Transmittal Letter

July 12, 2000

The Elected Officials & Staff
Village of Wellington
Village of Royal Palm Beach
City of Greenacres

Re: Palms West (SR 7/US 441) Corridor Study

Gentlemen and Ladies:

PBS&J is pleased to submit this completed report for the Palms West Corridor Study. These services have been performed in accordance with our agreement dated December 30, 1999, with the Village of Wellington and in association with our sub-consultants, HBI Planning Services and MTP Group.

We wish to express our thanks and appreciation to the Steering Committee for their assistance. The staff members representing each of your communities provided guidance and review comments, resulting in a true consolidated team effort.

On behalf of the PBS&J Team, it is our sincere hope the information presented in this document will stimulate a vision for the corridor, and ultimately produce the desired results that will be a source of pride for the residents and others traveling the corridor.

Very truly yours,

PBS&J

A.L. (Skip) Harvey, Jr., P.E.
Project Manager

Executive Summaary

GENERAL

The SR 7 / 441 corridor plan was an intensive study developed over the course of 8 months. This is a truly unique project with pairing the triad of municipalities as partners. The vision of the communities and consultants will act in tandem to promote and provoke continuing development of this dynamic corridor.

The report was developed closely with the active assistance of the citizens and communities officials. The coherent visual design guidelines and best practices recommended can help direct the planning agencies involved to the realization of this project in built form.

This corridor, which once was undetermined and chaotic, will have an artful unified persona that speaks to the histories and community character of this area. Each community and the county will be benefited from this active collaboration.

The following summary has been prepared to highlight the individual findings and recommendations for the corridor study. The recommendations are presented by Chapter in following the organization of the report.

CHAPTER 1 – CURRENT AND FUTURE LAND USE AND

CHAPTER 3 – ECONOMIC AND MARKET FORCES

1. Predominant future land use is low density residential which is a figment of the County's historical planning for this area as a suburban or exurban fringe area.
2. Land use planning in the future by area municipalities should address the Corridor area as a rising "urban edge" center in the County.
3. 80-90% of the Corridor is either already developed or approved for future development, resulting in limited opportunities to modify future land use.
4. Jobs/ratio in Corridor area is .24 jobs/resident; while County and State averages are .42 jobs/capita. Higher paying employment in Palms West is needed to address jobs imbalance and reduce high commuting rate to West Palm Beach and other coastal job centers.
5. Year 2015 unmet land use needs based on numerous market analysis is for hotel/motel, entertainment, office and light industrial uses with technological emphasis.
6. An estimated 2.5 million square feet of office and light industrial space can be accommodated by the Palms West market over the next 15-20 years.
7. Tailor area land use plans to encourage and "incentivize" future development of non-residential and non-retail land use types.
8. Focus future development in Mixed Use Activity Nodes at Southern and Forest Hill Boulevards as shown on the Future Land Use Opportunities Map.
9. The Activity Nodes should also incorporate desired non-residential and higher density residential uses. Potential incentives to encourage more diverse land uses include:
   - Increased building height possibly up to 5-7 stories.
   - Impact fee waivers or reductions.
   - Infrastructure provision at no or reduced cost to developers.
   - Land use conversation ratios which favor desired land uses.
10. Encourage medical-related offices and laboratories near Wellington Regional Medical Center.
11. Develop "attractive" land use conversion system to encourage conversion of residential uses to desired non-residential uses.
12. Encourage the installation of fiber optic infrastructure throughout Corridor with initial focus north of Forest Hill Boulevard.
13. Develop Blue-Green Way along E-1 Canal and preserve historical uses such as Posse Grounds.
14. Create Multi-Jurisdictional Overlay District for implementation of land use and other project recommendations.
15. Develop Four-Party Annexation Agreement to facilitate eventual inclusion of all Corridor lands into municipal boundaries.

CHAPTER 2 – WORKSHOP SUMMARIES

1. Recommendations not required for this Chapter.

CHAPTER 4 – TRANSPORTATION

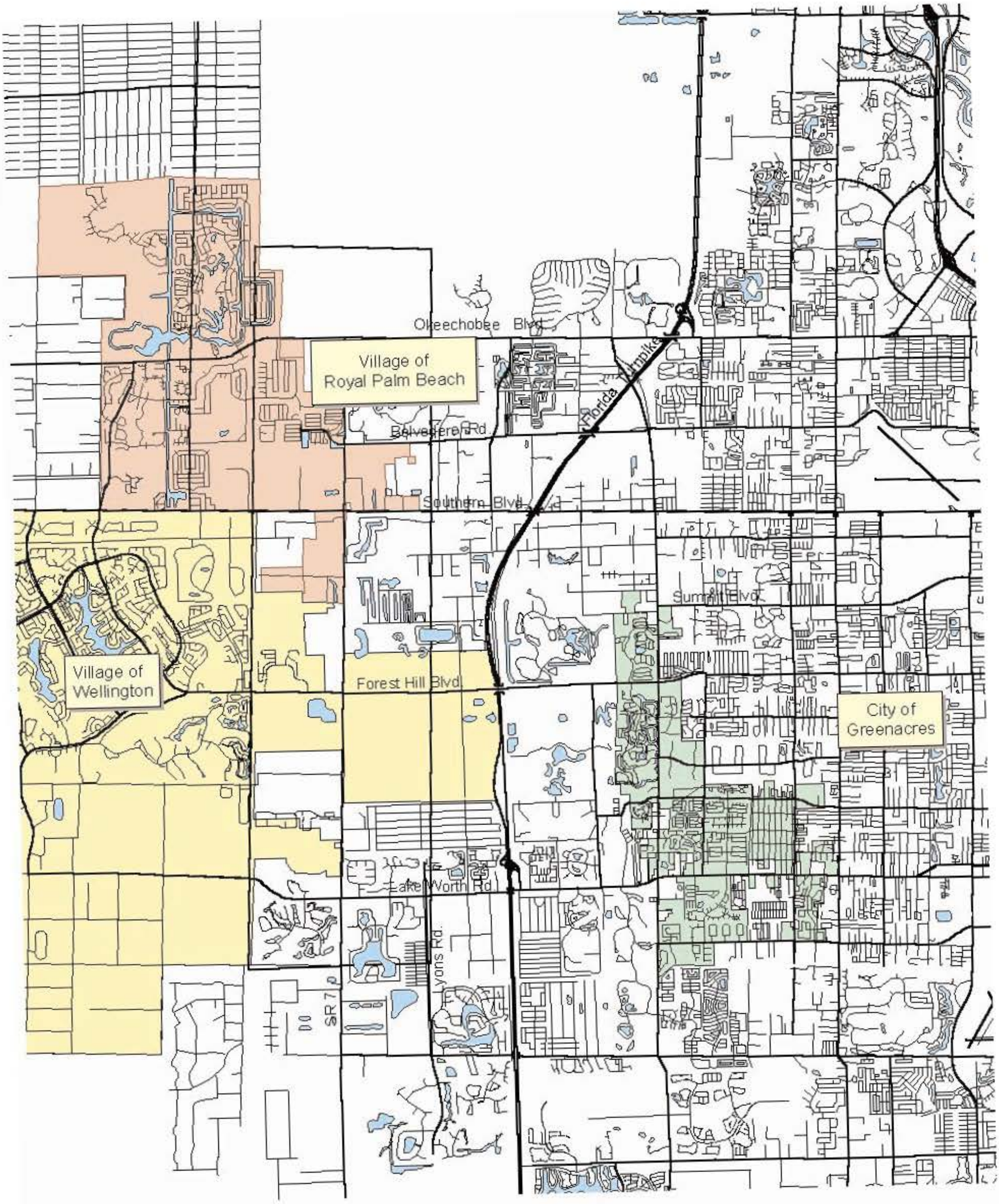
1. Improvements to roadway network.
   a.) Expand SR 7 from its existing 6-lane cross-section to an 8-lane cross-section from Lake Worth Road to Southern Boulevard.
   b.) Expand Forest Hill Boulevard from Southern Boulevard (SR 80) to North Wellington Trace to a 6-lane cross-section (most of this roadway segment already has a 6-lane cross-section).
   c.) Apply for a CRALLS designation for Forest Hill Boulevard between SR 7 and South Shore Boulevard as needed.
   d.) Provide an alternate route to traffic traveling to and from the Village of Wellington through the extension of Pierson Road and Fairlane Farms Road.
   e.) Expand the existing 2-lane cross-section of Lake Worth Road from west of SR 7 to South Shore Boulevard to a 4-lane cross-section.
   f.) Expand Southern Boulevard (SR 80) from Forest Hill Boulevard to Big Blue Trace to a 6-lane cross-section.
   g.) Provide an alternate corridor west of SR 7 from Southern Boulevard to Forest Hill Boulevard, which will allow access to the Village of Wellington from Southern Boulevard.
2. Encourage internal access between commercial and adjoining residential developments.
3. Provide pedestrian connections and crossings at signalized intersections.
4. Evaluate implementation of Trolley/Shuttle system.
5. Enforce access management.
6. Encourage industrial parks, medical offices, general offices, research and development, parks and other land uses with low trip generation within the corridor. Property owners or developers which have traffic concurrency approval for their property as retail, may get incentives by revising the proposed plan of development to land uses which have lower traffic impact.

CHAPTER 5 – FISCAL ANALYSIS

1. Explore interlocal agreements with County School District.
2. Expedite the planning and acquisition of school sites.
3. Re-evaluate impact fee schedules.
4. Agree upon annexation and urban service boundaries.
5. Pursue detail analysis of specific funding sources and alternatives.

CHAPTER 6 – URBAN DESIGN

1. Give this corridor a vibrant artful personality.
2. Initiate a "trail blazing" Corridor Overlay District or Tri-Community CRA.
3. Investigate funding mechanisms.



Base Map

PALMS WEST SR7/441 CORRIDOR STUDY

City of Greenacres | Village of Royal Palm Beach | Village of Wellington | 5/00

Table of Contents

Palms West SR7/441 Corridor Study

OVERVIEW

Existing Conditions along SR7 corridor

Photos by D.E. Siska

Palms West Corridor

I. CURRENT AND FUTURE LAND USE

INTRODUCTION

This corridor study is intended to provide the participating municipal entities with a vision for the rapidly-growing Palms West/State Road 7 area. The municipalities involved in this study area are:

Village of Wellington;

Village of Royal Palm Beach; and

City of Greenacres.

Palm Beach County has also been invited to participate through the project's Oversight Committee.

The existing development and future planned land use pattern for the Palms West Corridor has been well-documented in the print media in recent years, along with the anticipated difficulties associated with rapid growth such as stress on the transportation system. This chapter is designed to assess the existing and future land use patterns of the corridor, including those projects which have development approvals but have not yet started construction. Based on that assessment, recommendations are developed to help ensure that the future vision for the Palms West Corridor includes a well-balanced mix of job, living, shopping and entertainment opportunities.

A. CURRENT (EXISTING) LAND USE

Current land use defines the land use pattern as it exists today, including vacant land. Table 1 gives the acreages of each land use category in the State Road 7 Corridor. The predominant existing land use is agricultural and vacant land which totals 45.5% of the Corridor area, while the next largest category is residential comprising 38.9% of Corridor land. The great majority of Corridor residential development is lower density single-family. Commercial and industrial land uses make up a relatively small portion of current land uses with 2.4% and 1.6%, respectively.

The Existing Land Use Map depicts the existing land use pattern in the Corridor. The largest existing concentrations of residential land use are located within 1 mile of Okeechobee Boulevard, in a 1 mile stretch south of Belvedere Road, and north and south of Lake Worth Road. Commercial uses are concentrated around the Southern Boulevard intersection. Vacant and agricultural lands are especially prevalent around the Forest Hill Boulevard intersection and north of Southern Boulevard.

