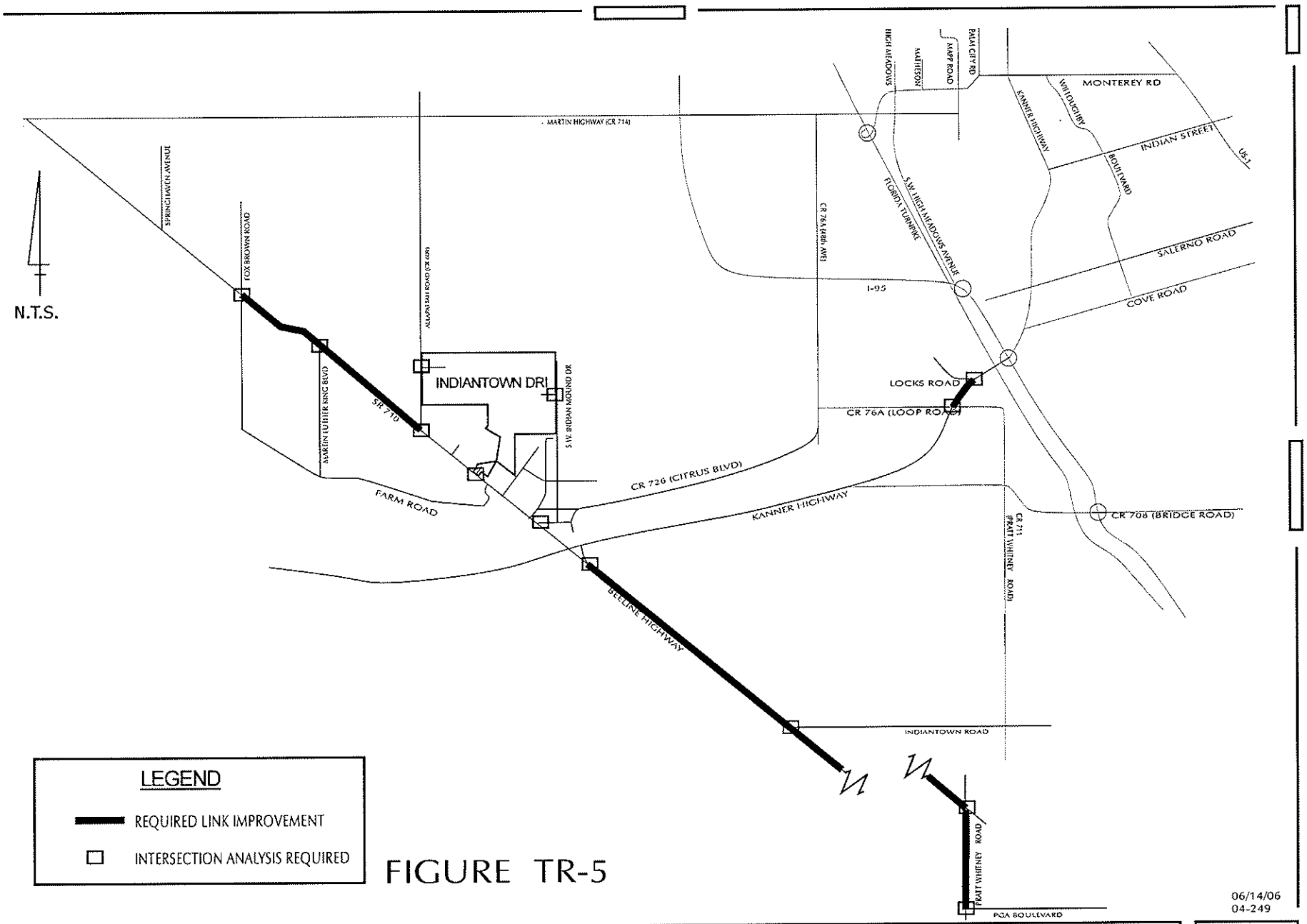


FIGURE TR-5

06/14/06
04-249

INDIANTOWN DRI	MAP J - F - 2	PHASE 2 (2015) REQUIRED LINK IMPROVEMENTS	PTC

APPENDIX G

Two Ways to Grow

If what you are selling is privacy and exclusivity, then every new house is a degradation of the amenity. However, if what you are selling is community, then every new house is an enhancement of the asset.

- Vince Graham, *Addressing the National Association of Home Builders*, (1997)

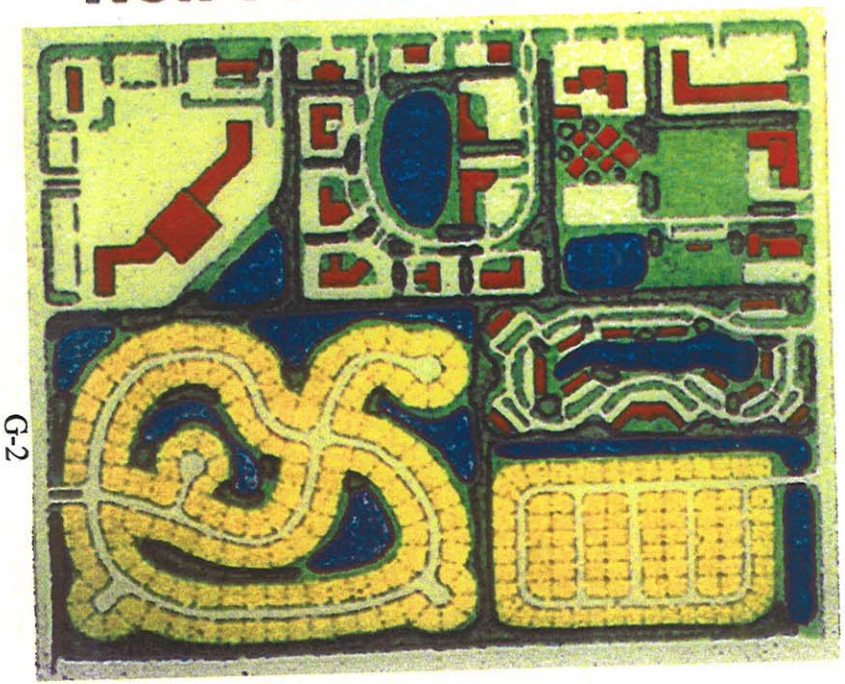
There are basically two different models of urban growth: the traditional neighborhood and suburban sprawl. They are polar opposites in appearance, function, and character: they look different, they act differently, and they affect us in different ways.

The traditional neighborhood was the fundamental form of European settlement on this continent through the Second World War, from St. Augustine to Seattle. It continues to be the dominant pattern of habitation outside the United States, as it has been throughout recorded history. The traditional neighborhood – represented by mixed-use, pedestrian-friendly communities of varied population, either standing free as villages or grouped into towns and cities – has proved to be a sustainable form of growth. It allowed us to settle the continent without bankrupting the country or destroying the countryside in the process.

Suburban sprawl, now the standard North American pattern of growth, ignores historical precedent and human experience. It is an invention, conceived by architects, engineers, and planners, and promoted by developers in the treat *sweeping aside of the old* that occurred after the Second World War. Unlike the traditional neighborhood model, which evolved organically as a response to human needs, suburban sprawl is an idealize artificial system. it is not without a certain beauty: it is rational, consistent, and comprehensive. Its performance is largely predictable. It is an outgrowth of modern problem solving: a system for living. Unlike the traditional neighborhood, sprawl is not healthy growth; it is essentially self-destructive. Even at relatively low population densities, sprawl tends not to pay for itself financially and consumes land at an alarming rate, while producing insurmountable traffic problems and exacerbating social inequity and isolation. These particular outcomes were not predicted. Neither was the toll that sprawl exacts from America's cities and towns, which continue to decant slowly into the countryside. As the ring of suburbia grows around most of our cities, so grows the void at the center. Even while the struggle to revitalize deteriorated downtown neighborhoods and business districts continues, the inner ring of suburbs is already at risk. Losing residents and businesses to fresher locations on the new suburban edge.

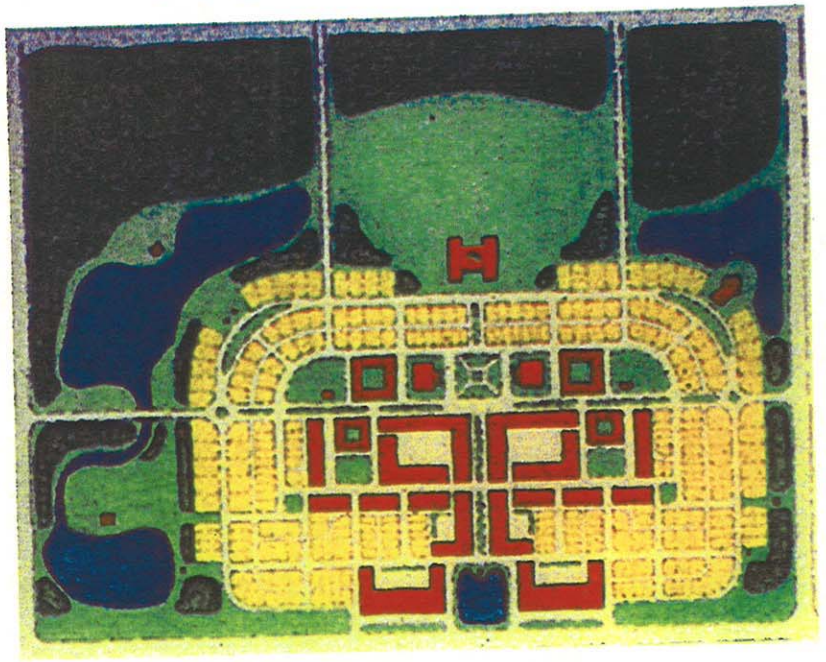
Regional Impacts of Sprawl

Non-Preferred Form



- 30% more energy
- 2 to 4 times poorer water quality
- 25% to 50 % more time in our cars
- 30% to 40% more land used
- Public transportation is not an option
- 20% to 25% of your income spent on cars
- Kids won't be able to walk to school

Preferred Form

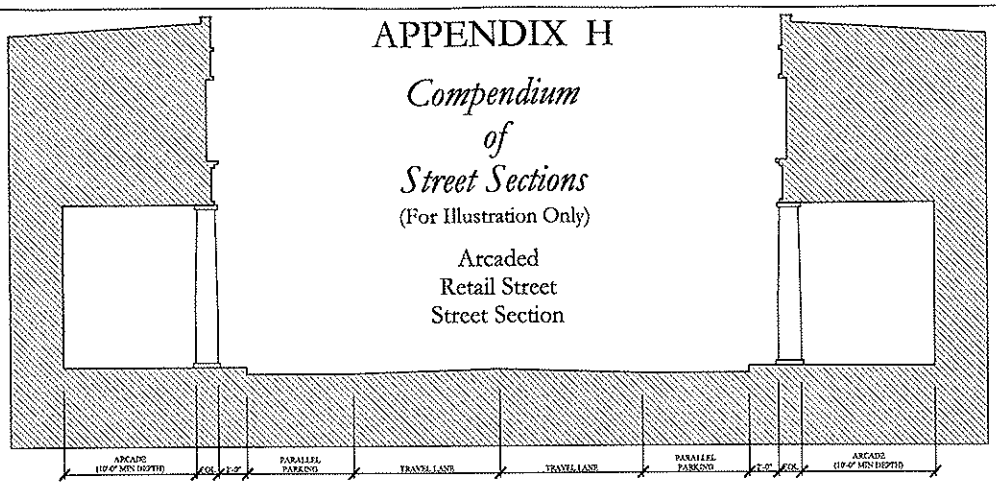


- Sprawl housing products underperform able comparable New Urbanist products on sales price and absorption
- Road building will take priority over the arts, culture, care of the elderly and education of your children
- Fiscal savings of $606 million through 2025
- Capital cost savings of $4.19 billion through 2025

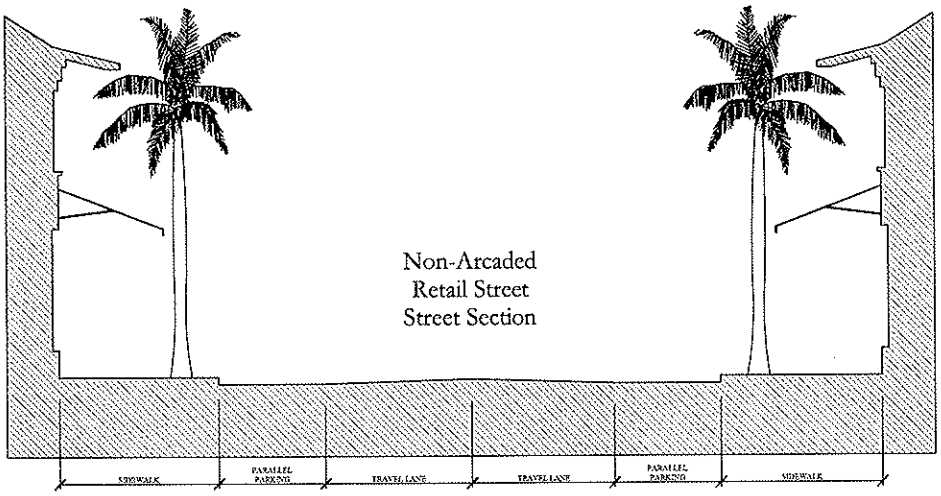
APPENDIX H

Compendium of Street Sections

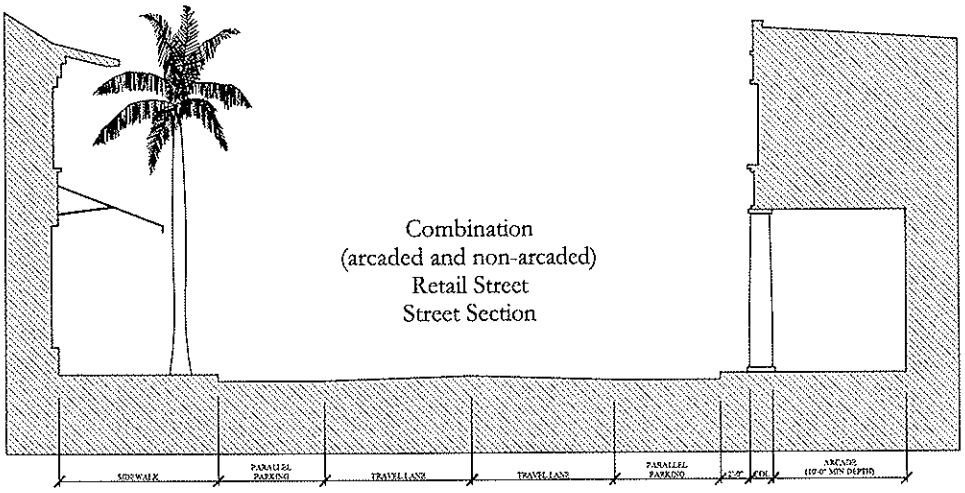
(For Illustration Only)



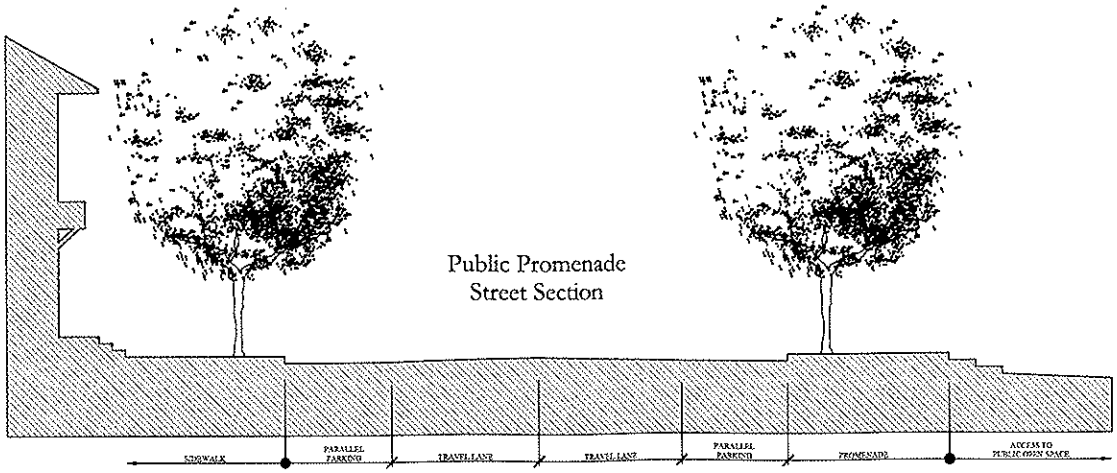
Arcaded
Retail Street
Street Section



Non-Arcaded
Retail Street
Street Section



Combination
(arcaded and non-arcaded)
Retail Street
Street Section



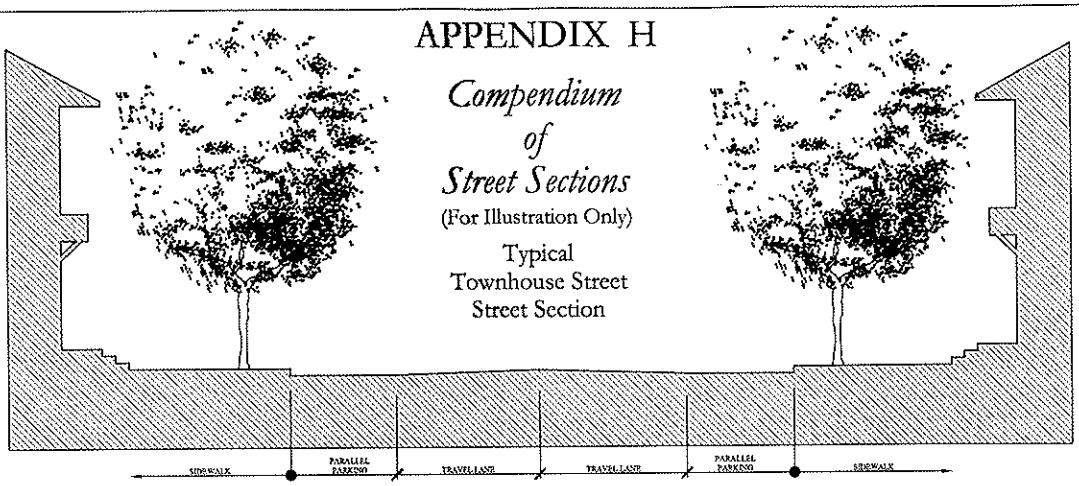
Public Promenade
Street Section

APPENDIX H

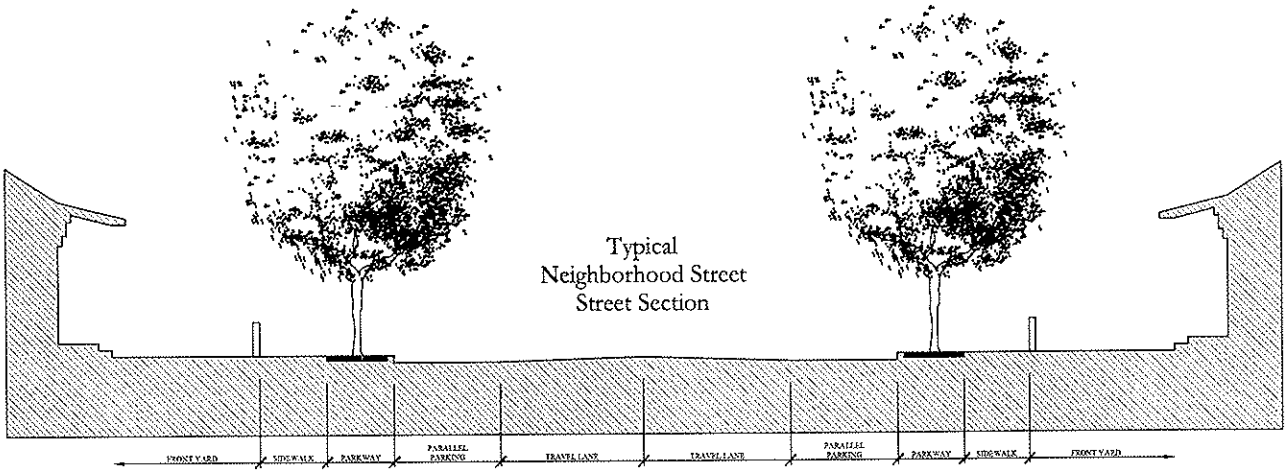
Compendium of Street Sections

(For Illustration Only)