(See Table 1, following page)

B. FUTURE LAND USE PLANS

The future land use plans of the three governmental jurisdictions in the Corridor have been examined as part of this study. The Future Land Use Map shows the use pattern in the Corridor as adopted on the subject land use plans. Residential land uses, most of which is single-family in unit type, predominates future land use in the Corridor. Table 2 provides the acreages and % coverage of each of the future land use categories, and documents that residential use is either developed or planned for nearly 80% of the area.

The extensive amount of residential use is even greater than it first appears due to the fact that a significant proportion of the Mixed Use category is also planned for residential. For example, the Wellington Green Mall, now under construction, has 400 multi-family units planned.

As noted earlier, the future land use pattern in the corridor is divided among three (3) jurisdictions, Wellington, Royal Palm Beach and Palm Beach County. The largest impact on land use in the Corridor has been through Palm Beach County. Although many areas are in the process of annexation into either Wellington or Royal Palm Beach, the County's land use categories still predominate. The section will examine the land use regulations applicable to the State Road 7 Corridor through each of the subject jurisdictions.

(See Table 2, following page)

PALM BEACH COUNTY

The County's Future Land Use Element designates the large majority of unincorporated land in the Corridor as Low Residential 2 (LR-2). LR-2 allows 1-2 dwelling units per gross acre. The maximum density can be increased to 3 units per acre if a parcel is located in a designated Planned Development District (PDD). Properties within the LR-2 designation include the Minto tract, and large parcels north and south of the Wellington Green Mall site.

VILLAGE OF WELLINGTON

The future land use pattern of Corridor parcels located in Wellington is limited primarily to several large parcels located north and south of Forest Hill Boulevard. The Wellington Green Mall site is designated Large Scale Multiple Use (LSMU) which allows a mix of office, retail, service and residential uses.

LSMUs are generally larger than 60 acres in size and intended to serve a regional market. They are allowed up to 30% lot coverage and 40% floor area ratio (FAR). Building height is limited to 35 feet, however it can be extended up to 72 feet with Village Council approval. All LSMUs must be justified by a professionally-prepared market analysis and no less than 50% of the total land must be dedicated to establishing an employment generating non-retail land use. Average residential densities can not exceed six (6) dwelling units per acre, however, congregate living facilities are allowed to develop at up to 16 units per acre.

Several parcels north of Forest Hill Boulevard are designated Residential E and G categories. Residential E allows densities between 5.01 to 8.0 dwelling units per acres, while Residential G permits 12.01 to 18.0 dwelling units per acre. These tracts also contain conservation and park areas.

Two (2) significant parcels, the Minto tract and the Victoria Lakes site, have been annexed into the Village under the County's LR-2 designation and the Village has retained the two (2) unit density limit for these parcels.

VILLAGE OF ROYAL PALM BEACH

The jurisdiction of Royal Palm Beach ranges generally between Okeechobee Boulevard and Southern Boulevard. The land use in this area is dominated by residential, commercial and industrial parcels. The Village's Future Land Use Element provides very few restrictions on commercial and industrial parcels in the Corridor and places requirements on these uses primarily through its Land Development Code. The Element does limit unit types and density among residential parcels, and the density limits are presented below.

Single Family (SF):	Not exceeding 5 units per gross acre.
Villa Residential (RV):	Not exceeding 6 units per gross acre.
Townhouse Residential (RT):	Not exceeding 8 units per acre.
Medium Residential (RM):	Not exceeding 12 units per acre.
High Density (RH):	Not exceeding 18 units per acre.

I. CURRENT AND FUTURE LAND USE

C. VESTED AND NON-VESTED DEVELOPMENT

Vested development is a planned land development project which has achieved either a valid development order, site plan approval and/or traffic concurrency, but has not yet been completed. The Committed Development Map shows the distribution of vested (or committed) development in the Corridor. Table 3 presents the acreages shown on the committed development map.

While the previous section indicated that approximately 46 % of the Corridor was either vacant or in agricultural use, Table 3 shows that a large percentage of the Corridor's vacant/agricultural lands are committed for development with little opportunity to modify their vested land use program. Less than 27% of the Corridor is uncommitted at this time with respect to having an approved master and/or site plan, however large portion of that segment is committed by way of having achieved traffic concurrency approval, as shown on the Traffic Concurrency Map, which also restricts the flexibility to encourage land use modifications. Primary among the parcels with traffic concurrency in place is the Minto Property (parcel #75), which contains 1,622 acres and approval for 3,243 residential units.

The master and site plan approvals are listed by project in Table 4 along with the unique key number which links each project with the Committed Development Map.

(See Tables 3 and 4, following page)

Summarizing the land use totals in Table 4, the Palms West Corridor has over 3.5 million square feet of commercial development and over 6,700 residential units committed (but unbuilt) through development approvals at this time.

D. ENVIRONMENTAL CONSTRAINTS (BY PBSJ)

No environmental constraints were identified within the corridor. This includes no jurisdictional wetlands or uplands. Consequently, no mitigation is needed to address any environmental impacts.

Individual parcels along the corridor and their respective property owners should satisfy their own requirements and have mitigation plans in effect.

E. FUTURE LAND USE ANALYSIS AND RECOMMENDATIONS

1. Innovative National Trends

Mixed Use. Mixed use development envisions land use configurations where different but compatible uses are permitted to co-exist and compliment each other either on the same parcel or on adjacent, inter-connected tracts. This concept is already in use along State Road 7, most notably in the Wellington Green project where retail, office and residential uses are planned. Mixed use is a central component of the nationally-popular "New Urbanism" school of urban planning.

The mixed use concept should be expanded in the Corridor to provide developers with flexibility in responding to market fluctuations and benefits for area communities in obtaining a more diverse and interesting range of uses.

Smart Growth. The American Planning Association defines "Smart Growth" within six (6) overall principles:

1.) Compact, efficient urban form.

2.) Mixed-use, walkable neighborhoods.

3.) Variety and choice in housing.

4.) Balanced, multi-modal transportation system.

5.) Maximization of existing infrastructure.

6.) Improving development review processes.

The Palms West Corridor, as a very viable and rapidly-growing urban center in Palm Beach County, currently exhibits all of these principles in varying degrees. With visionary and coordinated future planning, a real opportunity exists to reinforce and enhance all of the Smart Growth principles

Sustainable Communities. Florida Statutes (163.324) defines the following key principles of sustainability:

Restore ecosystems;

Achieve a more clean and healthy environment;

Limit urban sprawl;

Protect wildlife and natural areas;

Advance efficient uses of land and resources; and

Create quality communities and jobs.

Several of these principles, relating to ecosystems and natural resources, have little applicability in the subject corridor due to existing development, however others addressing such issues as limiting urban sprawl and creating quality communities and jobs should be a focal point of future land use recommendations.

2. Future Land Use Needs of Existing and Future Residents

As indicated from the data and analysis discussed later in the Economic and Market Forces Chapter, existing development and the future land use plans of the Villages and the County are addressing the residential and retail needs of residents. Current (1997) market population is estimated to be 30,106 and is expected to grow to 52,746 residents by year 2015. The median household income of the area is $50,754, which is 19% higher than for Palm Beach County as a whole.

However, a large portion of the employment needs of existing residents are not being met locally, and the future land use plans now in place will not address this problem. A large component of area residents are forced to commute to West Palm Beach and other coastal locations for employment and this factor has created a large "jobs imbalance" in the State Road 7 Area. Statewide the average jobs balance ratio is 427 jobs/1,000 residents. In Palm Beach County, it is 420 jobs/1,000 residents and in the State Road 7 Corridor area 240 jobs/1,000 residents. To further document this land use need, the County's Commercial Needs Study showed that while future retail demand in this area should be satisfied through existing and committed development, office and industrial demand will not be met, resulting in a future deficit in those key land uses which produce higher salary jobs of an estimated 2.5 million square feet by the year 2015 if no changes are made.

Thus, job creation, and in particular office and industrial employment, should be a major thrust of the land use recommendations for this area, in order to begin to correct this imbalance.

I. CURRENT AND FUTURE LAND USE

3. The Urban Center Concept

The Urban Center Concept is a classic theory in urban planning and the primary element in historical city development throughout the country and the world. It dictates that concentrated commercial, industrial and high-density residential uses should develop at key trade and transportation nodes, and that less intense uses emanate out from that central focal point. The State Road 7 Corridor and immediate community areas exhibit all of the characteristics of the traditional urban center. However, one the problems experienced by this area is that the Palm Beach County Comprehensive Plan has not treated the Corridor as an Urban Center, but rather as a suburban and or 'exurban' area. This unfortunate planning treatment has generated a land use pattern, predominated by low-density single-family uses, which has severely hindered the "natural" urban development of this area, helped create an inefficient mix of uses and contributed heavily toward the generation of the substantial jobs imbalance now in place. One important outcome of this study should be to begin the process of coordinating with Palm Beach County to take a fresh view of this area as a significant Urban Center of the County and adjust future land use planning accordingly.

4. Future Land Use Opportunities

Based on the discussion above the following future land use recommendations are proposed:

Amend applicable future land use plans and land development codes to encourage more flexible mixed use development on uncommitted tracts or groups of adjacent parcels. The mix of uses should be heavily-weighted toward office, light industrial, technological, entertainment, hotel/motel and high-density residential. The Land Use Opportunities Map shows areas in the Palms West Corridor where desired land uses should be encouraged to develop.

Build-on the medical "anchors" now in the Corridor, such as the Wellington Regional Medical Center, by promoting complimentary medical uses in close proximity to the Forest Hills Mixed Use Nodes.

Designate the Corridor intersections at Southern Boulevard and Forest Hill Boulevard as "Mixed Use Activity Nodes," providing incentives in order to achieve desirable land use mixes and urban design features. These incentives could include:

- Increased building height possibly up to 5-7 stories.
- Impact fee waivers.
- Infrastructure provision at no or reduced cost to developers.
- Land use conversion ratios which favor desired land uses.

Encourage the installation of fiber optic infrastructure throughout Palms West Corridor in order to make the area more attractive for high-technology users.

Work with the Lake Worth Drainage District to jointly develop the E-1 Canal as the Corridor's featured "blue-green way" recreational and open space use which can also serve as a key pedestrian linkage and identity feature.

Preserve and enhance historical uses, such as the Posse Grounds, to support the equestrian/agricultural theme for part of the Corridor.

Develop a multi-jurisdictional Zoning Overlay District for the Corridor to ensure coordinated implementation of land use, site design, landscaping, impact fees and intra-parcel vehicular/pedestrian linkages. This will also entail modifications to applicable Future Land Use Plans. This Overlay District could be the implementation mechanism for land use conversion and intra-corridor density/intensity transfers to more desirable future uses, particularly in the Activity Nodes.

Encourage the annexation of remaining unincorporated Corridor lands through voluntary means if possible and involuntary methods if necessary. A high priority should be unincorporated lands in the area of the Wellington Medical Center. Ultimately a "Four-Party Annexation Agreement should be negotiated between Wellington, Royal Palm Beach, Greenacres, and Palm Beach County.

I. CURRENT AND FUTURE LAND USE

Tables

TABLE 1
STATE ROAD 7 CORRIDOR
EXISTING LAND USE

Land Use Category	Acres	% of Total Corridor
Residential	4,031	40.7 %
Commercial	244	2.5 %
Industrial	162	1.6 %
Agriculture	1,047	10.6 %
Community Facilities	416	4.2 %
Open Space	775	7.8 %
Rights-of-Way	45	0.5 %
Water	44	0.5 %
Vacant Land	3,124	31.6 %
Total	9,888	100 %

*Source: PBS&J, Inc.; HBI Planning Services, Inc.; March, 2000.