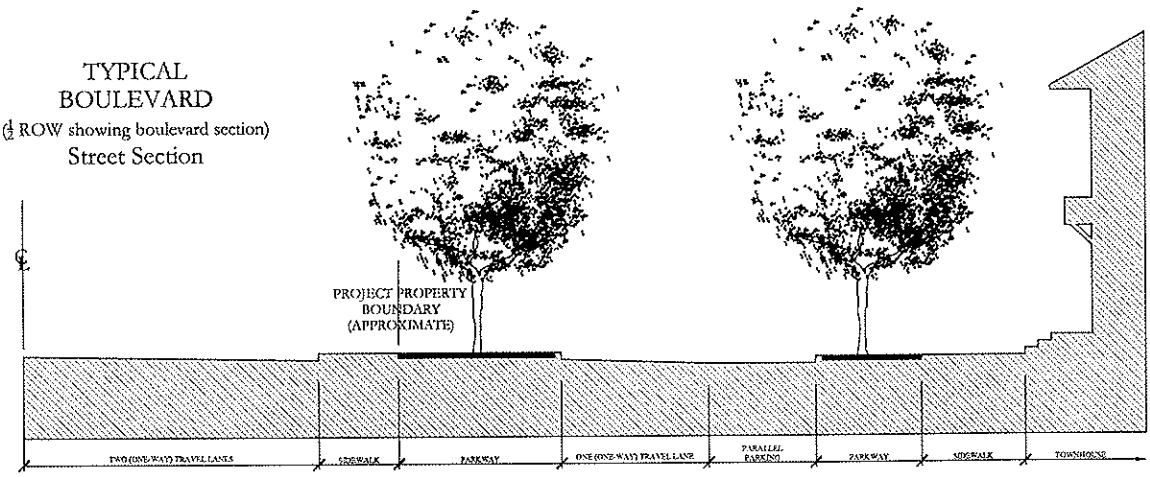
Typical
Townhouse Street
Street Section



Typical
Neighborhood Street
Street Section

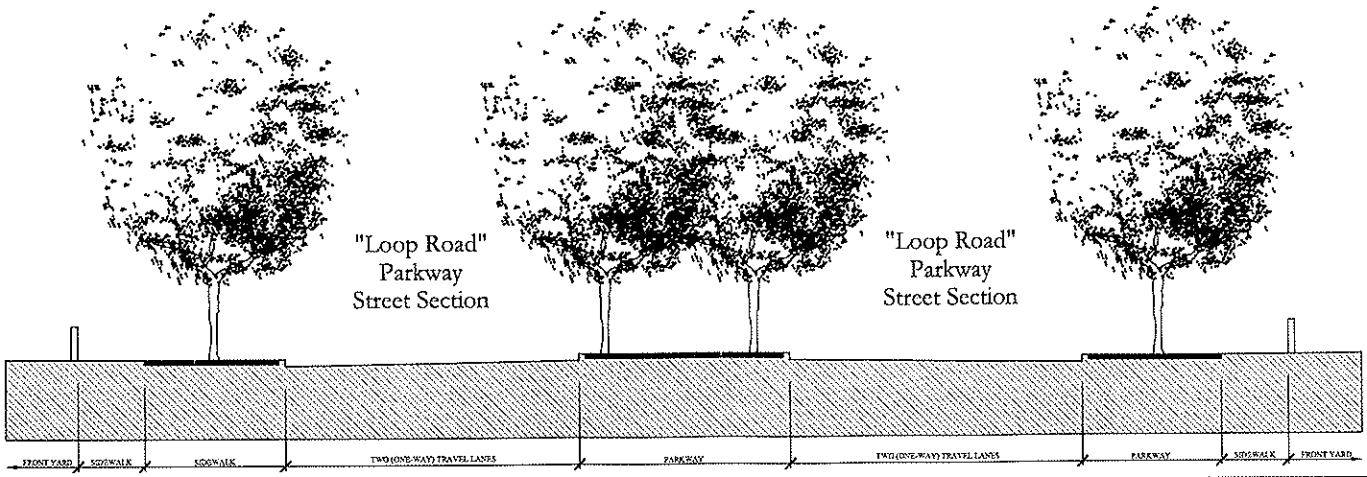


TYPICAL
BOULEVARD
(½ ROW showing boulevard section)
Street Section



"Loop Road"
Parkway
Street Section

"Loop Road"
Parkway
Street Section



APPENDIX I

COMPONENTS OF THE TRADITIONAL URBAN NEIGHBORHOOD

AUTHENTIC MIXED USE FOR DRIS

May 2004

TREASURE COAST REGIONAL PLANNING COUNCIL

COMPONENTS
Of the
TRADITIONAL URBAN NEIGHBORHOOD

American neighborhoods and cities are organisms, which are as complex and unique as the individuals who reside in them. Like people, places grow at different times, at different scales, with differing values and a varying sense of purpose. While it is impossible to generically characterize the human ethos and spirit, there are consistent basic needs like food, water, and shelter, which are fundamental to human existence.

Cities, towns and neighborhoods also require basic elements if they are to provide a memorable and sustainable habitat for their residents. These elements, while they may vary in scale and character from place to place, are consistently found in traditional development patterns. Listed below are the basic components which make up the traditional urban neighborhood.

I. Neighborhood Size

a. The neighborhood is scaled upon a five-minute walking radius (1,350 feet) as measured from the approximate center of the neighborhood.

b. In general, the neighborhood has well-defined edges, and should range between 40 - 150 acres in size. This size may vary depending upon physical and geological conditions.

c. Adjacent neighborhoods are connected with a series of streets detailed to encourage pedestrian and bicycle traffic.

II. Neighborhood Center

a. Each neighborhood has a recognizable center in the form of a public square, a park, a green, or a plaza.

b. The neighborhood center is faced by the fronts of buildings, which are sited to best define the public open space. A minimum of 80% of these buildings has a minimum height of 2 stories in order to achieve adequate spatial definition.

III. Streets, Blocks, and Alleyways

a. The basic building blocks of the neighborhood are the street, the block, and the alleyway. Each neighborhood has a fine-grained network of streets and blocks. Alleyways are encouraged in residential areas (especially where higher densities occur) and are provided in the mixed-use areas of the neighborhood.

b. Streets are detailed with sidewalks, on-street parallel parking, regularly spaced street trees and pedestrian-scaled lighting. Street trees are placed between the pedestrian and the roadway in parkways or in tree grates.

c. Blocks are scaled to accommodate a variety of building types and encourage pedestrian traffic. Typical block dimensions range between 300' – 500' on a block face and do not exceed 600' on any single block face. Single blocks do not exceed a total perimeter distance of 2,000'.

d. Alleyways provide access for rear-loaded parking, municipal services, loading and unloading of goods, and allows the street face to be inhabited by buildings and people. In residential areas, alleyways provide private entrances and parking for rental units located behind single-family homes.

e. Streets, blocks, and alleyways provide a continuous network of vehicular, pedestrian, and bicycle circulation and are designed to accommodate each in a meaningful way.

f. A hierarchy of streets is provided in the neighborhood. Larger streets have larger buildings and sidewalks; smaller streets have smaller buildings and sidewalks.

g. Streets are designed so the buildings facing a street are proportional to the width of that street. The preferred ratio of height to width proportion is 1:1.5 (1 unit in height to 1.5 units in width).

h. Sidewalks are continuous, provided on both sides of every street, and are a minimum dimension of 5'-0" wide on residential streets and a minimum of 10'-0" on mixed-use streets.

IV. Public Open Spaces

a. Each neighborhood has at least one primary, centrally located public plaza, green, park, or square. This space is faced by the fronts of buildings and is detailed with pedestrian-scaled street lighting, regularly spaced street trees, and street furnishings such as benches and fountains.

b. Streets and public open spaces are accessible to the public.

c. Public open spaces, including waterfronts, parkways and golf courses have public edges so these amenities are not wholly privatized.

d. Each neighborhood has a series of secondary and tertiary public open spaces, which are linked to one another by streets and parkways. Every residential unit is within a five-minute walk of a neighborhood park, green, square, or plaza.

V. Civic and Public Buildings

a. Civic and public buildings are sited on locations of high public visibility and importance. These locations include street terminations, parkways and greens, squares, important intersections, and other special sites.

b. Civic and public buildings include, but are not limited to, municipal buildings, places of worship, meeting halls, hotels and clubhouses, gazebos and other forms of garden architecture.

VI. Mix of Uses

a. Neighborhoods accommodate a mix of uses to support the daily needs of the neighborhood. Varying uses can occur in mixed-use buildings or within walkable distances of each other; not every building must have multiple uses. However, proximity alone is not enough. Streets must be detailed so that pedestrians will walk to different uses.

b. Mixed-use buildings are designed so they can accommodate a variety of uses over time as the local market dictates.

VII. Mix of Housing Prices

a. Neighborhoods provide a variety of housing opportunities to accommodate varying housing prices.

b. The neighborhood provides home-ownership as well as rental housing opportunities in an integrated manner. Rental housing is not concentrated in segregated areas; they are dispersed and filtered into the general neighborhood fabric in a compatible way.

c. The use of accessory or "out" buildings to provide dispersed rental housing, or other accessory uses, within the single-family fabric is critical to the overall sustainability of the neighborhood.

VIII. Building Types

a. Housing types are defined by building typologies (single family, multi-family, townhouse, mixed-use, etc) so that they can be logically and fairly distributed throughout the neighborhood.

b. Building types of like scale, massing, and uses face one another on any given street. Differing building types may be placed back-to-back on a single block.

c. The primary entrance of every building directly faces a street, a square, a park, a plaza, or a green.

IX. Parking

a. All streets have on-street parking, which should be counted towards meeting parking requirements.

b. All surface parking lots are screened from the street view with buildings, garden walls, and/or landscaping.

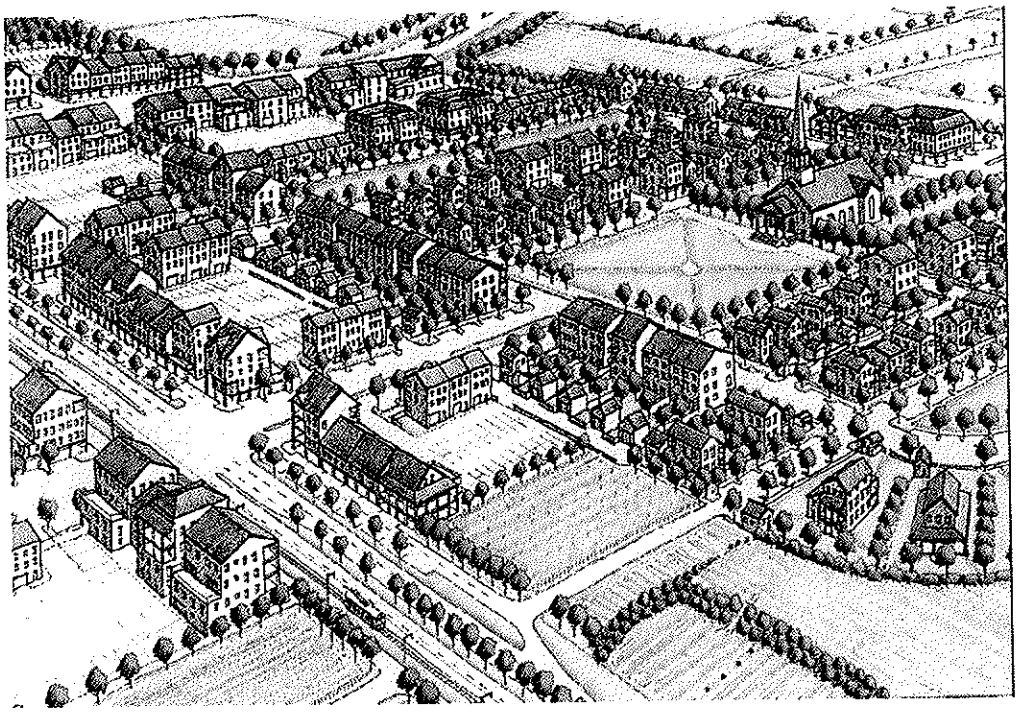
c. Parking structures are located to the interior of the block and are completely screened by buildings with habitable uses for all floors.

d. All on-site parking is located behind the primary building façade. Civic, cultural, and clubhouse buildings are exempted from this provision.

e. For residential lots 50' wide or less, parking is accessed from the rear alleyway.

APPENDIX J

ATTAINABLE WORKFORCE HOUSING TOOLKIT



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December 2006

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Executive Summary

This *Attainable Workforce Housing Toolkit* is a compendium of leading attainable housing policies and programs in effect in communities across the country. The policies and programs are grouped into the categories of Housing Development, Housing Preservation and Financial Tools and Resources. In the Housing Development category, for example, the strategies illustrated are intended to help facilitate the establishment of new attainable workforce housing units through the adoption of flexible planning and zoning tools and developer incentives. The section on Housing Preservation reflects two key strategies intended to help preserve a community's existing affordable housing stock. The Financial Tools and Resources section highlights how various financial tools and resources are being adopted to help defray the costs of providing attainable housing, even in high-growth or high-cost communities.

These select strategies are designed to help communities make better informed decisions about the policies and programs they may want to consider adopting locally. The *Toolkit* provides a brief description of each policy or program, followed by a discussion of prospective benefits and key policy considerations. In some cases, a detailed program description is provided as an exhibit. A strategy that may work well for a community focused on redevelopment would not necessarily be effective in a high growth community. Local governments looking at a range of policy and program options should consider the larger demographic and market context in which their potential programs would operate. Ultimately, a local government should consider a range of options to promote attainable housing.

A summary of attainable workforce housing strategies adopted or under consideration in communities across the Treasure Coast Region is presented in Section IV. The summary provides a snapshot of the respective policy or program, suggests actions to implement the strategy and provides resources for more information. The Toolkit and the summary section will be periodically updated to reflect the most current information available.

Attainable Workforce Housing Toolkit

In October 2005 the Treasure Coast Regional Planning Council published a report entitled *Workforce Housing: Defining Issues and Trends in the Treasure Coast Region.* The report provides background information to policymakers in the Treasure Coast Region on the subject of workforce housing. Topics covered include a definition of workforce housing, an overview of regional workforce housing issues and initial policy considerations. The report is the first part of a Workforce Housing work program designed to provide a comprehensive overview of workforce housing issues in the Region and suggest pragmatic courses of action to address the issues raised. Part II of the Workforce Housing work program was represented by a workforce housing summit that took place in December, 2005. *Achieving Results: A Symposium on Workforce Housing* brought together national and local experts on the subject of smart growth and workforce housing, highlighted best practices and provided an array of possible actions that local governments could take to provide workforce housing solutions in their communities. Part III of the work program, this *Attainable Workforce Housing Toolkit* suggests strategies – both public and private that can be undertaken along with current efforts underway to meet the demand for workforce housing across the Region.

The Treasure Coast Regional Planning Council's *Attainable Workforce Housing Toolkit* is a compilation of leading policies and planning tools that local governments can use to preserve and promote attainable workforce housing in their communities. It provides information on a wide array of community-based workforce housing strategies aimed at helping to increase and preserve the attainable housing stock in the Treasure Coast Region.

The toolkit is divided into four sections. Section I provides an overview of programs and policies designed to encourage the development of attainable workforce housing. Section II discusses approaches to help preserve existing attainable housing units. Section III highlights financial tools and resources that can be adopted to help spur workforce housing development. A summary of attainable workforce housing strategies adopted or under consideration in communities across the Treasure Coast Region is presented in Section IV.

How to Use the Toolkit

The purpose of this toolkit is to provide information on a wide range of workforce housing development and preservation strategies, highlight benefits of those strategies and illustrate key policy issues. The toolkit provides examples of policies in action and links to additional resources. For the purposes of this report, the terms "workforce housing", "attainable housing" and "affordable housing", are used interchangeably.

Ultimately, local governments working on ways to provide workforce housing for essential services personnel in their communities will need to consider a variety of complementary options. The Toolkit is not intended to represent an entire array of possible approaches to help promote and preserve affordable housing. It includes

approaches being used nationwide, some of which are being considered as policies and programs by local governments in the Region.

As local governments adopt policies and programs to address workforce housing, the toolkit will be updated to reflect local success stories. Ideally, a coherent and integrated workforce housing program would be the outcome of a carefully vetted public private process that has reached consensus on mutually beneficial approaches.

What is Workforce Housing and Why is it a Problem?

The cost of housing in the Treasure Coast Region is soaring. Middle-income households are finding it increasingly difficult to locate housing they can afford in proximity to where they work. According to business and community leaders, many moderate income families are seeking housing they can afford outside of the Region's major job centers.

A lack of affordable workforce housing in our communities negatively affects the Region's economy due to increased commute times to work and congested roads. Hardships are created for employers who find it increasingly difficult to find employees to fill much-needed entry and mid-level positions in industries such as Professional Services, Retail Trade, Education and Health Services. "Workforce Housing" can generally be defined as housing designed to be affordable to those earning between 60 and 120% of Area Median Income (AMI). That is housing that is moderately priced and addresses the demand for new homes generated by households with annual incomes ranging between $32,000 and $75,000.

What are Workforce Households?

The term "workforce households" is defined here as "households, with at least one full-time worker, whose members earn incomes that are too low for them to afford to pay market prices for homes or apartments in the communities where they work but, by most definitions, too high to enable them to qualify for significant federal housing subsidies." The target group includes teachers, police officers, fire fighters, and other municipal employees, as well as health care workers, retail clerks, administrative personnel, and other moderate income workers, all of whom are essential to the economic vitality of a city or a region and the success of its corporations, institutions, and governmental functions.

Urban Land Institute, 2003
Encouraging Workforce Housing in the Chicago Region, Atlanta, and the District of Columbia

Council's Strategic Regional Policy Plan highlights the chief dimensions of the affordable housing problem in the Region:

- Rapid population growth has stressed the ability of the private sector to provide a range of affordable housing concurrent with need;
- The cost of housing in much of the Region is much higher than the ability of workers to pay;
- An increasing proportion of the population earns low wages;
- There is a lack of rental housing of alternative types for low-income residents;
- There is a lack of housing in proximity to employment opportunities;
- Many local codes and subdivision regulations prohibit historic methods and means for naturally providing a range of housing affordabilities within existing and new communities; and
- Large lot, low density forms of development do not include a range of building types and lot sizes necessary to accommodate affordable housing.

Policy and Program Considerations

Council's report *Workforce Housing: Defining Issues and Trends in the Treasure Coast* noted that no single solution exists to the problem of meeting an increasing demand for affordably-priced workforce housing. This is a point that cannot be overemphasized. "There are numerous and varied program and policy responses to meet the challenge of providing workforce housing in the Treasure Coast Region... people ask why the market can't fix the problem or why local governments can't mandate a solution. The problem, however, is housing markets are inherently complicated. They are influenced by diverse factors such as local demographics and geography, the price of land, types of housing available, mobility of the workforce, interest rates, and land use regulations. Access to and availability of moderately priced housing for working households is determined by two conditions – market and non-market."

Market conditions such as a strong demand for housing, a limited supply of land, high land prices and higher profit margins for the construction of high-end housing all contribute to where and how much workforce housing is built.

Non-market conditions such as regulatory policies and practices at the local level often discourage the construction of moderately-priced homes even if market conditions make this type of development feasible. Regulatory barriers to workforce housing include:

- Large lot zoning;
- Restrictions on attached and manufactured units;
- Exclusionary zoning;
- Building codes;
- Lack of regulatory and program coordination.

Local governments, through their SHIP programs, recent FEMA hurricane relief funding and other initiatives have attempted to provide affordable housing for their residents. But, the demand for affordably priced housing continues to exceed supply. Additional measures being adopted and/or reviewed by local governments include:

- ✓ Adoption of inclusionary zoning;
- ✓ Developing community land trusts;
- ✓ Sponsoring a regional housing trust fund;
- ✓ Brownfields redevelopment;
- ✓ Density bonuses for affordable units;
- ✓ Allowing granny flats/accessory apartments;
- ✓ Mixed-income, mixed-use development;
- ✓ Traditional neighborhood development.

It is worth noting however, that no single solution exists to the problem of meeting an increasing demand for affordably-priced workforce housing. Most local governments are working on the problem and will need to consider a number of options. There are

demand-side and supply-side strategies to consider. Demand side initiatives typically focus on the cost of housing and seek to alleviate barriers such as subsidizing the down payment on a home purchase. Employer assisted housing is an example of a demand-side solution. Supply-side solutions seek to correct inadequacies in the housing market by increasing the supply of housing units provided. Sample programs include inclusionary housing and housing trust funds.

In an analysis of regional workforce housing issues the East Central Florida Regional Planning Council noted that

...virtually all communities are faced with the challenge of providing adequate and affordable housing to their residents. How they go about meeting that challenge, however, is as individual as each community itself. The suitability and effectiveness of solutions will depend on unique local circumstances—what works in one community, or even in part of one community, may not work in another. There is no one-size-fits-all solution to the affordable housing issue—a combination of strategies is necessary to effectively address this challenge.

Local governments looking at policy and program options to create and preserve workforce housing in their communities should consider the larger demographic and market context in which their potential programs would operate.