TABLE 2
STATE ROAD 7 CORRIDOR
FUTURE LAND USE

Land Use Category	Acres	% of Total Corridor
Residential	7,848	79.4 %
Commercial	379	3.8 %
Industrial	419	4.2 %
Mixed Use	634	6.4 %
Agriculture	19	0.2 %
Open Space	391	4.0 %
Rights-of-Way	120	1.2 %
Water	78	0.8 %
Total	9,888	100 %

*Source: PBS&J, Inc.; HBI Planning Services, Inc.; March, 2000.

I. CURRENT AND FUTURE LAND USE

Tables

TABLE 3
STATE ROAD 7 CORRIDOR
COMMITTED AND VESTED DEVELOPMENT SUMMARY

Category	Acres	% of Total Corridor
Existing Development	5,126	51.9 %
Master/Site Plan Approved*	2,079	21.0 %
Land Use/Zoning In Place*	2,683	27.1 %
Total	9,888	100 %

* Parcels with approved traffic concurrency also included.
Source: PBS&J, Inc.; HBI Planning Services, Inc.; March, 2000.

TABLE 4
STATE ROAD 7 CORRIDOR
DEVELOPMENT APPROVALS BY PROJECTS

Map #	Development Name	Acres	Approval Detail
55	Fox Property MUPD Commercial	29	328,000 sq. ft. of retail; 75,000 sq. ft. of office and 4 commercial outparcels
56	Baywinds	589	1,320 residential units + 150,000 sq. ft. of commercial
57	Fox Property MUPD	19	2 additional commercial outparcels and 400 bed Congregate Living Facility
61	Sawgrass Center	62	315,000 sq. ft. of commercial and 100,000 sq. ft. of industrial
62	Rubin/Lennar	223	380 residential units
63	Rubin/Lennar	28	Two commercial parcels of 14 acres each (150,000 sq. ft. and undetermined)
72	Rayside Excavation	39	Excavation area + 15.4 acres residential
74	Wellington Glen Lakes	127	195 residential units
75	Minto Homes	1,622	3,243 residential units
76	Wellington Green Mall	225	2,419,000 sq. ft. of retail; 65,000 sq. ft. of office; 400 multiple-family units; 300 bed CLF.
79	Victoria Lakes	226	452 residential units
80	Shoppes At Wycliffe	24	(not available)
81	SR #7 MUPD	11	35,503 sq. ft. retail; 3,610 sq. ft. bank

II. WORKSHOP SUMMARIES

A public forum was held to solicit comments from the community. Stakeholders both from the public and private sector were identified, sent notices of the meeting with the request that they attend and provide input into the planning process. In addition, the general public was notified through public notices in the local newspapers and mailers sent out through various home owners associations.

Approximately one hundred people, including City staff and governmental officials from the three communities along
with various representatives from local businesses, homeowners associations and the interested public attended the meeting. The meeting began with a presentation of collected information and data within the corridor. Preliminary results from early investigations of transportation data, as well as market data, were presented to give a contextual overlay of what was occurring over the four-mile corridor of S.R. 7.

Slides of the physical conditions which existed along the corridor were presented to demonstrate the development opportunities and constraints, as well as, provide a visual context of what had been build and what is being built within the corridor. Attendees at the public forum were presented with five questions for their consideration.

They are as follows:

1. If you could change one thing about this corridor, what would it be?
2. What types of land uses would you like to see within this corridor?
3. What do you like best about this area?
4. What do you like best about this area?
5. What characteristic best describes this area?

Everyone, except the staff and public officials from the three communities, participated in the breakout sessions. The group was broken into five smaller groups where they sat around an easel with a flipchart. They were then asked questions by PBS&J facilitators. The facilitator role was to elicit comments regarding the five questions and clarify any questions that came up regarding the questions. Their presence was there not to direct the flow of the conversation but merely to facilitate it and document it. The following responses as presented below represents a consensus of all of the five groups consolidated. This information was then given over to the Urban Design Team of PBS&J for their utilization in identifying potential urban design themes within the corridor.

II. WORKSHOP SUMMARIES

First Public Forum
QUESTIONS/RESPONSES
GROUPS, 1 -5

PUBLIC FORUM

IF YOU COULD CHANGE ONE THING ABOUT THIS CORRIDOR, WHAT WOULD IT BE?

Landscaping theme, compatible with mixed use development, models like in Abacoa in Jupiter and Gardens Mall, AIA to Intracoastal, Admiral's Cove and Jonathan's Landing in Palm Beach Gardens, handling parking in urban setting, AIA to Jupiter, meandering parkway with bike paths and parks, video cameras monitoring traffic,
Improve public transportation.
Preserve agriculture use, ag preserves thru purchase,
Breakup the straight lines—.
FINISH CONSTRUCTION!
Consistent development standards Landscaping, signage, sewer/water, Pedestrian and green areas
MakeState Road 7; 8-lanes
Coordinate the (3) municipal annexation plans to provide a consistent plan for infrastructure, water/sewer, etc. municipal boundary; infrastructure delivery could be consistent with municipal boundary,
Change retention ponds – make aesthetically pleasing.
LOS, stop development, stay same.
Land use diversity.
County to buy vacant land to make open space areas——.
Spread out and diversify commercial development
2-lane road
Not become "Dade or Broward"
Stop at Okeechobee
Slow down growth, Less commercial development
Frontage roads
Lower residential densities
Improve landscaping
Use wisdom in developing adjacent land
Less Traffic
Extend SR7 to Bee Line
Consistent landscape program, including maintenance change the aesthetic value of the corridor – more consistent
Less/eliminate billboards
Extend SR7 to Bee Line

WHAT TYPES OF LAND USES WOULD YOU LIKE TO SEE WITHIN THIS CORRIDOR?

Wider diversity of commercial businesses, open spaces, an dgreenways,
Create jobs, light industrial, mixed of residential.
Fire hydrants, lighting, lighting programs for streets, businesses and residents,
Signage standards, height and theme,
cleaner seams between Commercial and residential—.
Entertainment/restaurants/office/residential/high tech.
Office and commercial.Clustered commercial.
Agricultural Preserves
Business parks
Flex space
Planned communities
Gateway – Beautify entrance, pedestrian friendly
Parks/pedestrian corridor, Model use of berms and big trees-More buffers with landscaping
Employment centers, corporate headquarters
Fine shops on the main corridor
Schools, Pre-school/daycare for children
Light industrial – high tech
Professional Medical offices – medical node w/related uses
Places of worship
Hotels/motels
Fine restaurants/No Fast Food)
Community and Civic center, especially for active adults
Limited mixed use to transition residential to commercial
Apartment rental community.
Higher density residential.
Better access to Wellington/western communities to help eliminate traffic congestion on SR7 – thru Pearson Rd to Forest Hill Blvd.
Rural residential
Safer bike trails
Nurseries (plants)
Preserves – animal population
Auto dealerships.

II. WORKSHOP SUMMARIES

WHAT DO YOU LIKE BEST ABOUT THIS AREA?

Natural/native landscape
Biking access, wooded area behind K-Mart
Open space, Loxahatchee Refuge.
Glades Road between I-95 and Turnpike use as model.
Has Potential
New mall – good Hospital
Big Box accessibility,Commercial growth
Good traffic flow, good LOS (not under construction)
Likes RPB restrictions, L.A., signs and Wellington
Traffic is the only concurrency issue
Good schools, no busing
Excellent examples of development
Location, Proximity to the Turnpike.
Opportunity to plan urban infill
Low density housing
Posse grounds
Hay and feed store
Wetlands,Orange groves, Natural resources
Home Depot and Lowe's
Width roads and flow of traffic
Lack of signals
Centralized location – hr. to everywhere!
Good value – overall, quieter – more laid back than Boca.
Recreational facilities
Spirit of cooperation on new development.
Self contained
**Strong sense of community*
Beautiful landscape in gated/planned communities
New median landscape in SR7 is nice

WHAT DO YOU LIKE LEAST ABOUT THIS AREA?

Poorly maintained road, no development controls,
Large parking areas between street and building,
No clear vision for future. Piecemeal development
Predominance of BIG BOX types of development,
No job creation, Lack of employment centers.
Not attractive, no character No theme,Lack of landscaping
Too many gas stations
Ugly retention ponds
No Outback
Canal-safety hazard.
Traffic conditions.Noise from trucks and traffic
Existing hazardous roadway construction conditions.
Lack of entertainment. Lack of shopping
Lack of schools 0r Overcrowded schools
Annexation disputes
Too much lighting on street and into neighborhoods
Small lots
"Quick" zoning changes
Loss of agricultural lands and trees
Crowded stores in some areas
Signage for commercial uses (BK!)

WHAT CHARACTERISTIC BEST DESCRIBES THIS AREA ?

Scruffy
The road is a barrier similar to Pines Blvd.
Rapidly changing
Under construction
Dangerous for pedestrians and bicyclists
Low density (housing)
Semi-rural
Next to Military Trail
Unplanned
Forced over capacitation of SR7 due to County constraints.
Suburban infill
Hot dog missing from bun, SR7
Not pedestrian/bicycle friendly
Major transportation corridor
Southern Computers who bring additional traffic
Mess
No consistency land use
Some woods
Too much commercial
Too much development
Rural country feel
Canals and ponds (south end)
Preserve (north end)
Rapidly changing, unfriendly for bikes and pedestrians
Major transportation corridor and problems
Strip (Southern Blvd.) commercial houses
Lack of office/predominantly retail
Unfulfilled potential
No character to architecture
No hotel amenities for tourists
Segregated/isolated development
Laid back
Diverse
Suburban infill
Equestrian oriented
Natural areas, water,
Agricultural to urban, more people,
Explosive growth patters.
No character, fast travel, unattractive.

III. ECONOMIC AND MARKET FORCES

A. ECONOMIC AND MARKET ANALYSIS

Introduction

This section begins with a review of the regional economy related to the future outlook of population growth and economic development in the Palm Beach County marketplace. A review of population and employment growth and development trends within the county are indicative of the outlook for future expansion of the area economy. Recent private market studies into the area and the County's Commercial Needs Study are summarized and reviewed for indication of future Corridor non-residential needs. The area's employment diversity and density is also compared and contrasted with County and State ratios. This documentation and analysis is then used to develop a summary of economic trends and opportunities for the Palms West Corridor.

1. Countywide and Market Area Characteristics and Projections

Population

Table 1 shows the population trends for the Southeast Florida Region. Growth in this region originated in the south and moved northward. Palm Beach County's growth rate has increased steadily during the past fifteen (15) years. In 1980, the county had a population of approximately 587,000, which represented an increase of 228,000± (64%) from 1970. By 1990, the county had reached a population of approximately 870,000, which represented an increase of nearly 283,000 (48%) from 1980.

The county's growth rate between 1990 and 2000 is expected to be less than it was between 1980 and 1990 due to recessionary economic conditions in the early 1990s. A significant factor in the Palm Beach County's slower growth rate was the severe recession in the northeast United States, which has historically been the area of origin of many of the county's new residents. The recession in this geographic area made it difficult for residents to sell their homes and relocate. However, population growth has increased substantially from the early 1990s. Population forecasts prepared by the Bureau of Economic and Business Research (University of Florida) indicate that an increased rate of growth is projected to continue during the 2000–2010 period. Population is projected to increase from approximately 1,100,000 in 2000 in approximately 1,300,000 in 2010.

(See Table 1, following page)

Employment

Employment growth provides perspective regarding the growth of the local economy as related to the growth in population. Looking at Table 2A, between 1985 and 1995, the number of persons employed and living in Palm Beach County increased by 98,400 or approximately 35%. While the number of persons working at jobs in the County increased by 91,700 or about 32%, as indicated by Table 2B. While the overall 1985–1995 trend was positive, growth in the number of persons employed slowed significantly after 1990. Within this time frame, the number of persons employed grew by approximately 75,000, from about 284,800 to 359,800. After 1990 the number grew only 55,400. This sharp slowdown in job growth, coupled with a substantial increase in unemployment, reflects the recessionary conditions which prevailed in the county after 1990 (in the early 90s).

(See Tables 2A-2B, following pages)

Comparative Demographic Characteristics of Market Area

Demographic characteristics data, as well as housing and income data related to the resident population of the Palms West State Road 7 Market Area (generally defined by a 3-mile radius), are included in Tables 3 and 4. A summary comparison of those characteristics within the market area (M.A.) to those of Palm Beach County as a whole is included below.

The 1997 base year population in the market area is estimated to be 30,106 residents (an increase of 34% since 1990). An estimated 52,746 residents are projected by the year 2015. The population increase by the year 2015 represents a 75% increase from the current population estimate.

Within the market area, the resident population is substantially younger than is the case countywide, as indicated by the median age estimate (37.1 years–M.A. vs. 41.7–Palm Beach County).

30.0% of the resident population in the market area is in the 9–19 year age group, with 20.6% of the countywide resident population in this same age group. In the over 65 year age group, the market area has a significantly lower percentage than is the case countywide (13.0%–M.A. vs. 24.5%–Palm Beach County). Average household size is 2.97 versus 2.37 countywide.

These age group and household size statistics support the observation that the market area is comprised of younger, larger family households vs. countywide.

A much greater proportion of total households in the market area is comprised of owner-occupied units than is the case within the county as a whole (86.0%–M.A. vs. 72.6%–Palm Beach County).

The estimated median household income within the market area is 19% greater than income levels in the county as a whole ($50,754–M.A. vs. $42,744–Palm Beach County).

(See Tables 3 and 4, following pages)

2. Developer Market Studies

Pursuant to direction from the scope of work, five (5) market studies for potential development sites in the State Road 7 Area, prepared by local market analysis firms, were reviewed. Generally they show large components of future demand for retail, office (especially medical), light industrial and hotel/motel uses. The studies are summarized below.

Medical Office

Focus of the study is a supply versus demand analysis for office space within a defined trade/market area. Study does not emphasize the need (i.e. defined as excess of demand over supply) for medical space; rather, the need for general office space is projected.

For the purposes of the analysis, supply consists of the following components: (1) Existing office projects; (2) approved office space projects; and (3) office space that can potentially be built on parcels with commercial future land use plan designations, assuming an appropriate floor-area-ratio, and a likely split between retail (80%) versus office (20%) space development.

Demand is determined by applying an office space multiplier (i.e. 30 sq. ft. per capita) to resident population estimates and projections in the trade/market area.

Property Location: 2.5 acre parcel located on the west side of State Road #7, north of Forest Hill Boulevard. Property is adjacent to the Wellington Regional Medical Center.

Proposed Development Concept: Commercial High-Office (CH-O) future land use designation for construction of a 15,000 sq. ft. surgical outpatient center.

III. ECONOMIC AND MARKET FORCES

Tables

TABLE 1
SOUTHEAST FLORIDA REGION
POPULATION TRENDS BY COUNTY, 1970-2010

County	1970	1980	1990	1995	2000	2010
Broward	629,700	1,025,200	1,261,500	1,360,400	1,461,100	1,654,500
Dade	1,279,200	1,652,200	1,943,800	2,001,500	2,120,700	2,352,300
Martin	28,600	64,900	101,600	113,000	127,600	155,800
Palm Beach	353,500	587,100	869,100	966,300	1,080,300	1,300,500
St. Lucie	51,400	89,000	151,700	174,400	200,800	252,400
County	1970–80 # Change	1980–90 # Change	1990–95 # Change	1995–00 # Change	2000–10 # Change	
Broward	395,500	236,300	98,900	100,700	193,400	
Dade	373,000	291,600	57,700	119,200	231,600	
Martin	36,300	36,700	11,200	14,600	28,200	
Palm Beach	233,600	282,000	97,200	114,000	220,200	
St. Lucie	37,600	62,700	22,700	26,400	61,600	
County	1970–80 % Change	1980–90 % Change	1990–95 % Change	1995–00 % Change	2000–10 % Change	
Broward	62.8%	23.04%	7.8%	7.4%	13.2%	
Dade	29.2%	17.6%	3.0%	6.0%	10.9%	
Martin	126.9%	56.5%	11.2%	12.9%	22.1%	
Palm Beach	66.1%	48.0%	11.2%	11.8%	20.4%	
St. Lucie	73.2%	70.4%	15.0%	15.1%	25.7%	

Source: Bureau of Business and Economic Research, University of Florida

TABLE 2A
PALM BEACH COUNTY
ANNUAL AVERAGE CIVILIAN LABOR FORCE BY PLACE OF RESIDENCE, 1985-1995

Palm Beach County			
Labor Force	346,800	427,800	451,190
Employed	325,200	399,600	418,765
Unemployed	21,600	28,200	32,425
Unemployment rate	6.2%	6.6%	7.2%
Florida unemployment rate	6.0%	5.9%	5.5%
U.S. unemployment rate	7.2%	5.5%	5.6%

Source: Florida Department of Labor and Employment Security

III. ECONOMIC AND MARKET FORCES

Tables

TABLE 2B
PALM BEACH COUNTY
ANNUAL AVERAGE NONAGRICULTURAL WAGE/SALARY EPLOYMENT BY PLACE OF WORK, 1985-1995

Industry					1994 Employment		1985–1990 Change					
	Number	Share	Number	Share	Number	Share	Number	Percent	Share	Number	Percent	Share
Manufacturing	37,600	13.2%	33,300	9.3%	30,200	2.0%	(4,300)	11.4%	3.9%	(4,300)	12.9%	2.3%
Non-Manufacturing	247,200	86.8%	326,500	90.7%	346,300	92.0%	79,300	32.1%	3.9%	27,700	8.5%	1.7%
Construction/Mining	27,200	9.6%	25,500	7.1%	21,400	5.7%	(1,700)	6.3%	2.5%	3,400	9.4%	0.6%
T.C.U.	10,600	3.7%	14,500	4.0%	13,900	3.7%	3,900	36.8%	0.3%	100	1.0%	0.1%
Wholesale/Retail Trade	73,700	25.9%	96,400	26.8%	101,300	26.9%	22,700	30.8%	0.9%	6,800	7.1%	2.3%
F.I.R.E.	23,500	8.3%	28,500	7.9%	25,200	6.7%	5,000	21.3%	0.3%	(2,100)	7.4%	0.4%
Services/Miscellaneous	78,500	27.6%	115,100	32.0%	136,100	36.1%	36,600	26.6%	4.4%	20,400	17.7%	6.3%
Government	33,700	11.8%	46,500	12.9%	48,600	12.9%	12,800	38.0%	1.1%	4,900	10.5%	1.6%
Total Employment	284,800	100.0%	359,800	100.0%	376,500	100.0%	75,000	26.3%	—	55,400	15.4%	—

Source: Florida Department of Labor and Employment Security

III. ECONOMIC AND MARKET FORCES

Tables

TABLE 4
SUMMARY OF DEMOGRAPHIC CHARACTERISTICS
(CORRIDOR MARKET AREA – 3-MILE RADIUS)

Characteristic			
Total Persons	23,140	30,106	37,353
Average Household Size	2.93	2.97	3.00
Households (%)			
Owner occupied	86.0	—	—
Renter occupied	14.0	—	—
Age Distribution (%)			
0–19	28.0	30.0	30.0
20–24	4.0	3.0	4.0
25–44	34.0	33.0	30.0
45–64	19.0	21.0	24.0
65+	14.0	13.0	12.0
Median Age	35.9	37.1	38.2
Household Income ($)			
% less than $14,999	10.0	9.0	9.0
% $15,000–$24,999	11.0	10.0	10.0
% $25,000–$34,999	13.0	13.0	12.0
% $35,000–$49,999	20.0	17.0	17.0
% $50,000–$74,999	27.0	28.0	28.0
% $75,000 and over	18.0	24.0	24.0
Median	$45,975	$50,754	$51,302
Average	$53,220	$60,539	$61,614
Total Persons (Yr 2005)	40,031		
Total Persons (Yr 2010)	46,327		
Total Persons (Yr 2015)	52,746		

Source: 1990 Census; CACI; Palm Beach County Planning Division.
* TAZ population estimates from the Palm Beach County Planning Division.

III. ECONOMIC AND MARKET FORCES

TABLE 3
SUMMARY OF DEMOGRAPHIC CHARACTERISTICS
(PALM BEACH COUNTY)

Average Household Size	**2.32**	**2.37**	**2.36**
Households (%)			
Owner occupied	**73.4**	**72.6**	**72.9**
Renter occupied	**26.6**	**27.4**	**27.1**
Age Distribution (%)			
0–19	**19.7**	**20.6**	**20.5**
20–24	**7.5**	**5.8**	**5.8**
25–44	**29.4**	**28.5**	**26.2**
45–64	**19.1**	**20.6**	**23.1**
65+	**24.3**	**24.5**	**24.4**
Median Age	**39.9**	**41.7**	**43.3**
Household Income ($)			
% less than $14,999	**20.1**	**14.2**	**11.7**
% $15,000–$24,999	**17.2**	**13.6**	**11.5**
% $25,000–$34,999	**16.1**	**13.0**	**11.6**
% $35,000–$49,999	**18.1**	**17.3**	**15.5**
% $50,000–$74,999	**15.4**	**19.9**	**20.6**
% $75,000 and over	**13.2**	**22.0**	**29.1**
Median	**$32,517**	**$42,744**	**$49,696**
Total Persons (Yr 2005)	**1,170,300**		
Total Persons (Yr 2010)	**1,271,100**		
Total Persons (Yr 2015)	**1,373,800**		

Source: 1990 Census; CACI; Palm Beach County Planning Division.
*** TAZ population estimates from the Palm Beach County Planning Division.**

III. ECONOMIC AND MARKET FORCES

Demographics:

Trade/Market Area: Five-mile site radius.

Population Projections:

Year	Resident Population
2000	77,806
2005	88,304
2010	99,272
2015	112,623

Existing Primary Competition (Designated Medical Office Space): Good Sam Medical Pavilion (25,000 sq. ft.); Palms West Hospital/Medical Center (100,000 sq. ft.); Wellington Regional Medical Center (125,000 sq. ft.).

Existing Secondary Competition (Professional Office Space): Lakeview Center (30,000 sq. ft.); Miscellaneous space in Royal Palm Beach (100,000 sq. ft.); Wellington Mall (50,000 sq. ft.); Wellington Office Center (25,000 sq. ft.); and Wellington Professional Center (100,000 sq. ft.).

Total Existing Competition (Primary + Secondary Space): 555,000 sq. ft. Aggregate vacancy rate: 3.9%.

Approved, Unbuilt Office Space:

Space (sq. ft.)	General Location
183,000	Okeechobee Boulevard, between State Road No. 7 and Florida's Turnpike.

SUPPLY PROJECTIONS:

	2000	2005	2010	2015
Existing Space	555,000	555,000	555,000	555,000
Approved/Unbuilt	45,750	91,500	137,250	183,000
Potential	174,375	348,750	523,125	697,500
TOTAL	775,125	995,250	1,215,375	1,435,500

SUPPLY VERSUS DEMAND PROJECTIONS (SQ. FT.):

	2000	2005	2010	2015
Demand	2,334,180	2,649,120	2,978,160	3,378,690
Less Supply	775,125	995,250	1,215,375	1,435,500
TOTAL (Need)	1,559,055	1,653,870	1,762,785	1,943,190

Professional Office

Focus of the study is a supply versus demand analysis for office space within a defined trade/market area.