In its *Workforce Housing Toolkit*, the East Central Florida RPC also noted that attainable housing policies need to work within the larger demographic and land use context of their respective communities.

In ***rapidly growing communities*** with strong housing markets, inclusionary zoning could be an effective strategy for increasing the supply of affordable housing. Policies to diversify the housing stock to include townhomes, smaller homes and higher-density rental housing also could be appropriate strategies for housing the current and expected future population in these areas. In ***established communities***, particularly if they are landlocked, the focus might be on redevelopment and adaptive reuse in downtown areas, rehabilitation of housing in older areas and increasing density around transit. If ***first-ring suburbs*** in the community have problems with aging housing stock and loss of economic opportunity, then strategies such as economic development or community land trusts might be appropriate. ***Older communities*** might be faced with losing rental units to expiring federal subsidies, while new suburban communities often face opposition to the development of higher-density and rental housing.

SECTION I: HOUSING DEVELOPMENT

Housing development strategies refer to options to help create new attainable workforce housing units. They are a combination of community-based policies and programs that encourage the development of attainable housing through the adoption of flexible planning and zoning tools and developer incentives to help defray the cost of providing affordably priced housing to essential services personnel.

Planning and Zoning Tools

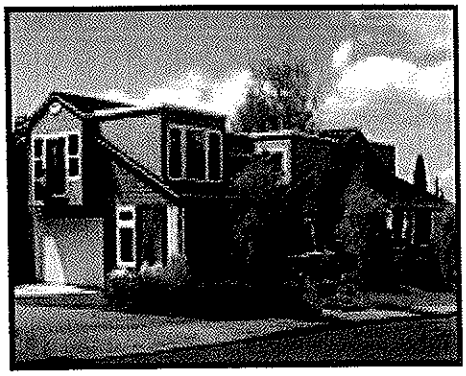
Many local government codes and subdivision regulations prohibit historic methods and means for naturally providing a range of housing types, tenures and affordabilities within existing and new communities. Large lot, low density forms of development do not include a range of building types and lot sizes necessary to accommodate affordable housing.

The following strategies are designed to remove regulatory barriers and encourage the development of attainable housing:

- Accessory Dwelling Units
- Expedited Permitting
- Inclusionary Zoning
- Infill Housing Development
- Special Area Plans

I.1. Accessory Dwelling Units

Description



This ADU is built over a detached garage in Kirkland, Washington.

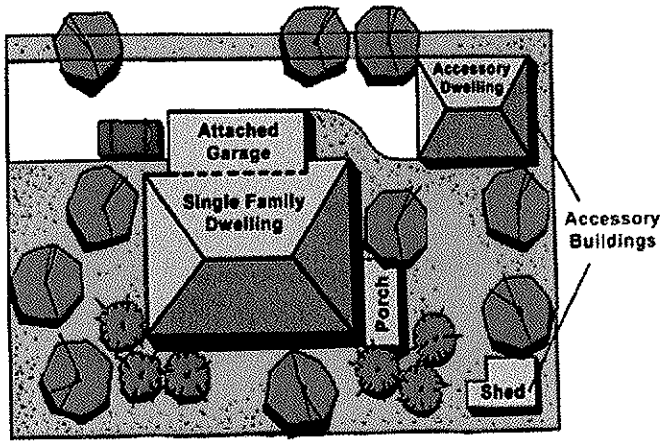
Accessory dwelling units (ADUs) are most commonly understood to be a separate additional living unit, including separate kitchen, sleeping, and bathroom facilities, attached or detached from the primary residential unit, on a single-family lot. They are usually subordinate in size, location, and appearance to the primary unit.

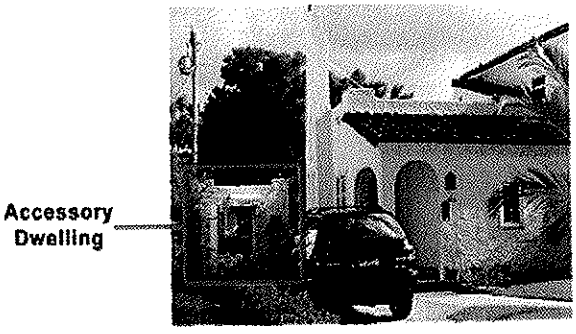
In its first year of implementation in 2003, the City of Santa Cruz, California's Accessory Dwelling Unit Development Program helped to produce thirty five accessory dwelling units. Over the next five years, the City estimated that between 40 and 50 new accessory dwelling units were built per year. The program has been so successful that eighty cities throughout California have requested copies of the implementing ordinance and ADU manual. A program summary is attached as Appendix 1.

Benefits

In its research report, *Affordable Housing Techniques: A Primer for Local Government Officials,* the Municipal Research and Services Center of Washington (MRSC) suggests that by allowing ADUs communities can provide more affordable housing opportunities without the necessity of local government expenditures or subsidies. This is important in light of declining federal support for the construction of new affordable housing units. Compared to the costs of constructing new government-subsidized apartments, the lower cost of converting existing units, which are paid for by the homeowner, can be an attractive option for most communities. MRSC also found that:

- If allowed, accessory apartments are a relatively easy way to obtain a source of affordable housing.
- Generally, rents for accessory apartments are lower than rents for comparably sized non-accessory apartments.
- Accessory dwelling units provide an additional income stream to elderly





Source: Palm Beach County Unified Land Development Code

residents who are living on fixed incomes and can use the added income to offset the costs of rising property taxes and utility bills, thus allowing them to stay in their homes.

- First-time home buyers can use the extra income to help pay their mortgage payment.
- Accessory apartments use surplus space in large older homes, thus making the most efficient use of the existing housing stock.
- Accessory apartments offer renters affordable housing located in more desirable single-family neighborhoods.

Key Policy Issues

Neighborhood opposition to accessory dwelling units usually arises from concerns about declining property values, exterior appearance of accessory units, and impacts on parking and traffic from increased density.

Regulations designed to address community concerns are usually devised to deal with such issues as the size of units, exterior appearance, off-street parking, and concentration of units. The challenge to policy-makers is to address the concerns of residents opposed to the concept of accessory units without making conversions too difficult or expensive for homeowners.

I.2. Expedited Permitting / Reducing Regulatory Barriers

Description

Uncertainties and time delays in the development review process increase the costs of development. If local governments can better define the development process, strive to decrease the length of the approval process and streamline permitting, affordable housing projects can be more attractive to developers. Expedited permitting is a cost-efficient and effective way of reducing developer costs. Fast-tracking review and permitting of affordable housing projects reduces developer costs at little cost to local jurisdictions.

U.S. Department of Housing and Urban Development (HUD) research suggests, in some communities, inflexible local development rules and regulations can account for as much as a third of the cost of a new home. HUD's website, *Regulatory Barriers Clearinghouse* at **www.regbarriers.org** suggests ten main areas that local governments can review for potential barriers to affordable housing development:

- Administrative Processes & Streamlining
- Building & Housing Codes
- Fair Housing & Neighborhood Deconcentration
- Fees & Dedications
- Planning & Growth Restrictions
- Redevelopment/Infill
- Rent Controls
- State & Local Environmental & Historic Preservation Regulations/Enforcement Process
- Tax Policies
- Zoning, Land Development Construction & Subdivision Regulations

Jaimie Ross, Affordable Housing Director for 1000 Friends of Florida cites in her analysis of expedited permitting in Florida, ..."Expedited permitting is required for all affordable housing land use decisions in every Florida county. Fast track permitting for this housing also is required in every SHIP entitlement city. Some local governments, such as in Pinellas County, have been fast tracking land use permits for affordable housing for years. Others, however, continue to expedite only building permits, with the result that zoning requests and variances for affordable housing are regularly treated the same as those for market rate homes..."

The Pinellas County Land Development Code, for example, provides incentives to encourage the provision of affordable housing (See Appendix 2). These incentives include:

- Expedited Permit Processing
- Density Bonuses
- Impact and Review Fee Relief
- Accessory Structures
- Reduced Parking Requirements
- Reduced Setbacks
- Housing in Commercial Zones

- Street Design Modifications
- Donation of Publicly Owned Land
- Zero Lot Lines
- Identifying Qualified Renters or Buyers

Benefits

According to the Washington Area Housing Partnership's *Toolkit for Affordable Housing Development*, expedited permitting is a cost-efficient and very effective way of reducing developer costs. Fast-track review and permitting of affordable housing projects can:

- Be administered with little or no cost to local governments.
- Provide meaningful incentives to developers of affordable housing.

Key Policy Issues

Local governments seeking to remove regulatory barriers to affordable housing in their communities need to conduct a comprehensive review of current rules and regulations to identify those which inhibit affordable housing development.

I.3. Inclusionary Zoning

Description

Inclusionary zoning ordinances are designed to require new residential developments over a certain size to set aside a certain number of affordable housing units within the development. The number of affordable units to be included in the new development is based on a percentage of the total number of proposed units in the development (generally 12% - 15%). In exchange, local governments may provide certain benefits such as a density bonus, fast-track permitting and waivers of certain municipal fees. In some cases, inclusionary zoning ordinances allow the developer to build the units off-site or make a contribution to a housing trust fund. A model inclusionary housing ordinance developed by the Florida Housing Coalition is attached as Appendix 3.

Benefits

Inclusionary zoning programs do not generally require the expenditure of local tax dollars to fund affordable housing development.

In 2000, in response to rapidly rising housing costs and the ineffectiveness of the voluntary inclusionary housing program, Boulder passed a mandatory inclusionary housing ordinance. The new program required 20% of housing in new developments to be priced affordably for low-income households, which Boulder now defines as households earning less than 80% of the area median income.[26] The comprehensive mandatory ordinance covers all residential developments regardless of size (with the exception of developments of a single lot with one owner and total floor area of less than 1,600 feet).

Boulder, Colorado

Source: *Success in Affordable Housing: The Metro Denver Experience*, Business and Professional People for the Public Interest, Chicago, 2005.

Proactive ordinances with built-in developer incentives, such as density bonus programs, offer a positive alternative to mandatory programs that may be resisted by local developers. Voluntary programs allow developers to determine for themselves whether participation will be cost effective.

Inclusionary programs avoid the problems of overconcentration, isolation, and stigmatization of affordable housing units, by integrating them into housing developments located throughout the community. This enhances the concept of mixed-income communities.

Inclusionary zoning can be flexible, since the provision for affordable housing can either be regulated or encouraged by developer incentives.

Key Policy Issues

MRSC suggest that mandatory requirements of inclusionary housing programs should be relatively modest (10 -15 percent of total units) if there are no compensating developer incentives.

Inclusionary programs will require some ongoing administrative oversight to provide for the collection and management of fees paid by developers who opt to pay into a housing trust fund. These programs will also require staff time and resources to ensure that attainable housing units that are constructed will be maintained as attainable housing for the foreseeable future and will be available to income eligible workforce households.

I.4. Infill Development

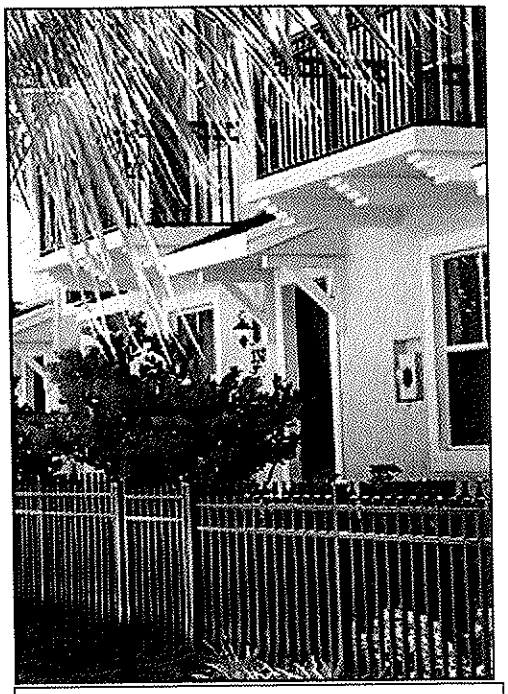
Description

Infill refers to development that makes use of vacant or underutilized land and buildings in downtown or suburban areas.

Interest in infill development stems from a desire to concentrate development into areas already served by public facilities, including police, fire, utilities, schools, and transit, to make more efficient use of existing land and public facilities.

Community redevelopment agencies are one of the main vehicles used by local governments to encourage infill development as part of a strategy to revitalize and bring new activity to older neighborhoods and downtown areas. Infill development provides more affordable housing opportunities for smaller households, helps to discourage urban sprawl, utilizes existing infrastructure and encourages pedestrian friendly-neighborhoods.

In their publication, *Successful Infill Development,* the Northeast-Midwest Institute suggests that successful infill development looks and feels different from typical suburban development, "...Successful infill looks, feels, and functions differently from development that is single use, low density, and dominated by automobiles and highways. It creates neighborhoods and districts that embrace a mix of uses and incomes, where a wide variety of citizens live, work, and play. It serves pedestrians and cyclists as well as autos."



Atlantic Grove
Delray Beach

Atlantic Grove is a mixed-use, mixed-income redevelopment project, consisting of fifty-five (55) for-sale townhouses and two (2), 3-story, commercial buildings, with retail on the first floor, offices on the second floor, and twenty (20) residential lofts on the third floor, overlooking Atlantic Avenue.

It is the first major private development on West Atlantic Avenue, located just west of the world-class Delray Beach Tennis Center, and one quarter of a mile west of downtown Delray Beach.

Benefits

- The trend towards smaller households can be readily served by infill development.
- Infill sites already served by infrastructure services can reduce a developer's upfront costs and may help to reduce the cost of the housing unit.
- Infill development can help to revitalize communities and downtowns.
- Infill redevelopment can help to reduce urban sprawl and encourage pedestrian-friendly neighborhoods.

Key Policy Issues

If infill sites are located on higher cost urban land, multi-family housing and/or mixed-use projects, with lower per-unit development costs, may be the most appropriate type of development.

Where land costs may be particularly high, incentives such as density bonuses or allowance of mixed uses, may add to a project's overall feasibility.

Infill redevelopment projects should be carefully designed to ensure compatibility with existing neighborhoods, surrounding buildings and architecture, and minimize parking, and traffic problems. This will help to increase neighborhood acceptance.

I.5. Special Area Plans

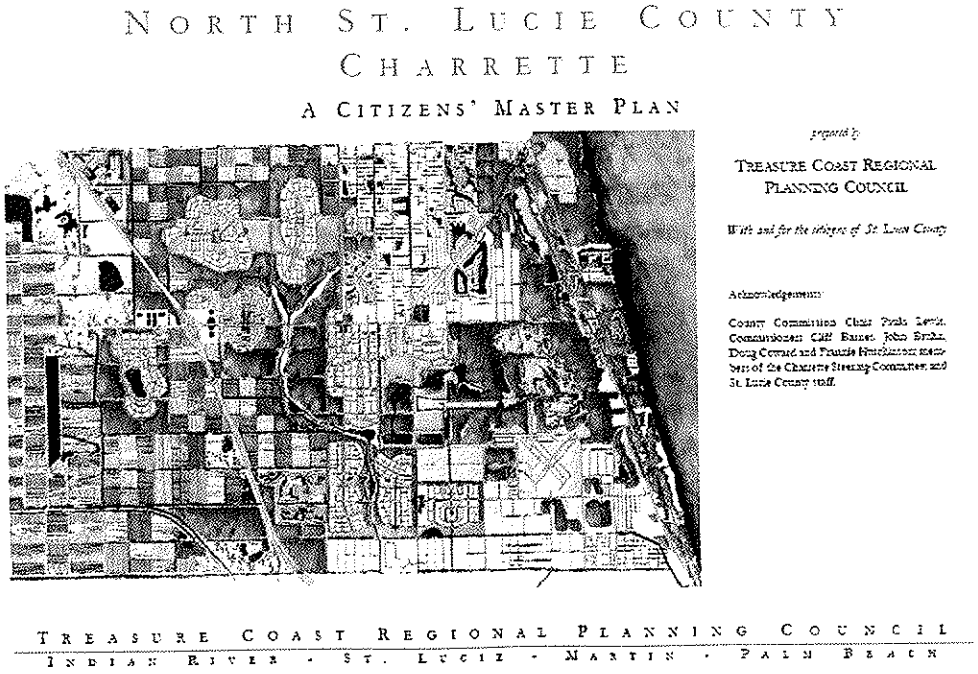
Description

Unique problems or issues in a community require extra consideration and attention. In high growth communities, the threatened loss of open space and agricultural lands may be a primary issue. There could be a critical need for private sector reinvestment to occur in an underutized corridor or downtown area. A community might choose to develop a special area plan to address these concerns. Examples of special area plans include plans for a downtown or industrial district, waterfront or agricultural area. Special area plans offer carefully considered land use, open space and development strategies to guide the growth and development of the area in question.

Benefits

- Provide a comprehensive analysis of issues and opportunities.
- Strategies are tailored to address the issues of the special planning area.
- Special land use, developer and financial incentives can be developed to help implement the special area plan.

The principles set forth in the recently adopted Towns, Villages and Countryside Element (TVC) constitutes a pro-active plan for future growth in St. Lucie County. The planning approach outlined in this element contains a strategy for development in the existing rural



agricultural areas that will ensure that future growth is sustainable, predictable, protects and enhances the natural environment, and improves the citizens' quality of life. The TVC preserves and enhances existing private property rights while providing incentive-based options to landowners intended to achieve these goals. Importantly, the TVC Element establishes workforce housing policies that require each Town and Village created within the TVC area to provide a minimum of 8% of the proposed number of dwellings as workforce housing. The Workforce Housing section of the TVC Land Development Regulations also specify affordability and resale provisions for workforce housing units to ensure that long-term affordability is maintained.

Key Policy Issues

Developing special area plans requires a good deal of public participation, staff time and resources. There may be conflicting issues and needs expressed by constituencies and landowners located within the special planning area. These diverse issues and needs must be addressed fairly and comprehensively in the final plan that is developed.

Developer Incentives

The cost of producing a housing unit is typically passed on to the purchaser of the home in the form of the final purchase price. The higher the costs to the developer to build housing the higher the prices that local households will pay for the housing. Developer incentives in the form of density bonuses and impact fee reductions or waivers can help to reduce the overall cost of housing and make affordable housing more likely. This section of the toolkit focuses on the following programs:

- Density Bonuses
- Impact Fee Strategies (reduction, waiver, alternative methods of payment, delayed payment)

I.6. Density Bonuses

Description

A density bonus allows a developer to build more units within a project than would otherwise be permitted under normal density limits in a community. A developer who commits to providing a certain percentage of below market attainable housing units may be allowed to reduce lot sizes or increase the number of houses on a lot, thereby reducing land cost per unit.

Benefits

- Bonuses can be provided at little or no cost to local governments.

Features

Zoning and subdivision regulations could be modified by a local government to allow density bonuses. Density bonuses may be used in conjunction with an open space development or planned unit development where the community desires to preserve open space and have lower municipal costs (street, water, and sewer).

Key Policy Issues

Density bonuses alone may not be sufficient, depending on market conditions, as an incentive to developers. Local governments may want to consider additional incentives such as reduced setbacks, street frontages, and other cost reducing inducements.

Policy makers need to consider what level of additional density will be allowed in exchange for a specified number of affordable units. Density bonuses are usually expressed as a percentage of the density allowed under normal zoning regulations.

An understanding of market conditions and context is important in designing a density bonus program. Programs must be designed on the basis of a thorough understanding of the real estate market to determine feasibility and to develop appropriate regulations. If current zoning allows enough density to satisfy current market demand, developers may have no interest in using a density bonus.

Careful attention should be given to the location and design of affordable housing units within proposed projects to ensure project quality.

I.7. Impact Fee Strategies

Description

Like all other development costs, impact fees add to the final cost of housing. Some local governments seeking to promote affordable housing development as part of market-rate residential projects have waived a portion or all of impact fees on these types of projects.

Benefits

- Helps to promote attainable housing development by lowering development costs.
- Helps to make attainable housing more feasible in high-cost communities.

Key Policy Issues

In order to develop an impact fee reduction and/or waiver program, communities need to review all current impact fees and exaction requirements to determine where reductions and/or waivers for affordable housing projects may be appropriate.

Impact fee reductions and/or waivers can be combined with other affordable housing techniques such as density bonuses or inclusionary zoning requirements to promote the construction of affordable housing.

Affordable Housing Impact Fee Grant

The City of Orlando currently reimburses the amount of City impact fees to certified developers of affordable housing within the City of Orlando. A developer utilizing this program would pay the impact fees when building permits are pulled, but would be reimbursed for the amount of the sewer impact fee and the transportation impact fee when certificates of occupancy are issued. The developer would also be reimbursed 25% of the school impact fees if developing rental housing and 62% if developing owner occupied housing. The current amount of impact fees are as follows:

Transportation Impact Fee	
Single Family	$1,192
Sewer Benefit Fee	
Single Family	$3,007.60
School Impact Fee (County)	
Single Family	$7,000
Multi-Family	$3,807

Actual amount reimbursed for school impact fee is $951.75 for Rental Multi-Family; $2,360.34 for Owner-Occupied Multi Family; and $4,340 for owner Occupied Single Family.