For the purposes of the analysis, supply consists of the following components: (1) Existing office projects; and (2) approved office space projects.

Demand is determined utilizing two methods: (1) Applying an employment-based multiplier (i.e. 250 sq. ft. per employee) to projected employment; and (2) applying resident-based multiplier (i.e. 47.12 sq. ft. per capita) to resident population estimates and projections in the trade/market area.

Property Location: 20 acre parcel located on the west side of State Road #7, approximately 0.75 miles north of Forest Hill Boulevard.

Proposed Development Concept: Commercial Low-Office (CL-O) future land use designation for construction of a professional office complex (maximum of 305,000 sq. ft., assuming a maximum F.A.R. of 0.35).

Demographics:

Trade/Market Area: Five-mile site radius.

Population Projections:

Year	Resident Population
1997	30,106
2005	40,031
2010	46,327
2015	52,746

Existing Competition (Designated Medical Office Space): Wellington Country Plaza (49,950 sq. ft.); Wellington Commons Mall (22,000 sq. ft.); Good Samaritan @ St. Mary's Health Center ((29,790 sq. ft.); Palms West Professional Center (42,400 sq. ft.); Royal Professional Office (15,400 sq. ft.); Wellington Professional Center & Wellington Medical Suites (86,000 sq. ft.); Hovsons (6,400 sq. ft.); and Palms Wellington Medical Center (28,200 sq. ft.).

Total Existing Competition (Primary + Secondary Space): 555,000 sq. ft. Aggregate vacancy rate: 7.6%.

Approved, Unbuilt Office Space:

Space (sq. ft.)	General Location
285,405	"312 Clematis"; State Road No. 7, north of "Ching" property.
65,000	Wellington Green office component.

SUPPLY PROJECTIONS:

Approved/Unbuilt	350,405
TOTAL	630,545

SUPPLY VERSUS DEMAND PROJECTIONS (SQ. FT.):

2015	
Demand	2,135,344
Less Supply	630,545
TOTAL (Need)	1,504,799

III. ECONOMIC AND MARKET FORCES

Commercial/Industrial/Residential Mix

Focus of these two (2) studies prepared for adjacent tracts is a supply versus demand analysis within defined trade/market areas for a mixed-use development, including retail and industrial space, and residential units.

Property Location: Tract 1 - 80 acre parcel located on the west side of State Road #7, immediately north of the Wycliffe Planned Unit Development; and Tract 2- 150 acre parcel located on the west side of State Road #7, immediately north of the Kahlert Property.

Proposed Development Concept: The market studies were prepared in support of future land use amendment applications for mixed-use projects. Subsequently, the applications were withdrawn, and future land use designations per the County's FLUE (LR-2) remain in effect.

The proposed mixed-use concepts consisted of the following components:

Tract 1:

Commercial Retail: 5 acres minimum to 30 acres maximum. Proposed space would range from 54,450 sq. ft. to 457,380 sq. ft., depending upon the amount of acreage allocated, and the floor-area-ratio applied (i.e. 0.25 to 0.35).

Industrial: 5 acres minimum to 30 acres maximum. Proposed space would range from 76,230 sq. ft. to 588,060 sq. ft., depending upon the amount of acreage allocated, and the floor-area-ratio applied (i.e. 0.35 to 0.45).

Residential: 10 acres minimum to 40 acres maximum (maximum of 320 residential units, depending upon the acreage allocation).

Conservation/Open Space: 5 acres minimum.

Tract 2:

Commercial Retail: 20 acres minimum to 35 acres maximum. Proposed space would range from 217,800 sq. ft. to 533,610 sq. ft., depending upon the amount of acreage allocated, and the floor-area-ratio applied (i.e. 0.25 to 0.35).

Industrial: 20 acres minimum to 90 acres maximum. Proposed space would range from 304,920 sq. ft. to 1,764,180 sq. ft., depending upon the amount of acreage allocated, and the floor-area-ratio applied (i.e. 0.35 to 0.45).

Residential: 15 acres minimum to 85 acres maximum (maximum of 680 residential units, depending upon the acreage allocation).

Conservation/Open Space: 5 acres minimum.

Demographics:

Trade/Market Area: Five-mile site radius.

Population Projections:

Year	Resident Population
1998	126,562
2005	150,685
2010	160,708
2015	179,778

Existing Competition:

Retail: A total of 16 retail facilities were identified within the primary trade area (total of 2,387,295 sq. ft.).

Industrial: A total of 11 Traffic Analysis Zones were identified containing industrial facilities within the primary trade area (total of 1,795,590 sq. ft.).

Approved Competition:

Retail: A total of 9 retail facilities were identified within the primary trade area (total of 1,822,500 sq. ft.).

Industrial: A total of 397 acres of vacant industrial lands were identified within the primary trade area.

Future Land Use Designated Parcels:

Retail: A total of 5 parcels (173 acres) were identified within the primary trade area (potential of 1,509,354 sq. ft. @ a 0.20 F.A.R.).

Industrial: Inventory included in #4, above.

SUPPLY PROJECTIONS:
Retail:

Existing Space	2,387,295
Approved	1,822,500
FLU designated	1,509,354
TOTAL	5,719,149

Industrial: 40.1 acres per year absorbed during the 1985 - 1997 per year.

SUPPLY VERSUS DEMAND PROJECTIONS (SQ. FT.):
Retail:

2015	
Demand	8,449,566*
Less Supply	5,719,149
TOTAL (Need)	2,730,417

Population x 47 sq. ft. per capita.

Industrial: 40.1 acres per year absorbed during the 1985 - 1997 per year. At this rate, all available industrial land (397 acres) will be absorbed by the year 2007. If the maximum acreage allocations for Kahlert (30 acres)and Lanier (90 acres) are added (i.e. a total of 517 acres), available supply is projected to be exhausted by the year 2010. Since the planning horizon of the County's Future Land Use Plan is 2015, additional industrial acreage is warranted.

III. ECONOMIC AND MARKET FORCES

Hotel/Restaurant/Convenience Store

Focus of the study is a supply versus demand analysis for retail space within a defined trade/market area. Study does not emphasize the need (i.e. defined as excess of demand over supply) for hotel rooms, restaurants, or convenience stores with gas pumps; rather, the need for general office space is projected.

Demand is determined by applying a retail space multiplier (i.e. 18 sq. ft. per capita) to resident population estimates and projections in the trade/market area.

Property Location: 6.7 acre parcel located at the northwest corner of Southern Boulevard and Florida's

Proposed Development Concept: Commercial High (CH) future land use designation for construction of a 58,000 sq. ft. hotel, an 8,500 sq. ft. restaurant, and a 3,000 sq. ft. convenience store with gas pumps.

Demographics:

Trade/Market Area: 1.5-mile site radius.

Population Projections:

Year	Resident Population
2000	6,589
2005	7,763
2010	8,979
2015	10,305

Existing Primary Competition (Retail Space): Six retail facilities, with a total of 45,300 sq. ft. of space.

Approved, Unbuilt Retail Space: None

SUPPLY PROJECTIONS:

	2000	2005	2010	2015
Existing Space	45,300	45,300	45,300	45,300
Approved/Unbuilt	0	0	0	0
Subject Site	0	69,500	69,500	69,500
TOTAL	45,300	114,800	114,800	114,800

SUPPLY VERSUS DEMAND PROJECTIONS (SQ. FT.):

	2000	2005	2010	2015
Demand	118,602	139,734	161,622	185,490
Less Supply	45,300	114,800	114,800	114,800
TOTAL (Need)	73,302	24,934	48,822	70,690

General Observations: As pointed out in the subject market study, Palm Beach County and this Corridor market area has excellent potential for hotel and motels. The following support facts give an indication of that market, according to the Tourist Development Council:

More than 2,200,000 visitors stayed in hotels in Palm Beach County during the last fiscal year. This is the second highest total during the past decade.

Overall, County hotel occupancy has been increasing at an average rate of 1% per year during the past 7 years. This average increase has continued even though the supply of hotel rooms has increased by 4.7% during the last two fiscal years.

Central Palm Beach County mirrors increases found countywide. Hotels with 1-100 rooms showed an increase in occupancy from 56.8% in FY 91/92 to 63.0% in FY 97/98 and 60.6% in FY 98/99.

Although the increased inventory has put downward pressure on the occupancy rate, the average room rate has continued to increase faster than the rate of inflation. The average room rate increased by over 50% during the past 7 years, from $80.01 to $108.42.

The largest percentage of visitors are here for business (49%), followed closely by leisure/family (40%).

3. PBC Commercial Needs Study

The Commercial Needs Assessment Report was prepared by the Palm Beach County Planning Division. The current revised edition is dated December, 1999. The 1989 Comprehensive Plan provided for limited commercial acreage in the "western communities", which includes the State Road No. 7 corridor. In 1998, the Board of County Commissioners adopted Policy LUE 2.2.2-g, which directed the staff to conduct a commercial needs assessment to evaluate the need for additional non-residential land in the developing western portion of the county.

The goal of the study is to determine the need for additional commercial space in the "study area", to the year 2015, and provide information to be used in the evaluation of commercial land use amendment requests, as well as other planning efforts.

The study provides the year 2015 projects the need (i.e. demand) for retail, office, and industrial space throughout the county, and compares projected demand with existing and potential (i.e. approved and planned) supply. It also presents specific recommendations for sub-county areas where additional commercial and industrial acreage may be warranted.

The "study area" includes two defined areas: (1) The area of the county west of the Turnpike and east of the J.W. Corbett Wildlife Management Area/Arthur B. Marshall Loxahatchee Wildlife Refuge, from the Palm Beach/Martin county line to south of Lantana Road; and (2) the area between the Turnpike and Military Trail, from Lantana Road to Clint Moore Road.

A 10 member steering committee was appointed by the Land Use Advisory Board (LUAB) to work with Planning Division staff in preparing the needs assessment. The committee included a cross section of industry professionals and representatives from the "study area".

In order to assess the needs of the "study area", it was determined that the demand versus supply analysis needed to be conducted countywide. To facilitate the assessment, the county was divided into , consistent with Metropolitan Planning Organization sectors, and sub-sectors.

The basic approach includes estimating built and potential space (i.e. retail, office, and industrial) and comparing the results to forecasts of demand. The net result is the determination as to whether there is excess demand, or excess supply in each of the county sub-sectors. A finding of excess demand indicates that a county sub-sector may be able to support additional space.

Determination Of Supply

The built supply was compiled from the Property Appraiser's parcel information. Potential supply was estimated from vacant land designated for future commercial or industrial use (i.e. Future Land Use Plan designations). Potential space resulting from commercial and industrial designated lands was estimated by the application of appropriate floor-area-ratios to vacant acreage figures.

Determination Of Demand

Retail Space Demand

Retail demand was determined using one of two methods:

(1) Method 1 was used to determine demand in the Urban/Suburban Tier (i.e within the Urban Service Area). This method attempts to quantify demand from permanent resident households, as well as seasonal residents, tourists, visiting shoppers, and businesses. The method was prepared using countywide gross retail sales information provided by the Department of Revenue, and retail sales per square foot data provided by the Urban Land Institute. The countywide retail multiplier developed using this method is 65 sq. ft. per capita.

III. ECONOMIC AND MARKET FORCES

(2) Method 2 was used to determine demand outside of the Urban/Suburban Tier. This method attempts to quantify demand from permanent resident households only, using household income and consumer expenditure data. Resulting per capita multipliers vary from sub-county sector to sub-county sector, depending upon the income levels therein. Demand multipliers developed using this method range from 27 to 45 sq. ft. per capita.

Office Space Demand

Office space demand was determined for each sub-county sector by forecasting the number of employees requiring office space, and assuming space needs of 200 sq. ft. per employee.