In order to qualify for this incentive, the project must be certified as an affordable housing project under the Affordable Housing Certification Process.

Source: City of Orlando, Housing Department Website accessed on 10/10/2006.

SECTION II: HOUSING PRESERVATION

In many communities across the country affordable housing is lost through conversion of existing attainable units to market rate units. Through a variety of means such as condominium conversions of apartment buildings or replacement of mobile home parks with new development, affordable housing units are lost. Housing preservation strategies are designed to help preserve affordable housing stock that already exists in communities.

The following strategies can be used to help preserve affordable housing units:

- Adaptive Reuse
- Community Land Trusts

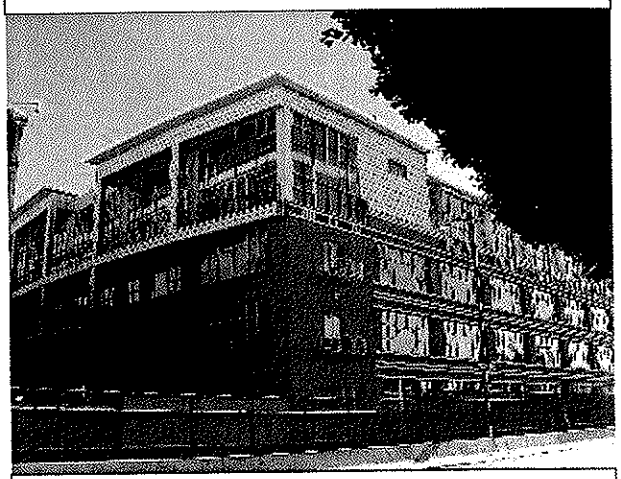
II.1. Adaptive Reuse

Description

Adaptive reuse programs involve converting surplus and/or outmoded buildings into new economically viable uses. Adaptive reuse projects could involve the conversion of old buildings such as hospitals, schools, warehouses and train stations and other outmoded buildings to new productive uses including housing.

The Flower Street Lofts (inset graphic) is an example of a former industrial use building, located in downtown Los Angeles, that was converted to residential uses under the City's Adaptive Reuse Program. Introduced in 2003, the City of Los Angeles's program is so successful it has helped to create over 10,000 housing units. The Adaptive Reuse Ordinance works by significantly reducing the time required to obtain a building permit (See Appendix 4).

Flower Street Lofts
1130-1140 S. Flower Street
Los Angeles, CA, 90015



Number of Units:
91

Number of Stories:
4

Status:
Completed

Neighborhood:
South Park

Building Floor Area:
156,416

Housing Type:
Loft-style Condominiums

Total Project Cost:
$35,000,000

The Lee Group spearheaded the Flower Street Lofts, downtown's first for-sale adaptive reuse project. In September, 2003, the United Parcel Service's central operations facility was reborn, with a newly constructed floor, as 91 loft-style condominium homes. At a record pace, the project sold out, proving there's a vibrant condominium market in downtown Los Angeles. Flower Street Lofts is located in South Park, across the street from the Staples Center, and next to the Palm Restaurant. With the Harbor freeway and the Blue Line close by, transportation access couldn't be more convenient to its homeowners.

Benefits

Adaptive reuse is a good way to introduce housing into non-residential areas.

Many older buildings which may be converted to housing uses are located in downtown areas and may therefore offer new residents convenient access to transportation, shopping and employment.

In some cases adaptive reuse of previously vacated or deteriorated buildings can be less expensive than new construction since infrastructure and other site improvements are already in place. This may help to reduce the cost of producing affordable housing units.

Adaptive reuse is a good tool to facilitate the revitalization of previously declining or blighted areas by rehabilitating deteriorating buildings and by bringing in new residents.

Key Policy Issues

Communities can facilitate adaptive reuse projects by adopting flexible zoning policies, such as mixed-use zoning, or by allowing residences as a permitted or conditional use in appropriate commercial and industrial zones.

Successful adaptive reuse involves extensive partnerships and coordination activities, and may involve many steps, including making inventories of potential adaptive reuse sites, amending local zoning regulations, arranging for possible property transfers of publicly-owned buildings, and providing funding assistance such as loans, grants and rent subsidies.

II.2. Community Land Trusts

Description

Community land trusts (CLTs) are typically organized and formed as nonprofit organizations to preserve long-term housing affordability. CLTs maintain housing units as affordable by separating ownership of the land and the homes built upon it. Buyers of land trust homes agree that when they move they will sell their home to an income-qualified low- or moderate-income family at an affordable price. By establishing resale prices of the CLT homes, the community land trust ensures long-term affordability.

There are 211 active community land trusts across the country, ten of which are located in Florida. See Table 1.

Table 1
Community Land Trusts in Florida

Name	City	Status
Boynton Beach CLT	Boynton Beach	Actively being planned
Gulf County CLT	Port St. Joe	Actively being planned
South Florida Regional Smart Growth land Trust	Miami	Active and still growing
Community Housing Trust of Sarasota County	Sarasota	No property yet
Lee County Community Land Trust	Ft. Meyers	Actively being planned
Bahama Conch CLT of Key West	Key West	Actively managing property
Delray Beach CLT	Delray Beach	No property yet
Escambia County CLT	Pensacola	Active and still growing
Hannibal Square CLT	Winter Park	Active and still growing
Middle Keys CLT	Marathon	Active and still growing

Source: Burlington Associates website accessed 10/11/2006.

Benefits

- Helps to ensure long-term affordability of housing
- Helps to ensure the public investment in attainable housing will last a lifetime

Key Policy Issues

Community land trusts can be used in communities which are experiencing differing rates of growth, investment and/or disinvestment. In its *Workforce Housing Toolkit* the East Central Florida Regional Planning Council illustrated how CLTs can be used to accomplish different goals based upon the community setting and context.

In **fast-growing areas**, where the price of real estate is escalating rapidly. They can be used in gentrifying areas to preserve a community's character, and limits on resale prices ensure that some housing remains affordable even in these areas.

In **disinvested neighborhoods**, CLTs can be used to increase owner occupancy, decrease absentee ownership, improve the physical condition of housing and stabilize the community. Such CLTs assist not only the buyers of the CLT's homes, but also existing homeowners in the area, who likely are lower income families.

In expensive **resort communities**, CLTs can provide housing for the community's workers.

In addition to residential uses, CLTs have constructed community facilities, businesses, parks and other types of facilities. CLTs can be located on a contiguous site or can be jurisdiction-wide.

Pros/cons of CLTs

- Pro: CLT is a flexible strategy—it can be used in different kinds of areas, as noted above. All kinds of housing types can be provided in a CLT—owner or rental housing, single family of multi-family. CLTs also can be used to provide economic development opportunities for the neighborhood

- Con: Some believe that a negative of CLTs is that the owner does not realize the full benefit of building equity—the equity is shared with the land trust because the owner does not own the land. There are many responses to this concern, depending on the particular CLT. If the CLT is in a gentrifying area (such as Winter Park), home appreciation likely will happen at a faster rate than a home the buyer could purchase on the market. In the Winter Park CLT, the buyers purchased the homes at a price far below the market value, so the equity they build should be commensurate with their investment.

SECTION III: FINANCIAL TOOLS AND RESOURCES

The cost of residential development, especially in high-growth or high-cost communities can be high. There are however, financial tools and resources that can be used to help defray pre-development and development costs and ultimately help make attainable housing affordable to workforce households. This section illustrates how the following mechanisms can be used to promote attainable housing development and preservation:

- Donation of public land
- Down payment assistance
- Employer-assisted housing
- Housing trust funds
- Linkage fees

III.1. Donation of Public Land

Description

The identification and donation of surplus government owned land can be used to help reduce the cost of developing attainable housing. Donations of land to a non profit affordable housing developer is the typical mechanism.

The Florida Legislature recently passed House Bill 1363 requiring each local government (county and municipality) to prepare an inventory list of all real property it owns within its jurisdiction that is appropriate for use as affordable housing (First Inventory due July 1, 2007). Local governments have three options if they choose to use any of the properties for affordable housing:

1. The land may be offered for sale to generate funds to a local government to purchase land for affordable housing or the proceeds can be put into a local affordable housing trust fund; or
2. The land may be sold with a restriction that requires the development of the property as permanent affordable housing; or
3. The land may be donated to a nonprofit housing organization for the construction of permanent affordable housing.

Benefits

- Little or no cost to local governments
- Can work in conjunction with housing trust funds and other programs

Key Policy Issues

Local governments will have to task staff to identify, inventory and dispose of surplus or other underutilized government-owned property.

III.2. Down Payment Assistance

Description

Down payment assistance programs typically provide interest-free and low-interest loans to qualified low to moderate income homebuyers, which may be used for down payment or closing costs. In many instances, the loans can be forgiven provided the homeowner resides in the home for a certain number of years.

The Florida Housing Finance Corporation's First Time Homebuyer Program provides low-interest 30 year fixed-rate loans that can be used for down payment and closing costs associated with a home purchase. Eligible applicants could receive up to $25,000 in assistance in certain high cost counties. Essential services personnel such as teachers, firefighters, healthcare workers, police officers, as well as active duty and veteran military personnel could be eligible for lower interest rates through the Community Loan Program. The State of Florida's affordable housing programs are presented in Appendix 5.

The State Housing Initiatives Partnership (SHIP) Program, established in the 1992 Sadowski Affordable Housing Act, allocates funds to each of Florida's 67 counties on a population-based formula. SHIP funds can be used to help produce and preserve affordable homeownership and multifamily housing for income-qualified households. Current 2006/2007 funding for SHIP is $166,400,000.

The Florida Housing Finance Corporation notes in their description of the SHIP program that higher construction costs and purchase prices for housing have required significant changes to many local SHIP programs. Some of those changes are:

- Development of strategies to assist specific employment categories (teachers, nurses, first responders) to address the needs of the local community.
- The need to provide deeper subsidies from SHIP for down payment assistance to make home purchasing possible for low to moderate income households (see Table 2 below).

Table 2

Incomes, Housing Prices and Subsidies

	1995				2005			
MSA	Income for Typical SHIP Homebuyer (70% of Median Income)	Mortgage Amount Qualified For	SHIP Eligible Home Price	Subsidy Needed to Afford SHIP Eligible Home Price	Income for Typical SHIP Homebuyer (70% of Median Income)	Mortgage Amount Qualified For	SHIP Eligible Home Price	Subsidy needed to Afford SHIP Eligible Home Price
Daytona Beach	$23,730	$62,912	$66,600	$2,355	$34,055	$72,360	$190,800	$114,625
Fort Myers	$26,250	$72,138	$74,700	$1,067	$37,870	$79,077	$229,500	$145,833
Ft. Lauderdale	$30,170	$86,214	$88,200	$221	$40,670	$98,740	$216,900	$113,822
Fort Pierce-St. Lucie	$27,510	$76,366	$72,000	$0	$36,715	$76,066	$220,500	$140,023
Fort Walton Beach	$25,410	$67,392	$77,400	$8,460	$38,605	$98,245	$187,200	$85,210
Jacksonville	$27,580	$77,094	$78,300	$0	$40,495	$116,870	$163,800	$43,654
Lakeland	$23,170	$61,420	$62,550	$0	$33,320	$80,319	$154,800	$70,385
Miami	$24,990	$62,930	$85,500	$20,860	$32,445	$51,370	$225,000	$169,130
Naples	$31,290	$86,694	$103,500	$14,736	$44,310	$76,705	$333,000	$249,635
Ocala	$20,790	$50,893	$61,200	$9,082	$30,170	$74,639	$126,000	$48,841
Orlando, FL	$28,000	$78,338	$81,000	$1,041	$38,570	$90,944	$207,000	$111,915
Pensacola, FL	$24,290	$64,126	$71,100	$5,551	$35,490	$96,930	$144,000	$44,191
Punta Gorda	$23,240	$58,957	$72,000	$11,602	$34,405	$82,953	$166,500	$80,217
Sarasota-Bradenton	$26,390	$70,841	$81,000	$8,538	$39,130	$85,564	$230,400	$140,228
Tallahassee	$28,280	$80,847	$77,400	$0	$40,390	$123,415	$144,000	$17,704
Tampa-St. Pete	$25,480	$69,202	$71,100	$476	$36,505	$91,745	$173,700	$78,481
West Palm Beach	$31,150	$86,041	$103,500	$15,389	$43,470	$98,354	$260,100	$156,543

Source: Florida Housing Coalition

Key Policy Issues

A dedicated revenue source is needed to ensure the program's long-term viability as well as dedicated staff resources for program oversight.

III.3. Employer-Assisted Housing

Description

Employer-assisted housing (EAH) programs are designed to enable employers to help their employees achieve homeownership. EAH programs include low-interest loans, grants for down payment assistance, homeownership education and other savings plans to help employees become homeowners.

The Metropolitan Planning Council of Chicago has conducted extensive research on Employer Assisted Housing and has helped to launch a regional employer-assisted housing program in the Chicago metropolitan area.

Employer-Assisted Housing in Action

Since the Council first introduced employer-assisted housing to one Chicago-area manufacturer in 2000, that successful program and partnerships with REACH Illinois housing counseling agencies and Housing Action Illinois have yielded impressive results.

The State of Illinois provides matching funds and tax credits for employer-assisted housing initiatives, more than 50 employers have signed on and saved on their recruitment and training costs, and 1,200 employees have been counseled, with over 500 successful buyers. An estimated $1.35 million in employer dollars went to help employees purchase homes in Illinois in 2005.

Benefits

- Little or no cost to local governments
- Improved employee retention for employers
- Reduced recruitment and training costs for employers
- Shorter commute time for employees
- Effective home purchase counseling for employees

Key Policy Issues

EAH programs are typically implemented through public-private partnerships and the cooperation of local area employers. Local governments wishing to implement such a program need to dedicate staff time and resources to facilitate the creation of the partnership. Employers need to be convinced of the merits of the program.

III.4. Housing Trust Funds

Description

Housing trust funds are locally established accounts, like bank accounts, that may receive dedicated public funding and/or private sector contributions and distribute those funds toward development, rehabilitation and preservation of affordable housing units. Because they are established locally, housing trust funds can be customized to address a community's specific housing needs. The funds may have a variety of revenue sources which may include developer contributions, sale of municipal owned property, local government appropriations and inclusionary zoning payments in lieu of providing on-site units.

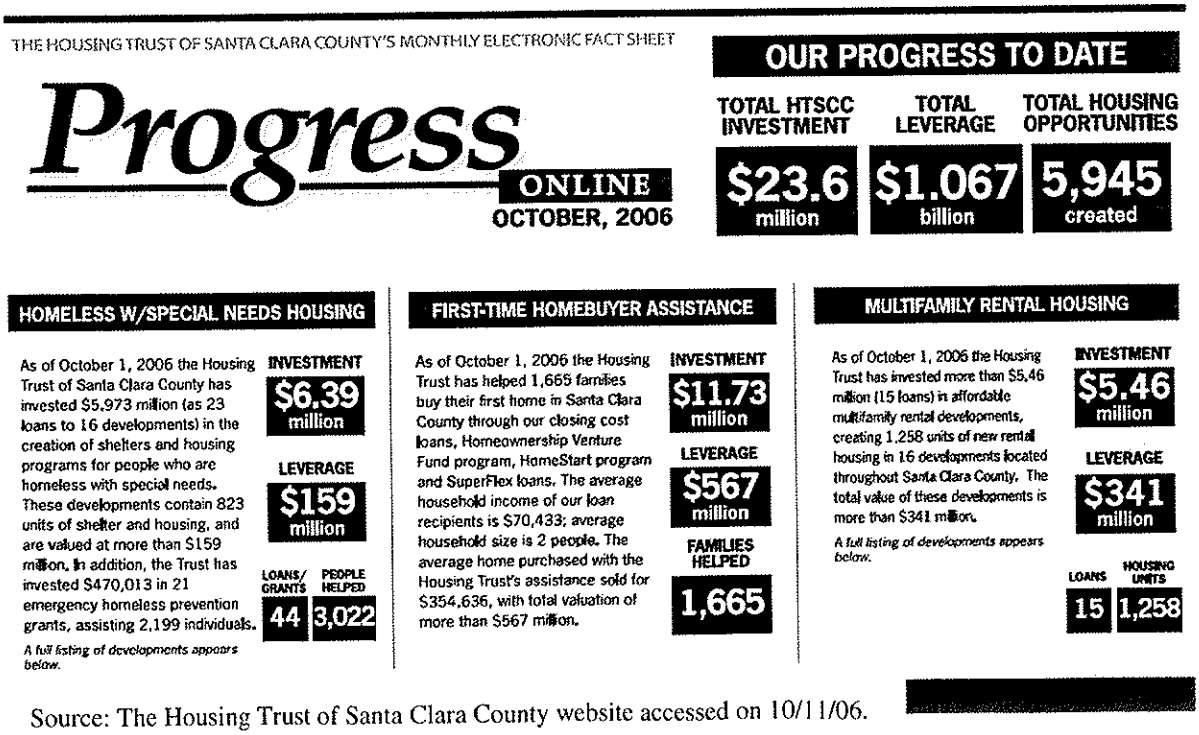
Benefits

- Dedicated funding source for affordable housing development or preservation.

Key Policy Issues

Housing Trust Funds generally are established through an ordinance or legislation passed by a county, city or state legislature. The legislation accomplishes at least two necessary steps in the creation of a Housing Trust Fund. First, it dedicates a revenue source to the Housing Trust Fund or establishes other obligations (e.g., developer exactions) that create revenue. Second, it establishes the Housing Trust Fund as a separate and distinct entity that can receive and disburse funds and defines its purposes and operation.

PROFILE: THE HOUSING TRUST OF SANTA CLARA COUNTY



THE HOUSING TRUST OF SANTA CLARA COUNTY'S MONTHLY ELECTRONIC FACT SHEET

Progress ONLINE

OCTOBER, 2006

OUR PROGRESS TO DATE

TOTAL HTSCC INVESTMENT	TOTAL LEVERAGE	TOTAL HOUSING OPPORTUNITIES
$23.6 million	$1.067 billion	5,945 created

HOMELESS W/SPECIAL NEEDS HOUSING

As of October 1, 2006 the Housing Trust of Santa Clara County has invested $5,973 million (as 23 loans to 16 developments) in the creation of shelters and housing programs for people who are homeless with special needs. These developments contain 823 units of shelter and housing, and are valued at more than $159 million. In addition, the Trust has invested $470,013 in 21 emergency homeless prevention grants, assisting 2,199 individuals.

A full listing of developments appears below.

INVESTMENT $6.39 million

LEVERAGE $159 million

LOANS/ GRANTS	PEOPLE HELPED
44	3,022

FIRST-TIME HOMEBUYER ASSISTANCE

As of October 1, 2006 the Housing Trust has helped 1,665 families buy their first home in Santa Clara County through our closing cost loans, Homeownership Venture Fund program, HomeStart program and SuperFlex loans. The average household income of our loan recipients is $70,433; average household size is 2 people. The average home purchased with the Housing Trust's assistance sold for $354,636, with total valuation of more than $567 million.

INVESTMENT $11.73 million

LEVERAGE $567 million

FAMILIES HELPED 1,665

MULTIFAMILY RENTAL HOUSING

As of October 1, 2006 the Housing Trust has invested more than $5.46 million (15 loans) in affordable multifamily rental developments, creating 1,258 units of new rental housing in 16 developments located throughout Santa Clara County. The total value of these developments is more than $341 million.

A full listing of developments appears below.

INVESTMENT $5.46 million

LEVERAGE $341 million

LOANS	HOUSING UNITS
15	1,258

Source: The Housing Trust of Santa Clara County website accessed on 10/11/06.

Mr. Carl Guardino, President and CEO of the Silicon Valley Leadership Group and Mr. Taylor Dial, Executive Director of the Housing Trust of Santa Clara County, participants at Council's Workforce Housing Symposium held in December, 2005 indicated just how powerful a catalyst for the creation of attainable housing their housing trust fund had become. Since its inception, the Housing Trust Fund has made some $23.6 million in investments. These investments have leveraged over $1.1 billion in additional investment and have helped to create affordable housing opportunities for almost 6,000 families.

III.5. Linkage Fees

Description

Linkage fees are fees or other requirements that local governments place on new industrial, commercial and office developments to offset the impact that new employment has on housing needs within a community. In the same way that local governments require residential developers to offset the school impacts caused by their development, businesses are required to mitigate the increased demand for moderately priced housing from workers in newly created jobs.