Industrial Space Demand

Industrial space demand was projected, assuming that the existing countywide rate of 50 sq. ft. per capita is appropriate throughout the county (i.e. in all of the sub-county sectors).

Findings

On a countywide basis, the demand versus existing supply analysis resulted in the following needs (i.e. excess of demand over existing supply) during the 1997 - 2015 period: (1) Retail space - 32 million sq. ft.; (2) office space - 26 million sq. ft.; and (3) industrial space - 16 million sq. ft.

Further, the analysis concluded that, when planned supply (i.e. all vacant, but FLU designated acreage) was added to the equation, an adequate amount of land exists to satisfy demand. FLU designated lands can accommodate the following additional supply: (1) Retail space - 31 million sq. ft.; (2) office space - 40 million sq. ft.; and (3) industrial space - 35 million sq. ft.

Although, from a countywide perspective, there is adequate planned supply (i.e. FLU designated acreage) to meet demand, sub-county sector analysis indicates that certain areas are in need of additional supply, while other areas have a surplus of FLU designated land.

The State Road #7 study corridor is located within 2 sub-county sectors; 31 and 41. Sector 31 includes the area west of the Turnpike (to the L-8 Canal), from M-Canal to Forest Hill Boulevard. Sector 41 includes the area west of the Turnpike (to the Loxahatchee Wildlife Refuge), from Forest Hill Boulevard to Gateway Boulevard (extended).

The demand versus supply analysis for Sectors 31 and 41 are presented.

(See Table 5, following page)

Table 5, numbers enclosed in parentheses indicate need (i.e. excess of demand over supply) and numbers not enclosed indicate excess supply. The only area of excess supply is in retail space in Sector 41. This conclusion is heavily influenced by the location of the Wellington Green Mall. The impact of the mall as a regional draw and attractor for additional retail and business users may not have been adequately addressed by the generic multipliers used in the study.

Likewise, the relatively small deficit of office space in Sector 41 likely has not accounted for the draw of the Wellington Regional Medical Center and the Wellington Green Mall. Additional analysis should be prepared in an attempt to quantify the impacts of these two facilities on the retail and office markets.

When Market Sectors 31 and 41 are combined, Table 5 clearly shows significant building space needs in the Palms West Corridor for office and industrial uses through the year 2015.

Recommendations

Several sector-specific recommendations were presented in the study; however, none directly relate to Sectors 31 and 41. General study recommendations include the following:

Create of a program that allows the transfer of residential retail, office, or industrial space as a method for shifting these various types of building space particularly into Mixed Use Activity Nodes.

Develop a program to allow the conversion of committed residential units to a desirable non-residential use (e.g. industrial to retail, or retail to industrial) to allow balancing of use types and create more diversified employment opportunities.

4. Summary of Economic Trends and Possibilities

The economic analysis presented here clearly shows that the State Road 7 Corridor market area is poised for substantial growth. The area has significantly greater household income and higher population educational achievement that the County as a whole. Economic characteristics and recent developer market studies indicate a strong market for nearly all categories of non-residential development. To this point, retail/service and residential needs have been emphasized by area local governments and developers through existing development and committed (vested) projects. However, market trends indicate a powerful niche for medical and other forms of office uses, hotel/motel facilities, entertainment activities, and light industrial parks oriented toward high technology users.

The market area has a much lower jobs-to population ratio than the County as a whole and the Statewide average. This means that the Corridor is not currently producing the types of jobs needed by area residents and that many people are forced to drive east to West Palm Beach and other coastal locations for employment. The focus of the land use recommendations from this project, as discussed earlier, is to “incentivize” the introduction of a much greater proportion of non-residential uses, other than retail and services, mixed with multi-family residential projects. This land use strategy will not only produce more value-added, higher-paying jobs and increase property values in the Corridor, but also make it major destination point and activity center for west-central Palm Beach County.

III. ECONOMIC AND MARKET FORCES

TABLE 5
YEAR 2015 NON-RESIDENTIAL NEEDS IN CORRIDOR MARKET AREA

		Sector	
31	(1,783,333)	(1,299,431)	(693,843)
41	1,545,536	(111,418)	(412,523)
Total	(237,797)	(1,410,849)	(1,106,366)

Source: Palm Beach County Commercial Needs Study, December, 1999.

IV. TRANSPORTATION

INTRODUCTION

The current expansion of SR 7 in the western communities has created additional traffic capacity within the area. However, this capacity will be affected by a substantial amount of projects which have already been approved for traffic concurrency. These approved projects, which have not yet been built, will place a considerable demand in the transportation system. A traffic study has been performed to determine existing as well as future traffic conditions on SR 7 within the area.

Although the main purpose of the study is to analyze traffic conditions along SR 7, adjacent roadways serving the corridor which affect its overall performance and capacity are also included in this analysis. The study area analyzed for the traffic study is presented in The Transportation Study Area Map. The study area, as shown in The Transportation Study Area Map is bounded to the east by Jog Road, to the west by Forest Hill Boulevard/Crestwood Boulevard, to the north by Okeechobee Boulevard and to the south by Lake Worth Road.

The analysis presented in this section is comprehensive in nature and is intended for planning purposes. It has been performed in average annual daily traffic conditions and it is used to make recommendations to the transportation system. Generally, for analytical purposes, a transportation system is designed to respond to two major functional factors: access and mobility. Typically, a transportation system is developed with one of these factors having higher priority than the other. Thus, access is often sacrificed to increase mobility or vice versa. When making recommendations, both factors are given the necessary consideration.

EXISTING TRAFFIC CONDITIONS

Traffic conditions for the study area have been determined using the 1999 Traffic Volume Map prepared by the Palm Beach County Metropolitan Planning Organization. Table 1 included in the Appendix presents this information. Traffic volumes have been evaluated against Palm Beach County service volume for the adopted level of service "D". As shown in the table, the following roadway links exceed the adopted level of service:

Southern Boulevard (SR 80) from Big Blue Trace to SR 7, and
Forest Hill Boulevard from South Shore Boulevard to SR 7

Roadway links exceeding the adopted level of service in the year 1999 are presented in The Roadways Exceeding Adopted Level of Service 1999 Map.

PLANNED ROADWAY IMPROVEMENTS

Roadway improvements included within the Florida Department of Transportation (FDOT) Transportation Improvement Program or the Palm Beach County Five Year Road Program have been identified and are depicted in The Planned Roadway Improvements 2000-2005 Map. This figure also includes roadway improvements committed by developers. This information is also presented in Table 2 of the Appendix. There is an additional improvement which is not within the study area which will have impact on traffic patterns within the area roadways. This is the Persimmon Boulevard extension. This roadway which currently exists, runs parallel to Okeechobee Boulevard, west of Royal Palm Beach Boulevard. Its existing terminus is at Royal Palm Beach Boulevard.

Palm Beach County has allocated funds for alignment studies, design, ROW, and mitigation within its current Five Year Road Program. The plan is to continue the road to the east and connect it with the SR 7 extension to the north. This planned roadway will allow an alternative access route for Acreage residents. Therefore, it will have an impact on traffic patterns on Okeechobee Boulevard west of SR 7.

The roadway network included in the 2020 Long Range Plan which is also included in the Palm Beach County Comprehensive Plan is also depicted in The 2020 Plan Update - Cost Feasible Plan Map.

APPROVED PROJECTS

As mentioned in the introduction, there is a considerable number of approved projects within the study area which have not been built. Approval in this section of the report refers to "traffic concurrency approval", as opposed to site plan approval or any other approval. The Projects Approved for Traffic Concurrency Map depicts the location of projects currently approved within the corridor and in close proximity to it.

Traffic impact of the approved developments for each link within the study area has been summarized in Table 3 of the Appendix. In order to avoid double-counting of traffic, the total traffic for approved developments was reduced by ten percent.

It should be noted that approved projects have been loaded into the roadway network based on buildout years included in the approved traffic analyses. Many of the projects have aggressive buildout years which may not be realistic. All approved projects included in the study have buildout years by 2004. The analysis is considered conservative since many of the approved projects will take longer to build.

TRAFFIC PROJECTIONS

Traffic projections have been prepared for short (year 2004), intermediate (year 2009) and long range (year 2020) conditions. While short and intermediate traffic conditions have been projected using growth rates, the long range analysis has been performed with the use of the Florida Standard Urban Transportation Model Structure (FSUTMS).

A growth rate evaluation was performed for the area an is presented in Table 4 of the Appendix. This evaluation resulted in an areawide annual growth rate of 5.01%. Given the considerable amount of traffic impact of approved developments and in order to avoid "double counting" of trips, the growth rate was adjusted. An annual growth rate of 2% has been used to estimate traffic in the year 2004, while a 1.5% annual growth rate has been used to estimate traffic between the year 2004 and 2009.

Short Range (Year 2004) Analysis

Roadway links which are projected to exceed the adopted level of service in the year 2004 are presented in The Over Capacity Roads 2004 Map. Table 5 in the Appendix presents the analysis. It should be noticed that there are three roadway segments which have been evaluated against the volume defined by adopted CRALLS (constrained roadways at lower level of service) as presented in Table 5.

Palm Beach County Traffic Performance Standards use two tests to define whether a roadway link meets the standards or not. Test One evaluates the daily traffic conditions at buildout of the project while Test Two evaluates daily traffic conditions at buildout of the area. When Test One is not achieved, an Alternate Test One is available which evaluates peak-hour/peak-direction traffic conditions at buildout of the project. This Alternate Test One allows higher capacity. Since this analysis has been performed for daily traffic conditions, an evaluation has been performed to identify those roadway links which may pass Palm Beach County Traffic Performance Standards. The Palm Beach County Traffic Performance Standards (2004) Map presents roadway links which are likely to fail Palm Beach County Traffic Performance Standards in the year 2004. As shown in this figure, the following roadway links are likely to fail Palm Beach County Traffic Performance Standards:

Okeechobee Boulevard from Royal Palm Beach Boulevard to Jog Road
SR 7 from Belvedere Road to Forest Hill Boulevard

In addition, the following roadway links may fail the adopted standards:

Forest Hill Boulevard from North Wellington Trace to Southern Boulevard
Southern Boulevard from Forest Hill Boulevard to Big Blue Trace

IV. TRANSPORTATION

Intermediate Range (Year 2009) Analysis

Roadway links which are projected to exceed the adopted level of service in the year 2009 are presented in The Over Capacity Roads 2009 Map. Table 6 in the Appendix presents the analysis. As discussed earlier, three roadway segments have been evaluated against the volume defined by adopted CRALLS (constrained roadways at lower level of service).

Palm Beach County Traffic Performance Standards use two tests to define whether a roadway link meets the standards or not. Test One evaluates the daily traffic conditions at buildout of the project while Test Two evaluates daily traffic conditions at buildout of the area. When Test One is not achieved, an Alternate Test One is available which evaluates peak-hour/peak-direction traffic conditions at buildout of the project. This Alternate Test One allows higher capacity. Since this analysis has been performed for daily traffic conditions, an evaluation has been performed to identify those roadway links which may pass Palm Beach County Traffic Performance Standards. The Palm Beach County Traffic Performance Standards 2009 Map presents roadway links which are likely to fail Palm Beach County Traffic Performance Standards in the year 2009. As shown in this figure, the following roadway links are likely to fail Palm Beach County Traffic Performance Standards:

Okeechobee Boulevard from SR 7 to Jog Road
(Previously identified in 2004 analysis)

Forest Hill Boulevard from Southern Boulevard to
North Wellington Trace

SR 7 from Belvedere Road to Forest Hill Boulevard
(Previously identified in 2004 analysis)

Southern Boulevard from Forest Hill Boulevard to Big Blue Trace

Jog Road from Forest Hill Boulevard to 10th Avenue North

Lake Worth Road from Pinehurst Drive to Jog Road

In addition, the following roadway links may fail the adopted standards:

Forest Hill Boulevard from South Shore Boulevard to SR 7

SR 7 from Okeechobee Boulevard to Belvedere Road

Lake Worth Road from its existing 4-Lane terminus to
South Shore Boulevard

Long Range (Year 2020) Analysis

The long range traffic analysis was performed with the use of the Florida Standard Urban Transportation Model Structure (FSUTMS). This model estimates traffic volumes based on the available roadway system and land uses within the network.