Local governments wishing to enact a linkage fee ordinance must first conduct a study (often called a "nexus study") which demonstrates the need for such fees and determines an appropriate amount to be charged that is reasonably proportional to a business development's impact. Local governments then use the linkage fees collected to support affordable housing development within their own jurisdictions.

Linkage fees vary widely—both by jurisdiction and by business type. The nexus study helps determine what that difference should be by business type. The fee should be designed to adjust to inflation, typically done by indexing the fee to the Consumer Price Index. Many jurisdictions have a threshold minimum project size that triggers the policy. The Florida Housing Coalition has developed a model Linkage Fee ordinance (see Appendix 6).

Benefits

- Linkage programs do not generally require the expenditure of local tax dollars to fund the construction of affordable housing units.
- Can provide substantial funding to support affordable housing development with minimal administrative burden.

Key Policy Issues

Voluntary/incentive-based linkage programs offering benefits to developers in exchange for housing are more likely to avoid or withstand legal challenges.

Linkage programs will be more successful in a strong commercial office market where developments are more numerous and developers are more willing to take advantage of development incentives.

Local governments seeking to establish a linkage fee program need to consider which types of development will pay the fee, how much each type of development will pay, and the geographic boundaries that are to apply.

SECTION IV: SUMMARY OF WORKFORCE HOUSING STRATEGIES

The final section of the report provides a summary of all of the programs and policies highlighted in the Toolkit. Where applicable, policies and programs adopted or under consideration for adoption by a local government(s) is noted. The Toolkit will be periodically updated with the most current information available.

Summary of Attainable Workforce Housing Strategies
Treasure Coast Regional Planning Council

Tool	Goal	Implementing Entity	Implementing Actions	Models	Resources	Local Examples
Accessory Dwelling Units	Increase the amount of affordable housing development.	City/County Governments	Review and adjust zoning / land development code, as necessary.	Santa Cruz, California - Accessory Dwelling Unit Development Program	Smart Growth Online – Smart Growth in Action www.smartgrowth.org	Palm Beach County – Unified Land Development Code
Expedited Permitting	Facilitate affordable housing development.	City/County Governments	Review codes, internal processes and set clear standards for timing of affordable housing development.	Pinellas County – Affordable Housing Incentives offered through the Pinellas County Land Development Code	U.S. HUD – Regulatory Barriers Clearinghouse www.regbarriers.org	Required in all Florida counties and SHIP entitlement communities.
Inclusionary Housing	Increase the amount of affordable housing development.	City/County Governments	Develop and adopt an inclusionary housing ordinance.	Montgomery County, Maryland - Moderately Priced Dwelling Unit (MPDU) Program	Florida Housing Coalition – Model Inclusionary Housing Ordinance (see Appendix 3) Smart Growth America – *Making the Case for Mixed Income and Mixed Use Communities* www.smartgrowthamerica.org	Palm Beach County – Interim Workforce Housing Program
Infill Housing Development	Promote affordable housing development.	City/County Governments	Identify important infill sites / locations, facilitate infrastructure, create design guidelines.	The City of Portland's Living Smart Program http://www.livingsmartpdx.com	***Strategies for Successful Infill Development*** – a publication of the Northeast-Midwest Institute	City of Delray Beach – Infill Workforce Housing Area
Special Area Plans	Guide growth and development in a specific area.	City/County Governments	Adopt implementing ordinance. Comprehensive plan amendment(s).	St. Lucie County - Towns, Villages and Countryside Element	www.tcrpc.org	St. Lucie County - Towns, Villages and Countryside Element
Density Bonuses	Increase the amount of affordable housing development.	City/County Governments	Adopt implementing ordinance.	City of Sarasota -Downtown Density Bonus and Attainable Housing Policy	Downtown Density Bonus and Attainable Housing Policy: Recommended Comprehensive Plan Amendment, prepared by ERA for City of Sarasota, FL, March 2006	City of Delray Beach
Impact Fee Strategies	Promotes affordable housing development by lowering development costs.	City/County Governments	Adopt implementing ordinance.	City of Orlando – Affordable Housing Impact Fee Grant	http://www.cityoforlando.net/housing/default.htm	

Tool	Goal	Implementing Entity	Implementing Actions	Models	Resources	Local Examples
Adaptive Reuse	Promotes affordable housing development.	City/County Governments	Adaptive reuse ordinance and design guidelines	City of Los Angeles – Adaptive Reuse Program	City of Los Angeles – ***Adaptive Reuse Program Handbook*** (see Appendix 4)	
Community Land Trusts	Create affordable housing in perpetuity.	Private, Non-Profit Corporation, can be sponsored and seeded by City/County Governments	Require extensive financial and technical assistance to establish.	Institute for Community Economics www.iceclt.org As originator of the CLT model ICE has worked with groups in a wide variety of communities around the country to establish local CLTs. ICE has also developed a $13 Million Revolving Loan Fund to provide critical project financing to CLTs and other innovative community organizations across the country.	Florida Community Land Trust Institute	Delray Beach CLT Boynton Beach CLT
Donation of Public Land	Increase the amount of affordable housing development by reducing associated costs.	City/County Governments	Identify, inventory and sell/donate surplus public land for affordable housing purposes.	See Florida HB 1363.		
Down Payment Assistance	Increase homeownership opportunities.	Florida Housing Finance Corporation	n/a	SHIP Program	Florida Housing Finance Corporation (see Appendix 5)	All 67 Florida counties and 50 CDBG entitlement cities.
Employer-Assisted Housing	Help employees live near their workplaces.	City/County Government or public-private partnership		Reach Illinois Employer-Assisted Housing	Metropolitan Planning Council – Technical Assistance for Employer-Assisted Housing	City of Orlando EAH Program – ***Housing Opportunities for Florida's Workforce***
Housing Trust Funds	Create a dedicated revenue source for attainable housing.	City/County Governments or private non-profit entity	Often works in tandem with inclusionary housing ordinance as "in-lieu" fee.	Housing Trust Fund of Santa Clara County	www.housingtrustscc.org	TBD
Linkage Fees	Create a dedicated revenue source for attainable housing.	City/County Governments	Implementing ordinance and nexus study.	City of Winter Park Linkage Fee Program ($0.50 per square foot for non-residential development)	See Appendix 6	

Appendix 1

Accessory Dwelling Unit Development Program
Santa Cruz, California

Accessory Dwelling Unit Development Program

SANTA CRUZ, CALIFORNIA

Like many communities in northern California, Santa Cruz has seen its housing costs increase dramatically. These rising costs mean the city is struggling to retain teachers, police officers, and service workers. To address these challenges, Santa Cruz created an Accessory Dwelling Unit (ADU) Development Program. Accessory units create separate residences by converting all or part of a garage or by building new structures on a homeowner's property.

The city's program aims to create more housing opportunities by making it easier for homeowners to build accessory units. For example, the city revised its zoning ordinance to eliminate a covered parking requirement for single-family homes, which freed up space for accessory units. In addition, the revision included design elements that ensure the accessory units complement the surrounding homes. Seven architects designed compact building prototypes (500 square feet) that address a variety of site needs. These plans have been pre-reviewed by city departments, which helps homeowners by reducing processing time, planning fees, and design costs.

The city also released an ADU "How To" manual to help residents navigate the development process. The manual packages all the information homeowners need to develop an accessory unit, including guidance on making an accessory unit "neighbor-friendly," managing a construction project, and being a good landlord. Over 175 manuals and prototype plan sets have been sold. To encourage affordable housing, homeowners get financial assistance through accessory unit loan and fee waiver programs if the unit will be rented at an affordable level.

SMART GROWTH PRINCIPLES
ACCESSORY DWELLING UNITS

#1	Includes Mixed Land Uses	
#2	Exhibits Compact Building Design	★
#3	Provides Range of Housing Types	★
#4	Promotes Walkable Neighborhoods	✓
#5	Exhibits a Distinct Sense of Place	
#6	Preserves Open Space	✓
#7	Utilizes Existing Development	✓
#8	Provides Transportation Choices	✓
#9	Practices Fair Decision-making	★
#10	Promotes Stakeholder Participation	✓

The program has broadened the range of available housing opportunities. In 2003, the program's first full year, 35 accessory units were built, which is a significant increase over the eight units built in 2001. Over the next five years, the city estimates that between 40 and 50 new accessory units will be built per year. The program has been so successful that more than 80 cities throughout California have requested copies of the ADU manual and ordinance. The EPA awarded it the Policies and Regulations Smart Growth Achievement Award (http://www.epa.gov/smartgrowth/sg_awards_publication_2004.htm#policies_reg) in 2004, and the program has also been recognized by the state chapters of the American Planning Association (www.planning.org) and the American Institute of Architects (www.aia.org).

> *"...as my parents reached retirement age and found that they could no longer climb the stairs to the second story bedroom, they began looking for alternative ways of staying in the neighborhood ....With the help of the city's revised accessory dwelling unit ordinance, the design workshops, and the ADU loan program, we are now building the 'granny unit' of my parents' dreams."*
>
> *— David A. Foster, Homeowner, Santa Cruz*

QUICK FACTS

Contact: Carol Berg, Housing and Community Development Manager
City of Santa Cruz, Dep't of Housing & Community Development
831-420-5108
cberg@ci.santa-cruz.ca.us

Location: Santa Cruz, California

Website: www.ci.santa-cruz.ca.us/pl/hcd/ADU/adu.html

Implemented: 2003

Appendix 2

Pinellas County Land Development Code Affordable Housing Incentives

AFFORDABLE HOUSING INCENTIVES

offered through the

PINELLAS COUNTY LAND DEVELOPMENT CODE

J-40

Pinellas County Community Development
600 Cleveland Street, Suite 800
Clearwater, Florida 33755

Affordable Housing Incentives offered through the Pinellas County Land Development Code

Purpose and Intent

Section 138-1346 of the Pinellas County Land Development Code describes the procedure for certification of Affordable Housing Developments ("AHD"), specifies incentives available to developers of AHD's, and provides for a review process for approval of these incentives. Affordable Housing Development is defined as owner-occupied housing development in which at least 20 % of the units are affordable to households at or below 80% of Area Median Income ("AMI") or rental housing development in which 20% of the units are affordable to households at or below 60% of AMI. Income limits are updated periodically and are available from the Community Development Department upon request.

Incentives to Encourage Provision of Affordable Housing

The incentives listed below are made available by the Board of County Commissioners in order to encourage development of affordable housing in unincorporated Pinellas County. These incentives are fully described in the Appendix to this document and in the Pinellas County Land Development Code.

- Expedited Permit Processing
- Impact and Review Fee Relief
- Reduced Parking Requirements
- Housing in Commercial Zones
- Donation of Publicly Owned Land
- Identifying Qualified Renters or Buyers
- Density Bonuses
- Accessory Structures
- Reduced Setbacks
- Street Design Modifications
- Zero Lot Lines

The Community Development Department administers the AHD certification process, provides relief of impact and review fees, and enforces mechanisms to ensure affordability of assisted units and compliance with applicable regulations. The Development Review Services Department processes all requests for modification of development standards.

Owner-Occupied Housing

Builders and developers of affordable homes for sale to income-eligible households may seek expedited permit processing; relief from County impact, connection, and review fees; and modification of development standards. Impact and connection fee relief is provided only for the number of units that serve eligible residents and may be limited to 20% of the total units in a development. The price of the home may be restricted by the source of funds used to pay the fees or by local policy. Maximum house prices are determined annually and are available from the Community Development Department. To be eligible for fee relief, the builder or developer must be certified as an Affordable Housing Development prior to applying for permits. There can be no waiver of this requirement. Fee relief for owner-occupied housing is available only to the extent that budgeted funds remain available at the time of certification. Impact and connection fee relief is also available to an owner or builder building a single stand-alone affordable unit.

Rental Housing Development

Developers building affordable units for rent to income-eligible households may seek expedited permit processing; relief from County impact, connection, and review fees; and other incentives provided through modification of development standards. Applicants for fee relief must sign a Land Use Restriction Agreement pledging to rent to eligible households at affordable rents for the period required by the funding source or by local policy. To be eligible for fee relief, the developer must apply for certification as an Affordable Housing Development prior to applying for permits. There can be no waiver of this requirement. Impact and connection fee relief is provided only for the number of units that will serve eligible households and is limited to 20% of the total units. Rental housing fee relief is available only to the extent that budgeted funds remain available at the time of certification.

Within a rental community, affordable units may not be substantively different from market rate units in size, amenities, or condition. Affordable rents are determined annually and are available from the Community Development Department. Owners may adjust rental rates as maximum rents change and must give residents at least 30 days written notice before increases are implemented. Residents whose incomes increase above program limits are not required to move. However, the next available unit must be rented to an eligible household.

Administrative Procedures

Builders and developers may submit applications for AHD certification to the Community Development Department at any time. If certified as an AHD, the developer is issued a voucher specifying the amount of impact and connection fee relief, if any, for which the project is eligible and the time limit on the use of the voucher. The voucher also serves as documentation of AHD certification and is submitted with permit and review applications. The applicant will immediately be entitled to permit and review fee waivers and expedited permit processing.

If a certified AHD is seeking modification of development standards, the developer must provide a concept plan and an explanation of why the requested modifications are needed. The developer also submits plans and specifications where appropriate. The Development Review Administrator serves as an ombudsman to shepherd the AHD through the review

and permitting process and is responsible for coordinating all County review comments, questions, and responses. This ombudsman will provide the developer with a single point of contact for all questions concerning the review process.

Certain modifications of development standards are awarded through administrative action. Other modifications require action of the Board of Adjustment. Development Review Services prepares all recommendations to the Board of Adjustment. Modifications are recommended for approval based on local housing needs and compatibility with the surrounding neighborhood. Staff and the Boards reserve the right to review architectural designs and specifications and, where appropriate, make recommendations that would enhance the development and the neighborhood. If the request for modifications is approved, the developer will be issued a variance or special exception. The developer shall insure that all housing is constructed and operated in accordance with the plans reviewed and approved by the County.

Impact and connection fees are prepaid by the developer and reimbursed once the Community Development Department receives documentation of compliance with the applicable criteria. Funds for fee relief are limited and available on a first-come, first-serve basis

J-42

Summary

The intent of Section 138-1346 of the Pinellas County Land Development Code is to provide private sector builders and developers with regulatory and financial incentives to produce affordable housing in Pinellas County. This section is intended to be a tool to both spur construction and to engage the creativity of our development community. It is our goal that all your interactions with Pinellas County government be simple and straightforward. We need your feedback on how we're doing and where you see opportunities for improvement. Your comments and suggestions are always welcomed.

For further information, contact Bernie Carnevale in the Pinellas County Community Development Department at (727) 464-8241, bcarneva@co.pinellas.fl.us.

Appendix

Pinellas County Land Development Code
Section 138-1346
Affordable Housing

The following is excerpted directly from Section 138-1346 of the Pinellas County Land Development Code.

(a) *Purpose and Intent.* The purpose and intent of this section is to provide a permitting procedure for the construction of affordable housing in keeping with the affordable housing incentive plan (Resolution 94-60) adopted by the board of county commissioners pursuant to the state housing initiatives partnership (SHIP) program pursuant to F.S.§ 420.9072. This section will describe procedures and criteria for the certification of affordable housing developments (AHD's), describe the package of incentives which may be made available to developers of AHD's and provide a review process for the approval of AHD's. This section may also provide reference to other county ordinances and regulations effecting the development of AHD's.

(b) *Incentives.* The following incentives may be made available to encourage the provision of affordable housing:

(1) *Expedited permit processing.* The county administrator shall provide a review process that gives AHD's priority in the permit review process. A two-week turnaround time shall be the desired goal for the processing of a site plan for such development. To assist in achieving this goal a pre-application meeting will be required between the applicant and county site plan review staff. The development review administrator will serve as an ombudsman to assist the applicant in achieving an expeditious review.

(2) *Impact and other review fees may be waived or paid by the county.* The county administrator is authorized to waive all fees for affordable housing units, except where "bond covenants" (i.e. on water, sewer connection fees) or other legal constraints prevent such waiving. Subsidies for payment of fees may be provided in the form of deferred payment or low interest loans. The department of community development shall administer a program to assist the applicant subject to available funds.

(3) A density bonus of up to 50 percent above the normal density permitted by this chapter may be provided as a special exception pursuant to article II division 7 of this chapter. Such bonus shall be subject to compatibility with the surrounding natural and physical environment, site constraints, concurrency management requirements and shall be in keeping with the purpose and intent of this chapter.

(4) Parking requirements may be reduced where it can be shown that such reduction will be compatible with the surrounding neighborhood and not cause an adverse impact to the neighborhood. Such reduction shall be reviewed by the board of adjustment pursuant to section 138-240(23).

(5) Setback requirements may be reduced up to 25 percent provided such reductions are not permitted for structures along the periphery of the AHD. Reductions along the periphery or in excess of the 25 percent limitation may be considered by the board of adjustment.

(6) Zero lot line configuration will be permitted in all single-family residential districts as follows:

a. Zero lot line configuration when not located on the periphery of the AHD may be permitted provided no setback is required on one side of the lot and the setback on the opposite side is double on one side of the lot and the setback on the opposite side is the normal requirement of the district in which the AHD is located. All other requirements must be met including article 4 division 11 of this chapter shall be applicable.

b. Zero lot line configuration proposed on the periphery of an AHD where located in a single-family residential district may be permitted as a special exception pursuant to article II division 7 of this chapter.

(7) *Street design.* Modifications in street layout and design may be permitted subject to site constraints, type and intensity of development, and compatibility with surrounding development. The county public works director or his designee may recommend such modifications as deemed appropriate to achieve the intent of this section. However, such recommendation will be in keeping with standard, safe engineering practice and construction standards generally shall not be modified.

(8) *Donation of publicly owned land.* County ordinance 88-47 currently permits donations of escheated property to nonprofit organizations. Using state or federal housing funds, the county may also make deferred payment or low- interest loans to both nonprofits and for-profits for the purchase of property when the use meets the requirements of the funding source.

(9) *Guest cottages.* Will be permitted in all areas permitting single-family homes subject to size limits, design guidelines, parking and that the primary unit be owner-occupied (see section 138-1).

(10) *Identifying qualified buyers or renters.* Existing sources will be identified and made available to AHD's to provide assistance in locating a qualified pool of homebuyers and renters for the affordable units. The department of community development will make this information available.

(11) *Affordable housing development.* Up to ten units per acre shall be permitted in commercial zoning districts provided all development standards of the zoning district are adhered to. Where residential development is provided as upper floors above commercial uses, the allowable floor area permitted for the commercial use shall not be reduced.

Appendix 3

Florida Housing Coalition
Model Inclusionary Housing Ordinance

APPENDIX 3

MODEL INCLUSIONARY HOUSING ORDINANCE

The model inclusionary housing ordinance that follows is only a starting place. It must be modified to conform to your local government's needs.

AFFORDABLE HOUSING INCLUSIONARY ORDINANCE

AN ORDINANCE OF _____ COUNTY, FLORIDA,

ESTABLISHING THE COUNTY'S AFFORDABLE HOUSING INCLUSIONARY DEVELOPMENT ORDINANCE; DESCRIBING THE INTENT AND PURPOSE OF THE ORDINANCE; PROVIDING APPLICABILITY, PROVIDING PAYMENT IN LIEU OPTION, PROVIDING FOR EXEMPTIONS, PROVIDING FOR DEVELOPMENT INCENTIVES; PROVIDING FOR ADMINISTRATION; PROVIDING FOR SEVERABILITY; AND PROVIDING AN EFFECTIVE DATE.

BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF _____ COUNTY, FLORIDA:

SECTION I. CREATION

The _____ County Affordable Housing Inclusionary Development Ordinance is hereby created as follows:

SECTION II. PURPOSE AND INTENT

The purpose and intent of the Inclusionary Development Ordinance is as follows:

1. To implement the goals, policies, and objectives of the _____ Comprehensive Plan to increase the supply of housing that is available and affordable to very-low, low, and moderate income persons; and

2. To provide a range of housing opportunities for those who work in _____ County and who provide the community with essential services but may be unable to pay market rents or housing prices in the community; and

3. To ensure that affordable housing opportunities are available throughout the entire community; and

4. To ensure that such housing remains in the affordable housing stock; and

5. To mitigate the impacts of market-rate housing on the supply and cost of very-low, low and moderate income housing, due to the decreasing available supply of developable sites in _____ County and the upward pressure on the pricing of all housing in the county; and

6. To provide incentives to developers of residential developments providing inclusionary housing; and

7. To provide alternative methods for compliance with the intent of this Ordinance, including payment in lieu to a Housing Trust Fund.

SECTION III. DEFINITIONS

The following words and phrases, as used in this Section, have the following meanings:

1. Affordable Housing Units *(either refer to the definition in the local SHIP ordinance. or draft a definition such as):*

Affordable Units are housing for which monthly mortgage payments (including taxes and insurance), or monthly rents (including utilities), do not exceed thirty percent (30%) of that amount which represents the percentage of the median adjusted gross annual income for the households qualifying under the definitions of very-low, low, and moderate income persons, as provided by the U.S. Department of Housing and Urban Development data provided annually to _____ County by the Florida Housing Finance Corporation.

2. Developments of Regional Impact - as defined in Part II, Chapter 380.06, Florida Statutes

3. Eligible Households - *(you may want to redefine, or refer to the definition in the local SHIP ordinance)*

4. Inclusionary Housing Trust Fund - a trust fund established by _____ County to support the development and preservation of affordable housing *(you should establish a trust fund separate from the local SHIP trust fund)*

SECTION IV. APPLICABILITY

1. The provisions of this Section shall apply to all developments seeking subdivision approval, special permits with site plan review such as Developments of Regional Impact (DRIs) or Planned Unit Developments (PUDs) that propose to develop 50 or more dwelling units of new construction, (hereinafter sometimes referred to as Inclusionary Development). Developments shall not be segmented or phased in a manner to avoid compliance with these provisions.

For the purposes of this policy two or more developments shall be aggregated and considered as one development, if they are no more than 1/4 mile apart and any two of the following criteria are met:

(i) There is a common interest in two or more developments.

(ii) The developments will undergo improvements within the same five-year period.

(iii) A master plan exists submitted to a governmental body addressing two or more of the developments.

2. Developments having more than 50 units, shall provide a minimum of fifteen percent (15%) of the total number of permitted dwelling units on-site as Affordable Units as follows: Ten percent (10%) of the Affordable Units shall be affordable to moderate income families (those earning less than 120% of area median income) and five percent (5%) of the Affordable Units shall be affordable to low income families (those earning less than 80% of the area median income). Where the application of this formula results in a fractional dwelling unit, that fractional unit shall be considered as one Affordable Unit.

3. All Affordable Housing Units shall remain affordable in perpetuity though the use of a deed restriction that shall be recorded in the public records of _____ County.

4. All Affordable Housing Units shall be initially and subsequently certified as to unit and income household eligibility by the _____ County Housing Office, based on the current SHIP income guidelines provided annually by the Florida Housing Finance Corporation; and, in the event of rental units, shall be monitored at least annually thereafter.

SECTION V. DEVELOPER INCENTIVES

1. All eligible households shall have the benefit of additional downpayment and closing cost assistance, provided specifically for housing produced pursuant to this inclusionary housing ordinance, within the _____ County SHIP Local Housing Assistance Plan;

2. All Inclusionary Developments providing inclusionary units shall have the benefit of a density bonus as provided pursuant to _____ Ordinance without further review or approval.

3. All Affordable Units constructed pursuant to this Ordinance shall have fees waived for building permits,...*(whatever fees the local government may be able to waive to provide further incentives to the developer)*

All PUD developments developed in accordance with this inclusionary housing ordinance shall have the benefit of PUD pre-application fee and PUD application fee waiver.

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SECTION VI. PAYMENT IN LIEU OPTION

1. Although it is intended that Affordable Units be included on-site, _____ County may allow the requirements of this ordinance to be met through the payment of a fee in lieu of construction for Developments with less than 100 residential units, as follows:

a) The fee in lieu of construction shall be equivalent to 25% of the difference between the average proposed selling price of units within a PUD, the current phase of a DRI, and the maximum affordable housing sales price allowed under the _____ County SHIP Home Buyer Program at the time of payments. In no event shall the fee exceed $50,000.

b) A request may be made to the Board of County Commissioner to accept an alternative to the payment in lieu option, in the event some equal or greater contribution is proposed that would further the goals of this ordinance. Examples include, but are not limited to, the donation of developable land in an area that would provide housing choice and accessibility to employment opportunities, or the provision of infrastructure in specific areas where the County plans to build or rehabilitate affordable housing.

c) The Affordable Housing In Lieu Fee shall be deposited in the Inclusionary Housing Trust Fund of _____ County.

Example

80-Unit Development
15% *Reserved for Low and Moderate Income Buyers*

10% Mod.	8 units
5% Low	4 units
Total =	12 units

With a mean (average) proposed sales price of $175,000:

$175,000
-106,017 (maximum SHIP sales price for _____ County, new construction)
68,983
x .25

$17,245.75 per unit
x 12
$206,949 payment in lieu due to County

SECTION VII. EXEMPTIONS

The following developments shall be exempt from this Ordinance:

1. Developments intended to accommodate the construction of less than fifty residential units;

2. Residential development provided as part of the County's affordable housing program, or any federal, or state affordable housing and community development programs;

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3. Residential development in census tracts where the median family income is equal to or less than the median family income for _____ County, except for Developments of Regional Impact. This Ordinance applies to Developments of Regional Impact having a residential component wherever located.

4. Nursing homes, assisted care living facilities, and retirement homes;

5. School dormitories; and

6. Mobile home and manufactured home parks and subdivisions.

SECTION VIII. ADMINISTRATION

The implementation of the Ordinance shall be administered by the Department of Community Development, *(or whatever the appropriate local office, such as SHIP office is called in your area)* or its successor in interest. Among other things, this Department shall be responsible for certifying the eligibility of applicants before certificates of occupancy or their equivalent are issued inclusionary units and for certifying eligibility of tenants for rental units. *(In this Ordinance or in the ordinance establishing the Inclusionary Trust Fund you may want to provide that a certain portion of the funds may be used for administration).*

SECTION IX. SEVERABILITY

If any work, phrase, clause, section or portion of this Ordinance shall be held invalid or unconstitutional by a court of competent jurisdiction, such portion or words shall be deemed as a separate, district and independent provision and such holding shall not affect the validity of the remaining portion of the Ordinance.

EFFECTIVE DATE

This Ordinance shall become effective according to law.

DULY PASSED AND ADOPTED THIS _____ DAY OF_____, 2001.

By: _____

Board of County Commissioners

ATTEST:

Clerk of the Circuit Court

BY: _____

APPROVED AS TO FORM

_____

County Attorney

Appendix 4

City of Los Angeles
Adaptive Reuse Program Summary

J-51

MAYOR HAHN'S OFFICE OF ECONOMIC DEVELOPMENT
LA's Housing and Business Team
200 North Spring Street, Los Angeles, CA 90012
(213) 978-0600 Fax: (213) 978-0780
http://www.lacity.org/mayor/moed/arp

PHOTO CREDITS:
Interior of Santee Court: *Gary Leonard* • Standard Hotel doors, interior and rooftop pool: *Ian Street Porter*
All other photos by *Jeff Main* except Far East Cafe and interior of Flower Street Lofts

Publication funded by a grant from the State of California Department of Housing & Community Development under the Downtown Rebound Planning Grant program. The grant was administered by the Los Angeles Housing Department and included studies in several areas. To access the studies, please visit LAHD's web site: http://www.lacity.org/lahd

MAYOR JAMES K. HAHN'S

Adaptive Reuse Program

- Creates new housing opportunities
- Revitalizes neighborhoods
- Preserves historic architecture
- Encourages community development
- Stimulates economic investment
- Facilitates mixed-use growth models

ABOUT ADAPTIVE REUSE

Adaptive Reuse is the conversion of existing vacant or underutilized buildings into new residential and live/work spaces

In 1999, the City adopted landmark legislation to encourage the conversion of downtown's mostly historic office buildings into lofts, apartments, condominiums, and hotels. The *Adaptive Reuse Ordinance's* mission was to attract residents and visitors who would bring vitality to the urban core, while addressing the City's housing crisis. Restaurants, stores and nighttime venues would follow, and downtown Los Angeles would once again become a 24-hour central city.

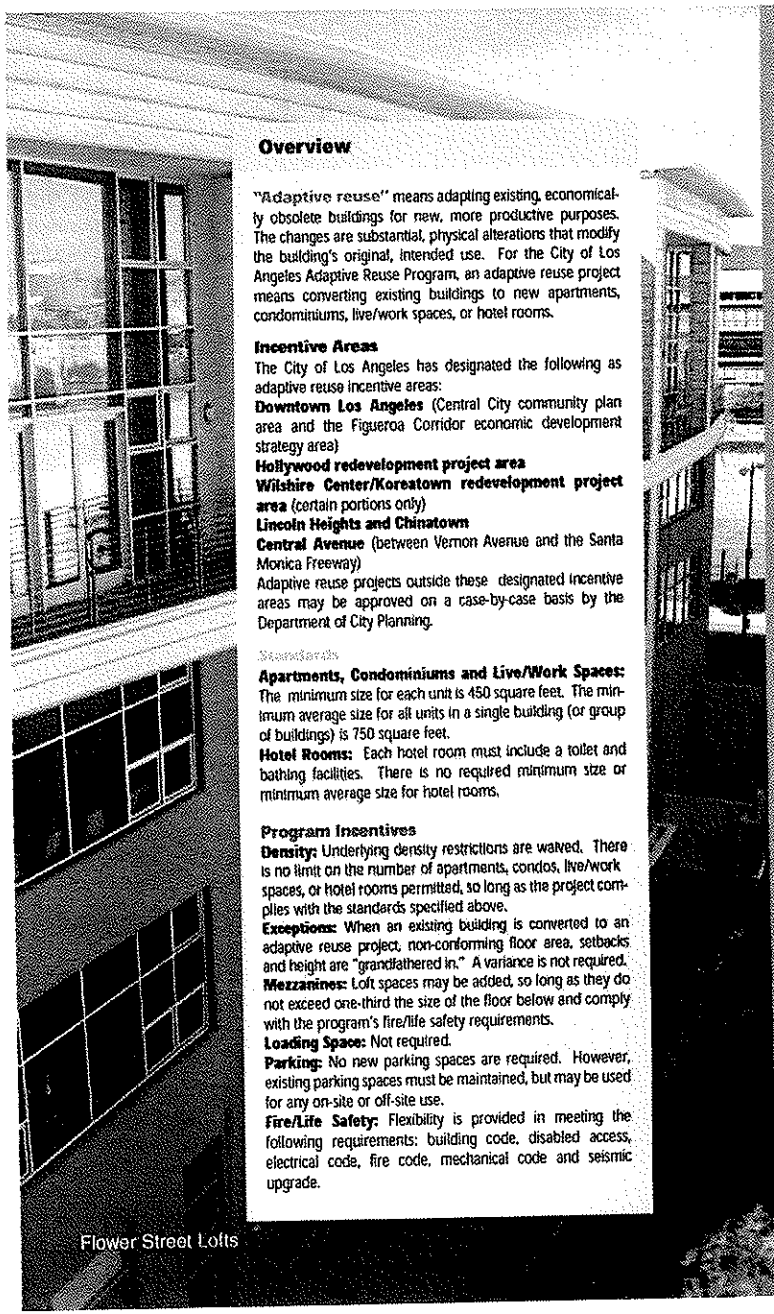
By any measure, **the new ordinance has been a spectacular success.** Media attention has been widespread. Starting with the Old Bank District, a 230-unit project at 4th and Main, over 2,100 units have been completed. Almost 8,000 additional units are either under construction or in the development pipeline. The new residents come from all over the city, attracted by Downtown's unmatched cultural venues, transit and subway access, and business and government centers.

Santee Court

Far East Café

The *Adaptive Reuse Ordinance* **works by significantly reducing the time** required to obtain a building permit. Changing an industrial or a commercial building to a new residential use would normally require compliance with numerous rules and regulations. The ordinance works by cutting through this red tape. The advantage has been significant, enabling the City to leverage an extraordinary amount of private sector investment with a minimum of public subsidy.

Encouraged by the success in downtown, the City expanded the *Adaptive Reuse Ordinance* to cover the historic suburbs of Hollywood, Chinatown, Lincoln Heights, and Wilshire Center business districts. New adaptive reuse projects in these areas are already in the works. Effective on December 1, 2003, the ordinance was expanded citywide, **providing a streamlined process for revitalizing neighborhoods and providing much needed housing throughout the City of Los Angeles.**



Flower Street Lofts

Overview

"Adaptive reuse" means adapting existing, economically obsolete buildings for new, more productive purposes. The changes are substantial, physical alterations that modify the building's original, intended use. For the City of Los Angeles Adaptive Reuse Program, an adaptive reuse project means converting existing buildings to new apartments, condominiums, live/work spaces, or hotel rooms.

Incentive Areas

The City of Los Angeles has designated the following as adaptive reuse incentive areas:

Downtown Los Angeles (Central City community plan area and the Figueroa Corridor economic development strategy area)
Hollywood redevelopment project area
Wilshire Center/Koreatown redevelopment project area (certain portions only)
Lincoln Heights and Chinatown
Central Avenue (between Vernon Avenue and the Santa Monica Freeway)

Adaptive reuse projects outside these designated incentive areas may be approved on a case-by-case basis by the Department of City Planning.

Apartments, Condominiums and Live/Work Spaces: The minimum size for each unit is 450 square feet. The minimum average size for all units in a single building (or group of buildings) is 750 square feet.

Hotel Rooms: Each hotel room must include a toilet and bathing facilities. There is no required minimum size or minimum average size for hotel rooms.

Program Incentives

Density: Underlying density restrictions are waived. There is no limit on the number of apartments, condos, live/work spaces, or hotel rooms permitted, so long as the project complies with the standards specified above.
Exceptions: When an existing building is converted to an adaptive reuse project, non-conforming floor area, setbacks and height are "grandfathered in." A variance is not required.
Mezzanines: Loft spaces may be added, so long as they do not exceed one-third the size of the floor below and comply with the program's fire/life safety requirements.
Loading Space: Not required.
Parking: No new parking spaces are required. However, existing parking spaces must be maintained, but may be used for any on-site or off-site use.
Fire/Life Safety: Flexibility is provided in meeting the following requirements: building code, disabled access, electrical code, fire code, mechanical code and seismic upgrade.

Los Angeles has always been a city of innovation, the place where new ideas get their start. Today, our city is transforming itself again. How? By turning its historic commercial and industrial buildings into beautiful lofts, apartments, condominiums, and even hotels.

The process is called adaptive reuse, a trend taking hold in communities all across the city, from downtown to Hollywood, from San Pedro to the San Fernando Valley.

Adaptive reuse is an important part of my comprehensive plan for building needed housing and revitalizing neighborhoods. This brochure explains my adaptive reuse program, and how it has helped produce thousands of housing units citywide.

By reclaiming the rich cultural legacy of our past, we can create a vibrant future for Los Angeles. Take a look at some of the older buildings around the city, and imagine what they will become in the next few years thanks to adaptive reuse.

JAMES K. HAHN
Mayor

Case Study #1
The Old Bank District Lofts

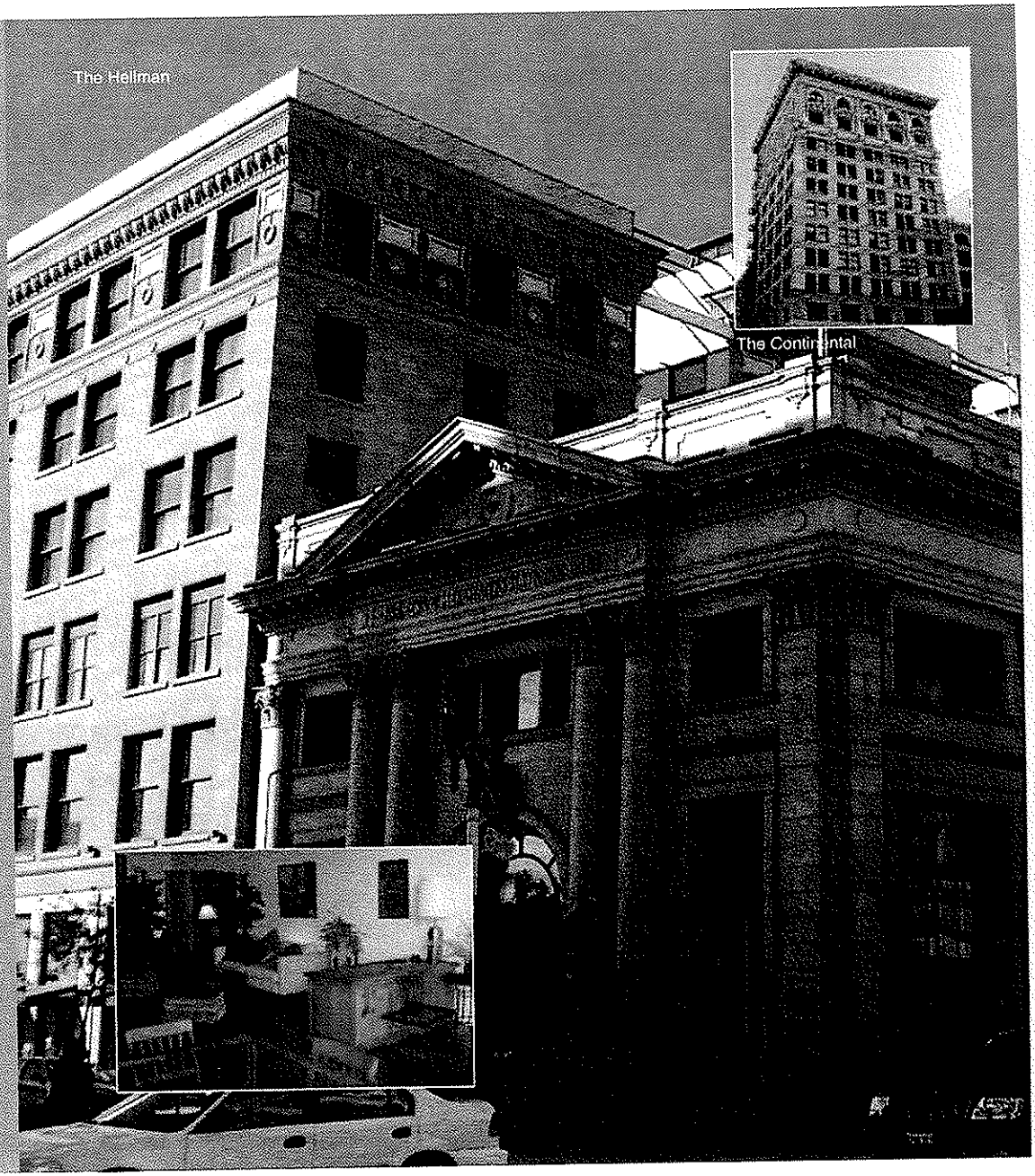
The San Fernando

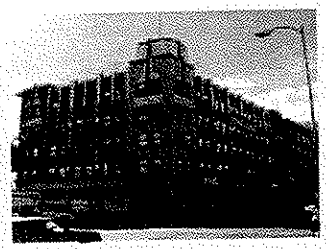
The Old Bank District, located just south of City Hall, jump-started the downtown residential boom. Gilmore Associates led the redevelopment of three historic buildings: the San Fernando, the Hellman, and the Continental. For years, these once-empty structures were considered a nuisance. Today, they're the center of a thriving new residential community.

The eight-story San Fernando was the first to be redeveloped. This 1906, Renaissance revival style building was originally six stories. Then, in 1911, two stories were added. At one time, the basement included a café, a billiards room, and even a Turkish bath. Today, the building features 70 lofts, the award-winning Pete's Café, Bank Art Gallery, Victor's Hosiery Store, the Banquette Coffee Shop, and a yoga studio.

The seven-story Hellman, with its perplexing configuration, fronts on Fourth, Main, and Spring streets. The building was constructed over three phases from 1905 to 1914 for Los Angeles's first banker, Isaias W. Hellman. Today, this Beaux-Arts style building houses 104 lofts, a Quiznos, the Old Bank District General Store, and the Warung Indonesian Café.

The thirteen-story Continental was Los Angeles' first skyscraper. This Beaux-Arts style building was designed in 1904 by renowned architect John Parkinson – the same architect that designed City Hall twenty-four years later. Today, the Continental has found a new life as 56 lofts.





Santee Court

At the beginning of the 20th century, Michael J. Connell developed the first garment manufacturing buildings in an area that became and is known today as downtown's Fashion District. Designed by architects Arthur Argel and Carl Leonard, the Connell, the Bailey Hat, and the Brownstein-Louis buildings were constructed between 1911 and 1912. All three buildings have been locally designated as historic monuments.