The lane geometry used for this analysis is presented in The 2020 Plan Update - Cost Feasible Plan Map. Land uses within the cost feasible analysis were obtained from the Palm Beach County Metropolitan Planning Organization. A first model run was performed to determine traffic projections with the land uses and lane geometry included in the Cost Feasible Plan. A second model run was performed after loading all approved developments within the network.

The following is a summary of the relevant results from the traffic projections on the 2020 roadway network once all approved projects were added to the network:

I. There is a slight increase in traffic projections on the following roadways: Southern Boulevard, SR 7 and Lake Worth Road.

II. The link of Forest Hill Boulevard between South Shore Boulevard and SR 7 is over capacity for a 6-lane divided roadway.

III. The link of SR 7 between Forest Hill Boulevard and Lake Worth Road is over capacity for an 8-lane divided roadway.

Recommendations

Based on the results of this analysis and taking into consideration roadway constraints, opportunities for roadway expansion and opportunities for new roadways, we have recommended improvements to the roadway network as depicted in The Recommendations Map. The following is a summary of the recommended improvements:

1. Expand SR 7 from its existing 6-lane cross section to an 8-lane cross section from Lake Worth Road to Southern Boulevard.
2. Expand Forest Hill Boulevard from Southern Boulevard (SR 80) to North Wellington Trace to a 6-lane cross section (most of this roadway segment already has a six-lane cross section).
3. Apply for a CRALLS designation for Forest Hill Boulevard between SR 7 and South Shore Boulevard as needed.
4. Provide an alternate route to traffic traveling to and from the Village of Wellington through the extension of Pierson Road and Fairlane Farms Road.
5. Expand Lake Worth Road from its existing 4-lane cross section west of SR-7 to South Shore Boulevard to a 4-lane cross-section.
6. Expand Southern Boulevard (SR 80) from Forest Hill Boulevard to Big Blue Trace to a 6-lane cross-section.
7. Provide an alternate corridor west of SR 7 from Southern Boulevard to Forest Hill Boulevard which will allow access to the Village of Wellington from Southern Boulevard.

These recommendations involve major capital investments and must be addressed individually to determine prioritization of such improvements. Projects within the SR 7 corridor may be assessed by the creation of an special taxing district. Due to the uncertainty of buildout years for approved developments, timing of recommended improvements is undetermined.

Good planning practices which are designed to reduce the number of trips while increasing mobility and access within the SR 7 corridor, are also recommended as follows:

1. Encourage internal access between commercial and adjoining residential developments along SR 7
2. Provide pedestrian connections and pedestrian crossings at signalized intersections within the corridor
3. Evaluate the implementation of a trolley/local bus shuttle system serving the western communities
4. Enforce access management along the corridor
5. Encourage industrial parks, medical offices, general offices, research and development, parks and other land uses with low trip generation within the corridor. Property owners or developers which have traffic concurrency approval for their property as retail, may get incentives by revising the proposed plan of development to land uses which have lower traffic impact.

IV. TRANSPORTATION

Appendix

Palms West Corridor

V. FISCAL ANALYSIS

TABLE OF CONTENTS

V. FISCAL ANALYSIS

FISCAL ANALYSIS AND EFFECTS UPON SERVICES AND INFRASTRUCTURE

Introduction

There is a direct relationship between the land use within a metropolitan area and the economy. Many decisions regarding economic development regard alteration in land use. Land use patterns are but one piece of the puzzle regarding the desirability and productivity of a municipality or in this case several municipalities along a unified corridor such as the Palms West Corridor.

The process of creating and maintaining a viable economy is more than simply attracting a few new retail chains or fast food outlets. It involves using the assets and location of corridor and the communities that are within it to position it as a uniquely advantageous place to attract developing basic sector industries, and retaining the existing base. These are business sectors that create a demand for quality professional employment with real growth opportunities. They are businesses that invest in communities for the long term, and share their future with the communities. With an increase in an upwardly mobile workforce, secondary businesses, such as restaurant and retail fill-in are attracted that enhance communities, specifically along major corridors. Overall the value of local property increases as the quality of life increases. Therefore, it is important to create a link between the most profitable use for property and the most socially beneficial use.

In order to promote the attraction of basic sector industries and secondary businesses such as restaurants and retail fill-in, it is critical to be able to provide the basic capital facilities necessary for development. Local governments generally play a major role in planning, financing, and constructing the capital facilities that provide essential services for the general public. There are several reasons why the provision of infrastructure is viewed as a primary local government function. First, many facility systems such as roads and water lines serve large areas and benefit many people. Therefore, the systems must be closely interrelated. Second, some public facilities and services such as schools should be made available even to people who cannot afford them. Lastly, governments frequently expand infrastructure systems to stimulate economic development.

It is important to note that the private sector has become more and more involved in providing capital facilities. Developers of real estate projects for example in most cases are required to plan, finance, and build roads and other infrastructure necessary to support their proposed development. Therefore, planning and financing infrastructure is a joint responsibility shared by the public and private sectors. In fact, in recent years, most of the burden of designing and constructing capital facilities has been shifted to the private sector. The State of Florida's concurrency requirement plays a major role in this.

The following sections analyze potential future development impacts within the corridor on capital facilities, projected revenues from potential future development within the corridor, projected expenditures to serve potential future development within the corridor, and the identification and summarization of infrastructure funding alternatives. These sections are broken down to include each municipality that has a direct or indirect link or interest in the future development of the corridor.

Potential Future Development Impacts on Capital Facilities

The impacts on capital facilities within the Palms West SR 7/US 441 Corridor, based on potential future development (those vacant parcels which have their Land Use and Zoning designations in place or in process), is generally addressed in each municipality's Comprehensive Plan. Each municipality, including the Village of Wellington, the Village of Royal Palm Beach and Palm Beach County, address the level of service needs for capital facilities based on future projections in population. These projections are based on each municipality as a whole, which includes potential future development that will occur along the Palms West Corridor that is within a given municipality. The following sections summarize the current levels of service for each municipality within the Palms West Corridor Study Area and the ability to meet potential future development demands based on projected population.

The analysis provided in this section is approached in two ways. The first approach is a Macro analysis, which is the ability of the municipality (Village's of Wellington and Royal Palm Beach) as a whole, based on the Comprehensive Plan, to provide future additional capital facilities in order to meet established levels of service. The second approach is a Microanalysis, which provides general information in terms of the impact those vacant parcels within the Palms West Corridor Study Area, which have their land use and zoning in place or in process, will have on capital facilities if developed. Those parcels that already have master/site plan approval are not part of this analysis since they already can be determined as meeting the concurrency requirements for capital facilities.

First and foremost, each municipality's Comprehensive Plan analyzes the need for future additional capital facilities in order to meet the established level of service of that municipality (Macro approach). Therefore, a summary of this information for the Village's of Wellington and Royal Palm Beach is provided based on the data and analysis contained in each municipality's Comprehensive Plan. Second, each of the vacant parcels within the Palms West Corridor Study Area, which have their land use and zoning in place or in process will require or generate a need for additional capital facilities based on its proposed use (Micro approach). Therefore, this analysis will estimate the need generated by these vacant parcels based on their proposed use.

WATER

Village of Wellington

MACRO ANALYSIS

According to the Comprehensive Plan, the Acme Improvement District (AID) provides potable water to the Village of Wellington. This is a special district that was created in 1953. The districts system distributes potable water throughout the Village via 2" to 20" diameter lines comprised of ductile iron or PVC.

The levels of service for potable water are established by Policy 1.4.1 of the Village's Comprehensive Plan, which reads as follows:

The potable water treatments system's rated capacity shall be at least 111 percent of "maximum day flow" of the proceeding year. The potable water consumption standard shall be 137 gallons per capita per day average daily flow based on the total population served and 273 gallons per capita per day maximum daily flow. The fire flow standard shall be 750 gallons per minute at 30 psi for residential development, 1,500 gallons per minute at 30 psi for commercial development and 2,000 gallons per minute at 30 psi for schools and other large-scale non-residential development. The storage capacity shall be _ the maximum daily flow.

V. FISCAL ANALYSIS

POTABLE WATER CONSUMPTION PROJECTIONS & WATER TREATMENT PLANT CAPACITY EXPANSION SCHEDULE

YEAR END	PROJECTED MAXIMUM DAY DEMAND MGD	PLANT CAPACITY MGD	CAPACITY INCREASE ON-LINE MGD	COMMENCE PLANNING & DESIGN	COMMENCE CONSTRUCTION
1997	8.5	10.1	1.8		
1998	8.9	10.1		X	X
1999	9.3	11.0	0.9	X	
2000	9.7	11.0			X
2001	10.0	13.9	2.7		
2002	10.4	13.9			
2003	10.8	13.9			
2004	11.2	13.9			
2005	11.6	13.9			

SOURCE: Village of Wellington Comprehensive Plan

NOTE: 1996 through 2005 consumption demand projections are based on an estimated increase of 550 dwelling units per year, which is above the approximately 450 units per year growth experienced in the five years proceeding 1996. The higher rate of growth is used to project need in order to provide a margin of safety that will ensure future needs are met. Projected peak demand is close to projected plant capacity in 2001. A severe drought, which would increase demand, could strain available capacity. Therefore, a plant expansion will be 1.8 million gallons per day, bringing the total capacity to 15.6 million gallons per day.

As the above table indicates, there will be an adequate availability of potable water to serve the future potential development for those parcels of land in the Palms West Corridor within the Village of Wellington and its future annexation areas that are within the Urban Service Boundary. Based on the analysis in the Village's Comprehensive Plan, the projected maximum daily demand for potable water in the year 2005 is estimated at 11.6 mgd with a plant capacity of 13.9 mgd, which equates to a difference of 2.3 mgd. This figure represents 83 percent of capacity. It is important to note that this analysis is based on a projected 2.7 mgd capacity increase in the year 2001. State law requires the system to be under design when maximum day flows reach 80% of capacity and under construction when maximum day flows reach 90% of capacity. Therefore, based on the above table, additional capacity should be in the design phase in the year 2004. However, these projections are based on the development of 100 more dwelling unit per year growth than what was experienced in the years previous to 1996.

MICRO ANALYSIS

The Village of Wellington has 4 vacant residential parcels of land, which have their land use and zoning in place or in process, within the Palms West Corridor Study Area. However, 1 (#75) of these 4 parcels will be provided potable water service by Palm Beach County due to its location outside the Urban Service Boundary of the Village. In addition, there are 3 vacant residential parcels of land which have their land use and zoning in place or in process, that are presently located in Unincorporated Palm Beach County, however, these vacant parcels are within the future annexation area of the Village of Wellington based on the Future Land Use Map (for analysis purposes the Village of Wellington's LOS will be utilized). These parcels are indicated on the committed development map as #'s 73, 75, 79, 82, 71, 77 and 78. Therefore, by utilizing the established level of service based on the Village's Comprehensive Plan for potable water of 137 gallons per capita per day and the projected population generated from these 6 vacant residential parcels, some baseline analysis can be performed.