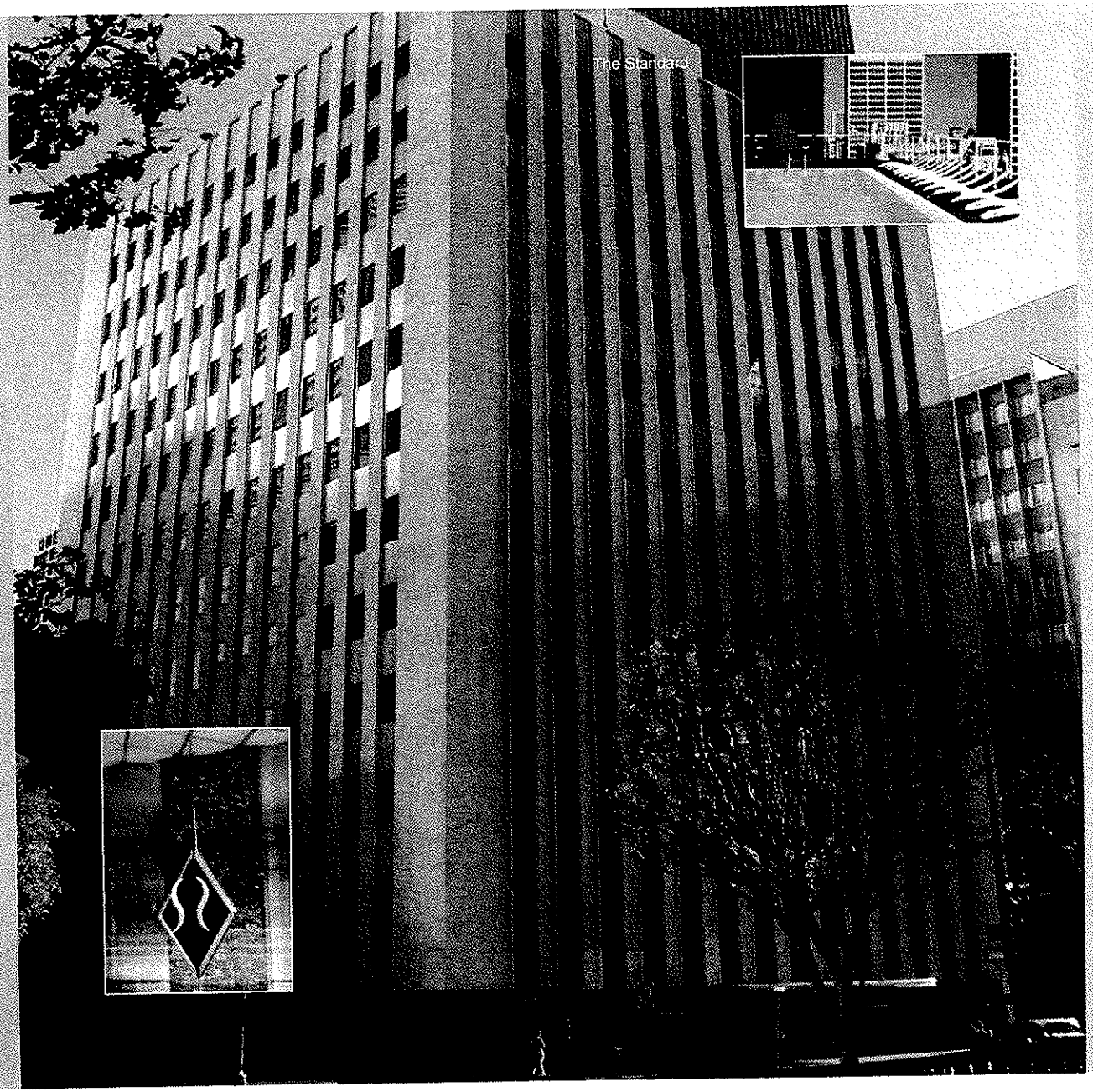
MJW Investments converted these buildings into 165 loft-style apartments, completing the first phase of downtown's largest adaptive reuse project, Santee Court. Twenty percent of the lofts are affordable units. Amenities include a rooftop garden, a basketball court, and a swimming pool. There's even a rooftop mini driving range and a hot tub.

The buildings are connected by a landscaped, pedestrian promenade (complete with outdoor tables and chairs) that was originally a service alley. The promenade is anchored by Rite Aid, and also features a Subway eatery. Other retail tenants will include a market and a food court.

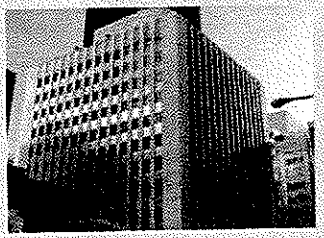
Case Study #3
Flower Street Lofts

The Lee Group spearheaded the Flower Street Lofts, downtown's first for-sale adaptive reuse project. In September, 2003, the United Parcel Service's central operations facility was reborn, with a newly constructed floor, as 91 loft-style condominium homes. At a record pace, the project sold out, proving there's a vibrant condominium market in downtown Los Angeles.

Flower Street Lofts is located in South Park, across the street from the Staples Center, and next to the Palm Restaurant. With the Harbor freeway and the Blue Line close by, transportation access couldn't be more convenient to its homeowners.

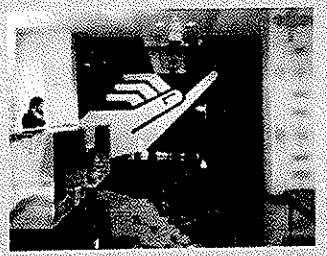


The Standard



The Superior Oil Company once occupied this historic office building, which now holds 207 of the most artistic hotel rooms in the City. The Columbia Development Group completed the hotel, which provides an ideal option for business travelers and visitors who want to experience the essence of downtown Los Angeles.

Located in the Financial District and famous for its newfangled rooftop bar, where patrons can take in the view of downtown's glittering skyline, the Standard is a popular gathering spot where hotel guests can escape to its stylish lounge and rooftop infinity pool.



Appendix 5

Florida Housing Finance Corporation Affordable Housing Programs

Florida Housing's Affordable Housing Programs

HOMEOWNERSHIP PROGRAMS

First Time Homebuyer Program

Florida Housing issues bonds under the Single Family Mortgage Revenue Bond Program and the proceeds from these bonds are used to originate 30-year mortgage loans through the First Time Homebuyer Program. First-time homebuyers then benefit from lower mortgage interest rates due to the tax-exempt status of the bonds. Eligible borrowers have to meet certain criteria such as the first-time homebuyer requirement, as defined by the Internal Revenue Code, credit worthiness, and an appropriate income level, not exceeding program limits.

Down Payment Assistance Programs

Funds for down payment assistance and closing costs are often provided in conjunction with the First Time Homebuyer Program through the Homeownership Assistance Program (HAP), the HOME Investment Partnerships program, the Homeownership Assistance for Moderate Income (HAMI) program and Three Percent Cash Assistance.

Homeownerhip Pool Program

Florido Housing Finance Corporation, in response to the recognized need to enhance the ability and process of Developers to match qualified homebuyers with purchase assistance, has created the HOMEOWNERSHIP POOL ("HOP") PROGRAM. The "HOP" Program is designed to be a noncompetitive and on-going program, where Developers, by way of an online system have the ability to reserve funds for eligible homebuyers to provide purchase assistance on a first-come, first-served basis.

Mortgage Credit Certificate

A Mortgage Credit Certificate (MCC) allows the homebuyer to claim a tax credit for some portion of the mortgage interest paid per year. It is a dollar for dollar reduction against their federal tax liability. An MCC may be issued to homebuyers at tax credit rates varying from 10 percent to 50 percent based on the mortgage interest paid per year capped at $2,000 annually. Florida Housing determines the tax credit rate. The credit is non-refundable but may be carried forward for a period up to three (3) years.

MULTIFAMILY DEVELOPMENT PROGRAMS

Multifamily Mortgage Revenue Bonds

The Multifamily Mortgage Revenue Bond program uses both taxable and tax-exempt bonds to provide below market rate loans to nonprofit and for-profit developers who set aside a certain percentage of their apartment units for low income families. Proceeds from the sale of these bonds are used to construct or acquire and rehabilitate multifamily rental properties. The Bond program's application scoring and ranking criteria encourage increased set asides for low-income households. Special consideration is given to properties that target specific geographic areas such HOPE VI communities.

Florida Affordable Housing Guarantee

The Florida Affordable Housing Guarantee Program encourages affordable housing lending by issuing guarantees on financing for affordable housing. This program provides guarantees on taxable and tax-exempt bonds, and creates a security mechanism that allows lenders to sell affordable housing loans in the secondary market. It also encourages affordable housing lending activities that would not otherwise have taken place.

HOME Investment Partnerships

The HOME program provides non-amortizing, low interest rate loans to developers of affordable housing who acquire, rehabilitate, or construct housing for low income families. Loans are offered through the annual Universal Cycle at the simple interest rate of zero percent to nonprofit applicants and three percent to for-profit applicants. Florida Housing's HOME program is designed for smaller developments in rural areas.

227 North Bronough Street, Suite 5000 • Tallahassee, Florida 32301
850.488.4197 • Fax 850.488.9809 • www.floridahousing.org

we make housing affordable
Florida Housing
Finance Corporation

Florida Housing's Affordable Housing Programs

Elderly Housing Community Loan
A portion of State Apartment Incentive Loan funds is set aside to fund the Elderly Housing Community Loan (EHCL) program. This program provides up to $750,000 in loans to make substantial improvements to existing affordable elderly rental housing. The EHCL program generally has one competitive funding cycle each year and the application period is open for a minimum of 60 days. These funds are available for the purpose of making building preservation, sanitation repairs or improvements required by federal, state or local regulation codes, and for life safety or security related improvements.

Low Income Housing Tax Credits
The competitive Housing Credit program provides for-profit and nonprofit organizations with a dollar-for-dollar reduction in federal tax liability in exchange for the acquisition and substantial rehabilitation, substantial rehabilitation or new construction of affordable rental housing units. Special consideration is given to properties that target specific demographic groups such as the elderly, homeless people, farmworkers and commercial fishing workers. Consideration is also given to properties that target specific geographic areas such as the Florida Keys, rural areas, urban infill areas, and Front Porch Florida communities.

State Apartment Incentive Loan Program
The State Apartment Incentive Loan (SAIL) program provides low-interest loans on a competitive basis to developers of affordable rental housing each year. SAIL funds provide gap financing that allows developers to obtain the full financing needed to construct affordable multifamily units. SAIL dollars are available to individuals, public entities, and nonprofit or for-profit organizations for the construction or substantial rehabilitation of multifamily units. Special consideration is given to properties that target specific demographic groups such as the elderly, homeless people, farmworkers, and commercial fishing workers.

SPECIAL PROGRAMS

Predevelopment Loan Program
The Predevelopment Loan Program (PLP) assists nonprofit and community based organizations, local governments, and public housing authorities with planning, financing, and developing affordable housing. Eligible organizations may apply for a loan of up to $500,000 for predevelopment activities such as rezoning, title searches, legal fees, impact fees, administrative costs, soil tests, engineering fees, appraisals, feasibility analyses, audit fees, earnest money deposits, insurance fees, commitment fees, administrative costs, marketing expenses, and acquisition expenses. Technical assistance is also provided.

State Housing Initiatives Partnership
The State Housing Initiatives Partnership (SHIP) program provides funds to local governments on a population-based formula as an incentive to produce and preserve affordable housing for very low, low, and moderate income families. These funds are derived from the collection of documentary stamp tax revenues, which are deposited into the Local Government Housing Trust Fund. SHIP funds are distributed on an entitlement basis to all 67 counties and 50 Community Development Block Grant entitlement cities in Florida. The minimum allocation per county is $350,000. SHIP dollars may be used to fund emergency repairs, new construction, rehabilitation, downpayment and closing cost assistance, impact fees, construction and gap financing, mortgage buy-downs, acquisition of property for affordable housing, matching dollars for federal housing grants and programs, and homeownership counseling. Each participating local government may use up to ten percent of their SHIP funds for administrative expenses.

Demonstration Loans
Florida Housing issues Demonstration Loans under authority of 420.507, F.S. Demonstration Loans are issued through a request for proposals (RFP) process one or more times throughout the year. Each RFP is developed to address a certain type of special needs housing. Demonstration Loans have been approved for housing for homeless people and elders, farmworkers, persons with disabilities and victims of domestic violence.

Affordable Housing Catalyst Program
The Affordable Housing Catalyst Program provides on-site and telephone technical assistance and training on the State Housing Initiatives Partnership Program (SHIP), the HOME Investment Partnerships Program and other affordable housing programs. This technical assistance includes assisting agencies in leveraging those dollars with other public and private funding sources, training on forming local and regional public/private partnerships, working effectively with lending institutions, implementing regulatory reform, training for boards of directors, implementing rehabilitation and emergency repair programs, developing volunteer programs, assisting with the design and establishment of fiscal and program tracking systems, and compliance requirements of state and federally funded housing programs. Workshops are conducted throughout the year at locations around the state.

Florida Housing's Affordable Housing Programs

HURRICANE HOUSING RECOVERY PROGRAMS

The eight hurricanes that hit Florida in 2004 and 2005 damaged approximately one million homes. As part of Florida's response, Governor Bush created the Hurricane Housing Work Group, which made recommendations in February 2005 for the appropriation of hurricane housing recovery funds. During the 2005 legislative session, the Florida Legislature approved $250 million in funding for some of these recommendations, including a locally-administered Hurricane Housing Recovery Program (HHRP), funded at $208 million, and the Rental Recovery Loan Program (RRLP), funded at $42 million.

In 2006, the legislature appropriated another $92.9 million for RRLP and $15 million to fund two additional hurricane housing recovery programs recommended by the Hurricane Housing Work Group, the Farmworker Housing Recovery Program (FHRP) and the Special Housing Assistance and Development Program (SHADP).

Hurricane Housing Recovery Program

The $208 million Hurricane Housing Recovery Program was established to enable local governments impacted by the 2004 hurricanes to develop and implement long-term affordable housing strategies for their communities. The Work Group identified 28 counties that would be eligible for funding through this program and recommended various funding levels for each of those counties. The Legislature made those funds available on July 1, 2005. Local governments developed and submitted disaster recovery plans to Florida Housing that outlined how their funding would be spent. Local governments are currently in varying stages of rebuilding and recovery using HHRP funds.

Hurricane Housing Recovery Program Fast Facts:

- HHRP was developed to assist households earning incomes up to 120% of area median income (AMI), with 30 percent of program funds reserved for extremely low-income households.

- Eligible Activities include:
  - Repair and replacement of site built housing;
  - Land acquisition;
  - Construction and development financing;
  - Down payment, closing costs, and purchase price assistance for site-built and post-1994 manufactured homes where the wind load rating is sufficient for the location;
  - The acquisition of building materials for home repair and construction;
  - Housing re-entry assistance, such as security deposits, utility deposits, and temporary storage of household furnishings, rental assistance; and
  - Community collaboration activities to develop affordable housing.

Rental Recovery Loan Program

The Rental Recovery Loan Program has made funds available to affordable housing developers in 2005 and 2006 as a means of leveraging existing federal rental financing programs, such as Multifamily Mortgage Revenue Bonds. One of the goals of this program is to facilitate the production of additional affordable rental housing stock in areas hurt by the hurricanes.

Rental Recovery Loan Program Fast Facts:

- At least 70% of the units must be set aside for those at or below 60% of area median income (AMI), and a minimum of 15% set-aside for extremely low income (ELI).

- Units must be set aside as affordable for at least 50 years.

- There is a supplemental forgivable loan provided for each ELI unit that a developer commits to set aside for at least 20 years.

- Rents for all units financed through this program are restricted at the appropriate income level using the restricted rents applicable for the Low Income Housing Tax Credit program.

Florida Housing's Affordable Housing Programs

Farmworker Housing Recovery Program

The Farmworker Housing Recovery Program (FHRP) provides one-time funds to finance the construction and/or rehabilitation of housing for farmworkers, with special targeting to migrant farmworkers. Funds will be awarded on a competitive basis through an application process to finance housing provided by non-profits, public housing authorities and other housing providers. Based on the Hurricane Housing Work Group's recommendations, the FHRP encourages partnerships with nonprofits, farmers, growers, local governments, trade associations or other organizations that can share in the cost of providing this housing. For farmworkers unaccompanied by their families, rents may be based on "beds" as necessary and paid daily, weekly, or monthly. Loans may be forgivable in certain situations. FHRP is targeted to agricultural areas of the state impacted by the 2004 and 2005 storms and proximate to services.

Special Housing Assistance and Development Program

The Special Housing Assistance and Development Program (SHADP) is designed to target smaller rental developments for hard-to-serve populations such as persons with a disability, frail elders and people who are homeless. Funds will be awarded on a competitive basis through an application process to finance housing provided by non-profits, public housing authorities and other housing providers. Based on the Hurricane Housing Work Group's recommendations, SHADP provides flexible loans which may be forgivable in certain situations.

The Hurricane Housing Work recommended that funding be targeted to developments in Tier I and II counties. Based on combined impacts from the 2004 and 2005 storms, those counties are:

- Tier I: Brevard, Broward, Charlotte, DeSoto, Escambia, Hardee, Hendry, Indian River, Martin, Miami-Dade, Monroe, Okeechobee, Palm Beach, Polk, St. Lucie and Santa Rosa.
- Tier II: Collier, Franklin, Glades, Highlands, Lee, Orange, Osceola and Volusia.

WORKFORCE HOUSING

Community Workforce Housing Innovation Pilot Program

The 2006 Florida Legislature passed House Bill 1363 (Ch. 2006-69, s. 27, Laws of Fla.), a housing bill focused on addressing some of the affordable housing challenges the State currently faces. HB 1363 includes $50 million for an affordable housing pilot program called the Community Workforce Housing Innovation Pilot Program (CWHIP). Florida Housing will administer CWHIP, and these funds will be awarded on a competitive basis through a Request for Proposals (RFP) process to public-private entities seeking to build affordable housing for Florida's workforce.

CWHIP promotes the creation of public-private partnerships to finance, build and manage workforce housing and requires the coordinated efforts of all levels of government as well as private sector developers, financiers, business interests and service providers. The program requires that 50 percent of the units built using CWHIP funds be targeted to "essential services personnel," to be defined in local SHIP plans. In addition, 80 percent of the units built using CWHIP must be available to households earning incomes up to 140 percent of area median income (AMI). This program may serve a broad range of incomes up to 140 percent of AMI.

Eligible Counties:

- High cost counties (relative cost to purchase home compared to incomes).
- High growth counties.
- Counties willing to make regulatory changes and financial investments in affordable housing.

Eligible Developments:

- Homeownership and rental housing, which may be in a mixed use and/or scattered site setting.
- Developments that have at least 15 percent of the total development costs granted or donated.
- Developments in neighborhoods close to employers, services, transportation.

Appendix 6

Florida Housing Coalition
Model Linkage Fee Ordinance

APPENDIX 4

MODEL LINKAGE FEE ORDINANCE

AN ORDINANCE OF THE CITY/COUNTY OF _____, FLORIDA, TO ESTABLISH A LINKAGE FEE TO INCREASE THE SUPPLY OF AFFORDABLE HOUSING, PROVIDING FOR THE PURPOSE AND INTENT, PROVIDING DEFINITIONS, PROVIDING THE ESTABLISHMENT OF AN AFFORDABLE HOUSING LINKAGE FEE, PROVIDING FOR EXEMPTIONS, ESTABLISHING AN AFFORDABLE HOUSING TRUST FUND, PROVIDING FOR IMPLEMENTATION, AND PROVIDING AN EFFECTIVE DATE.

BE IT ENACTED BY THE PEOPLE OF THE CITY/COUNTY OF _____

SECTION I. Creation

The Code of Ordinances of the City/County of _____ is hereby amended to adopt a linkage fee program to read as follows:

1. The City/County Commission of _____ has determined that the public health, safety and general welfare requires the implementation of an affordable housing program for the following purposes:
   a. To implement the goals, policies and objectives of the _____ Comprehensive Plan,
   b. To provide housing opportunities for lower income families in order to meet the existing and anticipated housing needs of such persons and to maintain a socio-economic mix in the community,
   c. To satisfy the community's obligation to provide that a fair share of the community's housing production is affordable to lower income families,
   d. To provide for a range of housing opportunities for those who work in _____ and who provide the community with essential services but cannot afford to live in the community,
   e. To provide that developments which create additional affordable housing demand within _____ share in the responsibility to provide affordable housing.

SECTION II. Definitions

Affordable Housing. (A definition consistent with the definition in the local SHIP program may be appropriate)

Residential Construction. Enclosed building and floor areas used for living and habitation including screened porches, recreation rooms, guest houses, but excluding garages, carports, open balconies, screen pool enclosures, cabanas, attics and storage sheds.

Square Footage. Square footage shall be calculated in the same method as defined and utilized within the zoning code as calculated for floor area or floor area ratio.

Non-residential Construction. Enclosed building and floor areas used for non-residential purposes, but excluding parking decks or garages, carports or covered parking, attics, external mechanical or storage buildings.

SECTION III. Affordable Housing Fee Established

1. In order to implement an affordable housing program, an affordable housing fee is hereby established, to be paid at the time of the issuance of building permits, based on the following schedule:
   a. For residential construction the fee shall be $.50 per square foot of construction.
   b. For non-residential construction, the fee shall be $3.00 per square foot of construction.
2. The affordable housing fee shall be assessed for all new construction, building additions and on the renovation of existing

buildings and building space when the building permit value of the renovation or improvement exceeds fifty (50%) percent of the replacement cost of the building or building space at the time of the construction.

SECTION IV. Exemptions

1. The following buildings constructed within the City/County of _____ shall be exempt form the affordable housing fee:
   a. Residential buildings constructed as part of the City's affordable housing program.
   b. Residential building projects which contain a set-aside of housing units(s) which qualify under the definition of affordable housing or residential units which are constructed such that they qualify as affordable housing, as defined herein.
   c. Non-residential building construction that constitutes the exempt use of property for education, literary, scientific, religious, charitable or governmental use, as defined by Chapter 196, Florida Statutes, or that is used for such purposes by organizations which qualify for exemption from taxation under Section 501(c)(3) of the Internal Revenue Code of 1986, as amended.
   d. Nursing homes or assisted living facilities, but not including retirement homes.
2. Whenever questions arise as to the applicability of these exemptions, such interpretations may be requested from the City Commission by the City Manager or by the affected party.

SECTION V. Affordable Housing Linkage Fee Trust Fund

There is hereby established an Affordable Housing Linkage Fee Trust Fund. All fees collected under these ordinance provisions shall be deposited within this fund, and shall be expended only for those purposed budgeted and authorized by the City/County Commission.

SECTION VI. Affordable Housing Program Implementation

The City/County of _____ shall use the funds deposited within the Affordable Housing Linkage Fee Trust Fund for the following purposes:

(Put in eligible uses of funds or tie to an existing program)

SECTION VII. Reference in Building Code

Reference to the Affordable Housing Linkage Fee shall be included within the Building Code, Section___ Permits; schedule of permit fees.

SECTION VIII. Conflicts

All ordinances or portions of ordinances in conflict herewith shall be hereby repealed.

SECTION IX. Effective Date

This ordinance shall become effective on_____

ADOPTED at a meeting of the City/County Commission of _____, Florida _____ on this _____ day of _____ 2001.

_____

Mayor/County Commission Chair

ATTEST:

_____

City/County Clerk

J-62

ATTAINABLE WORKFORCE HOUSING TOOLKIT
REFERENCE MATERIAL

East Central Florida Regional Planning Council. *Central Florida Workforce Housing Toolkit.*

Municipal Research and Services Center of Washington. *Affordable Housing Techniques A Primer for Local Government Officials,* March 1992 – Report No.. 22

The Washington Area Housing Partnership. *Toolkit for Affordable Housing Development.* http://www.wahpdc.org

Business and Professional People for the Public Interest. *Success in Affordable Housing: The Metro Denver Experience.* February 2005. http: www.bpichicago.org

Northeast – Midwest Institute Congress For The New Urbanism. *Strategies For Successful Infill Development.* http://www.nemw.org/

Southwest Florida Community Housing Subcommittee. *Housing Policies and Local Initiatives.*

Florida House of Representatives. *House Interim Workgroup on Affordable Housing.* September 20, 2006.

Regional Affordable Housing Initiative of Business and Professional People for the Public Interest. *A Community Guide to Creating Affordable Housing.* www.bpichicago.org

Interim Workforce Housing Program

Broward Housing Partnership. *"Listing of Potential Affordable Housing Tools".*

APPENDIX K

Fiscal Impact Analysis

Background

The purpose of fiscal impact analysis is to estimate the impact of a development or a land use change on the costs and revenues to local governments serving the development. Fiscal impact analysis is a tool that enables local governments to estimate the difference between the costs of providing services to a new development and the revenues—taxes and user fees, for example—that will be generated by the development. It is important to realize fiscal impact analysis only deals with the public costs and revenues associated with a project and does not take into account the fiscal impact on the private sector. This type of analysis only seeks to quantify the cumulative effect on a local government's revenues and expenses that are affected by a development.

The Florida Department of Community Affairs has developed a Fiscal Impact Analysis Model (FIAM) by contractual arrangement with Fishkind & Associates, Inc. The model has been made available to local governments in the Treasure Coast Region and throughout the State of Florida. FIAM is designed to serve as the prototype fiscal impact assessment tool for local governments in Florida. FIAM provides estimates for the effects of land use decisions on both the operating budget and capital budget of the local government. The FIAM model is designed to be calibrated with local budget and demographic data for the county that is the subject of the analysis. For this project, the FIAM model is calibrated with current Martin County data.

This analysis uses FIAM to indicate whether the Indiantown DRI project would have a positive or negative fiscal impact for the County. Presented here is a summary of total revenues and costs for operating and capital budget items. Results are given in terms of net present values (NPV). The net present value calculation displays how much a future investment is worth in today's dollars. A project's overall NPV is calculated by summing the net capital impact and the net operating impact. A positive NPV generally indicates a good investment.

Summary

The fiscal impact analysis was based upon development of the Indiantown DRI property with 1,222 single family residences, 428 multi-family units, 10,000 square feet of retail and 20,000 square feet of office space. In the project's first five years of development, the total estimated operating revenues generated by the project for Martin County are expected to be slightly less than the total operating expenditures incurred. At the sixth year, the project is expected to begin paying for itself with operating revenues generated exceeding local government expenditures (Figure 1).

On the capital side, the project's capital revenues are expected to exceed capital outlays in the 12th year of the project's buildout (Figure 2). The project's net total fiscal impact is estimated to be $4.8 million (present value), over the next 20 years.

Figure 1
Project Operating Revenues vs. Operating Expenditures
2008-2023

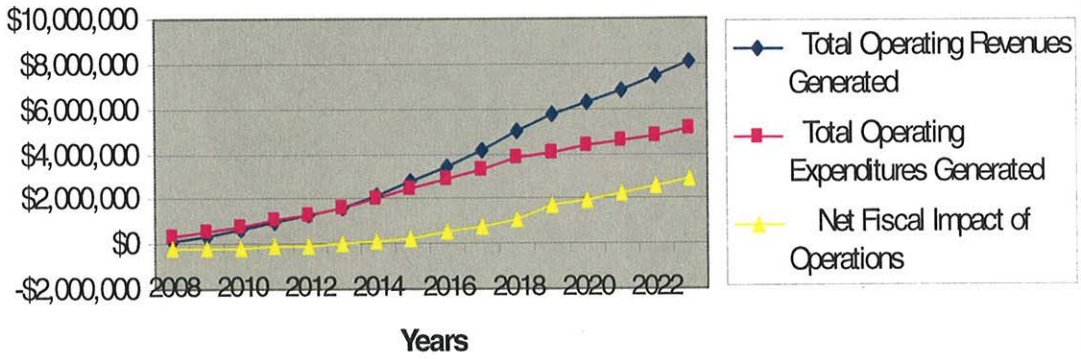
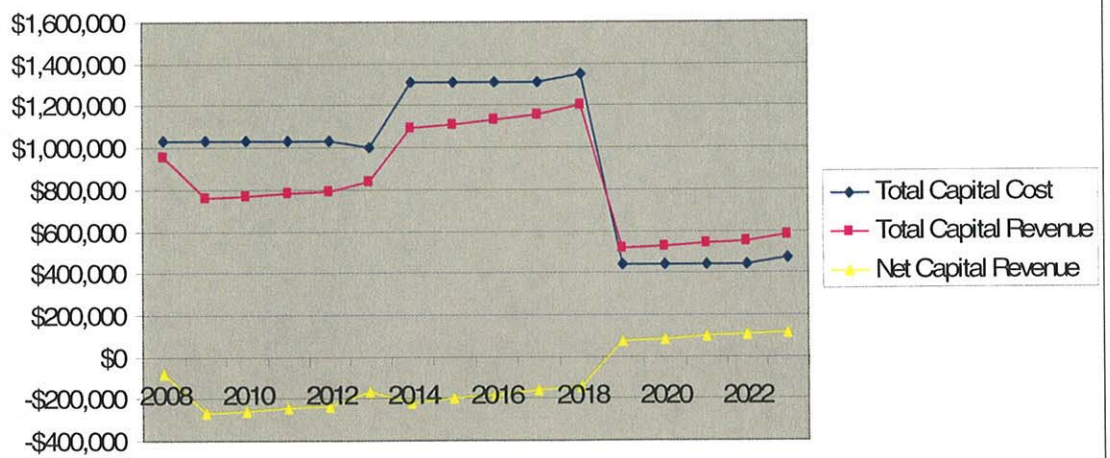


Figure 2
Project Capital Revenues vs. Capital Expenditures 2008-2023



The key fiscal impact analysis assumptions and summary results are presented on the following pages.

Martin County

Fiscal Impact Analysis Summary
Indiantown DRI

12/5/2006 22:05

Summary of Proposed Land Use Change

Land Uses	Units	Volume	Average Value
Single-family	Units	1,222	$266,000
Multifamily	Units	428	$189,000
Mobile Home	Units	0	$0
Hotel	Rooms	0	$0
Retail	Sq. Ft.	10,000	$72
Office	Sq. Ft.	20,000	$65
Warehouse	Sq. Ft.	0	$0
Industrial	Sq. Ft.	0	$0
Instutional/Gov't	Sq. Ft.	0	$0
Golf Course	Holes	0	$0

Summary of Fiscal Impacts

		Over 20 years	Over 20 years
		Total	Present Value*
Total Operating Revenue (Development)		$93,838,257	$25,731,749
Total Operating Cost (Martin County)		$64,850,998	$19,597,680
		==========	==========
Net Operating Impact		**$28,987,258**	**$6,134,069**
95% of Net Operating Impact		**$27,537,895**	**$5,827,365**
Total Capital Revenue (Development)		$14,250,109	$6,880,664
Total Capital Cost (Martin County)		$14,999,259	$7,885,629
		==========	==========
Net Capital Impact		**-$749,151**	**-$1,004,964**
Net Total Fiscal Impact @ 95% of Revenue		**$26,788,745**	**$4,822,401**

*(20 years @ 10% discount rate)

Table 6
Martin County
Fiscal Impact Assumptions

Taxable Assessment Ratio	0.85	(from input data)
Homestead Exemption	25000	(from input data)
% Single-Family with Homestead	0.78	(from input data)
% Multifamily with Homestead	0.47	(from input data)

Millage

Martin County	4.407	Mills
Coast Mgt	0.097	Mills
Health Care	0.354	Mills
MSTU Fire Operations	2.032	Mills
MSTU Parks and Rec.	0.2	Mills
MSTU Stormwater	0.454	Mills
MSTU Roads	0.281	Mills

		Equivalent Factor	**Full-Time Equivalent**
Population-Working Residents	58,397	0.7619	44,493
Population-Non-Working Residents	81,673	1	81,673
Population- Seasonal	15,053	0.375	5,645
Population (peak season)	155,123		131,811
Population (total) (FI Population Studies, 2005)	141,059		
Employment (total) (2003 Monthly Average)	58,397	0.2381	13,904
	2001	**2002**	**2003**
Persons per Household - Single Family	2.24	2.24	2.24
Persons per Household - Multifamily (FI Population Studies, 2003)	2.24	2.24	2.24
Total Households	61300	(FI Population Studies, 2005)	

Employment Assumptions	Project	
Retail - Neighborhood	598	sq. ft. per employee
Office	250	sq. ft. per employee

Average Annual Change in Property Value:	0.03

Property Sales Value Assumptions	Project Data	Source	General Defaults
Single-Family - Mid Range	$266,000	(Developer)	190000
Multifamily-For Sale Condo	$189,000	(Developer)	95000
Retail-Neighborhood	$72	(Developer)	90
Office	$65	(Developer)	100

APPENDIX L

United States Department of the Interior

FISH AND WILDLIFE SERVICE
6620 Southpoint Dr. South
Suite 310
Jacksonville, FL 32216-0958

IN REPLY REFER TO:
FWS/R4/ES-JAFL
June 5, 2006

CLEARANCE TO PROCEED WITH CONSTRUCTION ACTIVITIES ADJACENT TO BALD EAGLE NESTS - 2006 Revision

(All Development Projects within 660 feet)

All projects greater than 660 feet from a bald eagle nest tree do not need Service review.

To Whom It May Concern:

The U.S. Fish and Wildlife Service (Service) has proposed to remove (delist) the bald eagle from the list of threatened and endangered species because the bald eagle population has recovered in the lower 48 states, threats to the species have been reduced or eliminated, and reproductive success has significantly increased. In Florida, the population has tripled since 1982. As a result of this population rebound, the Service has determined that the bald eagle no longer warrants protection under the Endangered Species Act (ESA); however, the bald eagle will continue to be managed and protected by the Bald and Golden Eagle Protection Act (BGEPA) and the Migratory Bird Treaty Act.

The Service has also proposed a draft definition of the term "disturb" under BGEPA, and a companion draft document – The National Bald Eagle Management Guidelines (Guidelines) – intended to be used once the delisting occurs. These new Guidelines will take the place of the 1987 Habitat Management Guidelines for the Bald Eagle in the Southeast Region. Once the Service completes review of all the comments on the three proposed documents, which were published in the Federal Register from February 17, 2006 through June19, 2006, a final decision will be announced along with a response to all comments received. During this interim period until delisting is completed, the Service's Florida Ecological Services Field Offices (ESFO) have decided to implement the basic framework and associated buffer zones proposed in the new Guidelines. The new guidelines are different from what has previously been implemented under ESA; only **one** buffer zone is proposed with distances reduced based on three criteria shown below. Since the protections of the ESA will no longer apply, there will no longer be a permit option under Section 10 or an Incidental Take statement within a Section 7 Biological Opinion.

Given these changes in addition to many others proposed in the Guidelines, we are interested in helping the public apply these new Guidelines. During this time, we will better identify and assess any problems in this proposed document, and provide appropriate feedback to both our Regional and Washington offices. It is also possible that after delisting, our staff may not be able to provide the same level of technical assistance to the public as we have done in the past, since BGEPA is under the jurisdiction of the Service's Migratory Birds Division and outside the Florida ESFO purview.

We suggest that you download the Guidelines on our website, and familiarize yourself with the complete document. Specifically focus on page 11 which contains the two tables **(A & B)** that apply to most projects in Florida, and then read the Glossary on page 16 for the definitions of "similar in scope", "nest", and "nest abandonment". Since many City and County governments and Water Management Districts previously required letters from the Service prior to issuing a building or clearing permit; we recommend that applicants follow the measures and recommendations outlined below when activities are proposed within 660 feet of a bald eagle's nest.

This letter provides applicants guidance and subsequent clearance to proceed with construction for the following types of activities within a bald eagle nest territory (within 660 feet from a nest tree): Please refer to Appendix 1 for the matrix table representation of the narrative text below:

1. A 660-foot no activity buffer zone shall be maintained around the nest under the following conditions: (a) building construction **at any height**, and (b) where the project footprint is **any size**, and (c) the activity **will be visible** from the nest, and (d) if there is **no** similar activity within 1 mile of the nest.

    1a. If there is existing tolerated activity of similar scope **closer than 1 mile** from the nest, the buffer zone **may be adjusted to the same distance as that activity or structure occurs within the 660 feet.**

2. A 330-foot no activity buffer zone shall be maintained around the nest under the following conditions: (a) building construction of **any height,** and (b) **project** footprint is ½ acre or less, and (c) the activity **will not be visible** from the nest, and (d) there is **no** similar activity within 1 mile of the nest.

    2a. If there is existing tolerated activity of similar scope **closer than 1 mile** from the nest, the buffer zone **may be adjusted to the same distance as that activity or structure occurs within the 330 feet** for any project footprint larger than ½ acre.

3. Surface water management ponds proposed from **100 feet to 660 feet** constructed during the non-nesting season. For recommendations on storm water management in the Florida panhandle, Panama City Ecological Service Field Office area of responsibility, please go to http://www.fws.gov/panamacity/projects/stormwater.html.

If the proposed project meets the parameters cited above, and adheres to the following protective measures, we request that local and state regulatory officials refer applicants to this letter in lieu of sending them directly to the Service for an individualized response.

During this interim period, we will continue to provide Biological Opinions to Federal Agencies for projects that qualify for Section 7 consultation when proposing any type of activity within 330 feet of a bald eagle nest that is **not** similar in scope.

There are limited exceptions to the above when an individualized Service response may be warranted. In cases where an applicant has unusual circumstances, such as an irregular or narrow lot configuration or setback restrictions necessitate a reduced buffer even if there are no other existing structures within 330 feet of the nest tree, the Service will provide a response via email.

Communication Tower Facilities and Artificial Platforms warrant special consideration regarding the recommended buffer zones above. During this transitional period, the Service will attempt to standardize recommendations for these facilities as guidance is forthcoming. All normal maintenance and construction activities associated with tower facilities shall be conducted during the non-nesting season. In those instances where emergency situations occur during the nesting season, the local field office referenced below should be contacted for further recommendations.

For all projects, we recommend that **exterior** construction activities and **site work** within 660-feet be conducted outside of nesting season (October 1 - May 15). "Site work" is defined as all infrastructure work, including roads, sewer, water, power lines, fill and excavation work for homes and buildings. We discourage heavy construction activity during the nesting period, particularly the use of dump trucks. In the event that site work and exterior building construction is unavoidable during the nesting season between 330-feet to 660-feet, the **Bald Eagle Monitoring Guidelines (September 2005)** should be initiated. These guidelines will be revised in the near future and posted on our website at http://www.fws.gov/northflorida to reflect changes contained in this clearance letter. Construction between **0 – 330 feet** during nesting season should be avoided, since monitoring within this distance is not an option. **Interior** construction work may be conducted year-round without monitoring.

In many instances, young eaglets fledge and are independent of the nest (flying and feeding on their own) during late March or April. If it is confirmed that the young eaglets are independent of the nest sooner than May 15, we do not object to the initiation of site and exterior work at that time. In the event that adult bald eagles do not return to the nest tree by October 1, we do not object to the continuation of work as long as the nest site is adequately monitored. In both situations, we request that the Service be notified, so we may respond to inquiries from concerned citizens.

Lost, Inactive or Abandoned Nests – If a nest or a nest tree is lost by natural causes or storm events, we recommend that the Guidelines apply through two (2) complete breeding seasons. A nest is considered "abandoned" if it is inactive (unused) but intact or partially intact through five (5) complete breeding seasons, in which case the Guidelines no longer apply.

In summary, if an applicant follows these above-referenced recommendations, the Service believes that "take", as defined under Section 9 of the Endangered Species Act, and "disturb" as defined under the draft BGEPA rule should not occur to the pair of bald eagles or their young, occupying the active nest in question. In the event that the applicant is unable to meet the recommendations provided in this letter, they may contact the Service directly for further guidance.

If you have any further questions, please contact one of the following individuals:

North Florida: Candace Martino via email – candace_martino@fws.gov or at (904) 232-2580, ext. 129;
South Florida: Alfredo Begazo via email – alfredo_begazo@fws.gov or at (772) 562-3909 ext. 234; or
Florida Panhandle: Stan Simpkins via email – stan_simpkins@fws.gov or at (850) 769-0552 ext. 234.

Sincerely,

/s/

David L. Hankla
Field Supervisor

Appendix 1.

Category A:

Building construction, 1 or 2 story, where the project footprint is ½ acre or less. Construction of roads, trails, canals, power lines, and other linear utilities.

Agriculture – new or expanded operations.

Alteration of shorelines or wetlands.

Installation of docks or moorings.

Aquaculture.

Category A	***If there is no similar activity within 1 mile of the nest***	***If there is similar activity closer than 1 mile from the nest***
If the activity will be visible from the nest	660 feet. Clearing, external construction and landscaping should be done outside nesting season. Landscaping buffers are recommended.	660 feet, or as close as existing tolerated activity of similar scope. Clearing, external construction and landscaping should be done outside nesting season. Landscaping buffers are recommended.
If the activity will not be visible from the nest	330 feet. Clearing, external construction and landscaping should be done outside nesting season.	330 feet, or as close as existing tolerated activity of similar scope. Clearing, external construction and landscaping should be done outside nesting season.

Category B:

Building construction, 3 or more stories.

Building construction where the project footprint is larger than ½ acre.

Mining.

Oil and natural gas drilling and refining.

Category B	***If there is no similar activity within 1 mile of the nest***	***If there is similar activity closer than 1 mile from the nest***
If the activity will be visible from the nest	660 feet. Clearing, blasting, external construction and landscaping should be done outside the nesting season. Landscaping buffers are recommended.	660 feet, or as close as existing tolerated activity of similar scope. Clearing, external construction and landscaping should be done outside the nesting season. Landscaping buffers are recommended.
If the activity will not be visible from the nest	660 feet. Clearing, external construction and landscaping should be done outside the nesting season.	330 feet, or as close as existing tolerated activity of similar scope. Clearing, external construction and landscaping should be done outside the nesting season.

TREASURE COAST REGIONAL PLANNING COUNCIL

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