The following table illustrates for the 3 vacant residential parcels located within the Village of Wellington's Urban Service Boundary, there is a potential for approximately 1,227 single-family units (assuming single-family detached units for analysis purposes). Based on this number of units, using 2.39 average persons per household size, the table illustrates there is potential for a population of 2,887. Finally, the table illustrates the potential potable water demand for the 3 vacant residential parcels based on this approximate population figure and the Village's potable water level of service is 395,521 gallons per day.

POTENTIAL POTABLE WATER DEMAND*

ID#	ACRES	POTENTIAL # OF UNITS	ESTIMATED POPULATION BASED ON NUMBER OF UNITS**	POTABLE WATER LOS	POTENTIAL POTABLE WATER DEMAND
73	32	64	153	137	20,961
79	215	452	1,035	137	141,797
82	219	711	1,699	137	232,763
TOTALS	466	1,227	2,887	N/A	395,521

*Vacant parcels that have their land use and zoning in place or in process and are currently within the Village boundaries.

**Multiplying the potential number of units by 2.39 persons, which was the average household size utilized by Palm Beach County for Future Land Use Atlas Amendments in 1999, derives this figure.

The following table illustrates for the 3 vacant residential parcels located in Unincorporated Palm Beach County but within the Village of Wellington's future annexation area, there is a potential for approximately 598 single-family units (assuming single-family detached units for analysis purposes). Based on this number of units, using 2.39 average persons per household size, the table illustrates there is potential for a population of 1,429. Finally, the table illustrates the potential potable water demand for the 3 vacant residential parcels based on this approximate population figure and the Village's potable water level of service is 195,773 gallons per day.

POTENTIAL POTABLE WATER DEMAND*

ID#	ACRES	POTENTIAL # OF UNITS	ESTIMATED POPULATION BASED ON NUMBER OF UNITS**	POTABLE WATER LOS	POTENTIAL POTABLE WATER DEMAND
71	74	148	354	137	48,498
77	151	302	721	137	98,777
78	74	148	354	137	48,498
TOTALS	299	598	1,429	N/A	195,773

*Vacant parcels that are within Unincorporated Palm Beach County, which have their land use and zoning in place or in process, and are within the Village of Wellington's future annexation area and Urban Service Boundary.

**Multiplying the potential number of units by 2.39 persons, which was the average household size utilized by Palm Beach County for Future Land Use Atlas Amendments in 1999, derives this figure.

V. FISCAL ANALYSIS

Based on the above analysis, it is estimated for the 6 vacant residential parcels, which are within the Urban Service Boundary, there will be a potential potable water demand of 591,294 gallons per day. This potential demand will not be immediate, it will most likely occur over a 3 – 5 year period depending on potential annexations and the phased timing of the projects by the developers.

VILLAGE OF ROYAL PALM BEACH

MACRO ANALYSIS

According to the EAR, a shallow aquifer is the water source for the Village. The potable water is supplied via 12 water wells, which are located within the municipal boundaries of the Village. The water distribution system consists of approximately 71 miles of water mains. At the time of the EAR, the recommended level of service standard for potable water was 115 gallons per capita per day (this number is utilized for analysis purposes). Additionally, at the time of the EAR, 5.0 mgd was the current treatment plant capacity. The following tables are from the Village of Royal Palm Beach's EAR.

PROJECTED POTABLE WATER SERVICE AREA POPULATION

Population*			
1995	2000	2005	2010
17,200	21,150	26,134	32,322

SOURCE: Village of Royal Palm Beach EAR
*Comprises Service Area Population

As the above table indicates, the projected potable water service area population for 2005 is 26,134 and for 2010 is 32,322.

PROJECTED AVERAGE DAY AND MAXIMUM DAY WATER DEMAND*

Year	ADF	MGD
1995	2.275	3.475
2000	2.432	3.891
2005	3.005	4.809
2010	3.717	5.947

SOURCE: Village of Royal Palm Beach EAR
*Demand is in million gallons per day

As the above table indicates, the average and maximum daily flows for 2005 are 3.005 ADF and 4.899 MGD and for 2010 are 3.717 ADF and 5.947 MGD.

WATER FACILITY CAPACITY ANALYSIS

	1995	2000	2005	2010
Design Capacity	5.0	5.0	5.75	6.50
Peak Demand	3.475	3.891	4.809	5.947
Residual Capacity	1.525	1.109	0.941	0.553

SOURCE: Village of Royal Palm Beach EAR

As for future capacity, the water supply system of the Village has a design life of 50 years, and is expected to provide adequate capacity beyond the current planning period. As indicated in the above tables, the current treatment capacity is adequate to meet the projected maximum day demands through the end of the next planning period (year 2002). Additionally, since the time of the EAR's preparation, the Village via Inter-local Agreements or through plant capacity expansions has adequate potable water capacity through year 2020.

MICRO ANALYSIS

The Village of Royal Palm Beach has 2 vacant residential parcels of land, which have their land use and zoning in place or in process, within the Palms West Corridor Study Area. However, 1 (#68) of these 2 parcels will be provided potable water service by Palm Beach County due to its location outside the Urban Service Boundary of the Village. In addition, there are 2 vacant residential parcels of land, which have their land use and zoning in place or in process, that are presently located in Unincorporated Palm Beach County. However, these vacant parcels are currently in the process of being annexed into the Village (for analysis purposes the Village of Royal Palm Beach's LOS will be utilized). These parcels are indicated on the committed development map as #'s 65, 68, 59 and 60. Therefore, by utilizing the established level of service based on the Village's Evaluation and Appraisal Report (EAR) for potable water of 115 gallons per capita per day and the projected population generated from these 3 vacant residential parcels, some baseline analysis can be performed.

The following table illustrates for the 1 vacant residential parcel located within the Village of Royal Palm Beach's Urban Service Boundary, there is a potential for approximately 376 single-family units (assuming single-family detached units for analysis purposes). Based on this number of units, using 2.39 average persons per household size, the table illustrates there is potential for a population of 899. Finally, the table illustrates the potential potable water demand for the 1 vacant residential parcel based on this approximate population figure and the Village's potable water level of service is 103,385 gallons per day.

POTENTIAL POTABLE WATER DEMAND*

ID#	ACRES	POTENTIAL # OF UNITS	ESTIMATED POPULATION BASED ON NUMBER OF UNITS**	POTABLE WATER LOS	POTENTIAL POTABLE WATER DEMAND
65	47	376	899	115	103,385

*Vacant parcels that have their land use and zoning in place or in process and are currently within the Village boundaries.
**Multiplying the potential number of units by 2.39 persons, which was the average household size utilized by Palm Beach County for Future Land Use Atlas Amendments in 1999, derives this figure.

The following table illustrates for the 2 vacant residential parcels located in Unincorporated Palm Beach County, which are currently in the process of being annexed by the Village, there is a potential for approximately 82 single-family units (assuming single-family detached units for analysis purposes). Based on this number of units, using 2.39 average persons per household size, the table illustrates there is potential for a population of 509. Finally, the table illustrates the potential potable water demand for the 2 vacant residential parcels based on this approximate population figure and the Village's potable water level of service is 58,535 gallons per day.

POTENTIAL POTABLE WATER DEMAND*

ID#	ACRES	POTENTIAL # OF UNITS	ESTIMATED POPULATION BASED ON NUMBER OF UNITS**	POTABLE WATER LOS	POTENTIAL POTABLE WATER DEMAND
59	72	183	437	115	50,255
60	10	30	72	115	8,280
TOTALS	82	213	509	N/A	58,535

*Vacant parcels that are within Unincorporated Palm Beach County, which have their land use and zoning in place or in process, and are currently in the process of being annexed into the Village and are within the Urban Service Boundary.
**Multiplying the potential number of units by 2.39 persons, which was the average household size utilized by Palm Beach County for Future Land Use Atlas Amendments in 1999, derives this figure.

Based on the above analysis, it is estimated for the 3 vacant residential parcels, which are within the Urban Service Boundary, there will be a potential potable water demand of 161,920 gallons per day. This potential demand will not be immediate, it will most likely occur over a 3 – 5 year period depending on potential annexations and the phased timing of the projects by the developers.

V. FISCAL ANALYSIS

PALM BEACH COUNTY

MICRO ANALYSIS

Unincorporated Palm Beach County has 1 vacant residential parcels of land, which has its land use and zoning in place or in process that is not within a future annexation area, within the Palms West Corridor Study Area. This parcel is indicated on the committed development map as # 58. Additionally, Palm Beach County will provide potable water service to parcel #75 (which is within the Village of Wellington) and parcel # 68 (which is within the Village of Royal Palm Beach) but are outside the Village's Urban Service Boundaries. Therefore, by utilizing the established level of service based on the Palm Beach County Comprehensive Plan for potable water of 180 gallons per capita per day and the projected population generated from those vacant residential parcels, some baseline analysis can be performed.

The following table illustrates for the vacant residential parcel located within Unincorporated Palm Beach County, there is a potential for approximately 167 single-family units (assuming single-family detached units for analysis purposes). Based on this number of units, using 2.39 average persons per household size, the table illustrates there is potential for a population of 399. Finally, the table illustrates the potential potable water demand for the vacant residential parcel based on this approximate population figure and Unincorporated Palm Beach County's potable water level of service is 71,820 gallons per day.

POTENTIAL POTABLE WATER DEMAND*

ID#	ACRES	POTENTIAL # OF UNITS	ESTIMATED POPULATION BASED ON NUMBER OF UNITS**	POTABLE WATER LOS	POTENTIAL POTABLE WATER DEMAND
58***	56	167	399	180	71,820

*Vacant parcels that have their land use and zoning in place or in process and are currently within the Unincorporated Palm Beach County boundaries.

**Multiplying the potential number of units by 2.39 persons, which was the average household size utilized by Palm Beach County for Future Land Use Atlas Amendments in 1999, derives this figure.

***This parcel is proposed to have a 400 bed ACLF. Therefore, the Palm Beach County conversion methodology back to dwelling units is utilized for this analysis. This is based on an average person per household of 2.39.

The following table illustrates for the 1 vacant residential parcel located within the Village of Wellington and the 1 vacant residential parcel located within the Village of Royal Palm Beach but outside the Village's Urban Service Boundaries, there is a potential for approximately 3,494 single-family units (assuming single-family detached units for analysis purposes). Based on this number of units, using 2.39 average persons per household size, the table illustrates there is potential for a population of 8,531. Finally, the table illustrates the potential potable water demand for the 2 vacant residential parcels based on this approximate population figure and Unincorporated Palm Beach County's potable water level of service is 1,503,180 gallons per day.

POTENTIAL POTABLE WATER DEMAND*

ID#	ACRES	POTENTIAL # OF UNITS	ESTIMATED POPULATION BASED ON NUMBER OF UNITS**	POTABLE WATER LOS	POTENTIAL POTABLE WATER DEMAND
58***	56	167	399	180	71,820

*Vacant parcels that have their land use and zoning in place or in process and are currently within the Unincorporated Palm Beach County boundaries.

**Multiplying the potential number of units by 2.39 persons, which was the average household size utilized by Palm Beach County for Future Land Use Atlas Amendments in 1999, derives this figure.

***This parcel is proposed to have a 400 bed ACLF. Therefore, the Palm Beach County conversion methodology back to dwelling units is utilized for this analysis. This is based on an average person per household of 2.39.

Based on the above analysis, it is estimated for the 3 vacant residential parcels, there will be a potential potable water demand of 1,646,820 gallons per day. This potential demand will not be immediate, it will most likely occur over a 5 – 7 year period depending on the phased timing of the projects by the developers.

SEWER

Village of Wellington

MACRO ANALYSIS

According to the Comprehensive Plan, the Acme Improvement District (AID) provides sanitary sewer service to the Village of Wellington. This is a special district that was created in 1953. The districts system is a gravity system which discharges to several lift stations. These lift station then pump via a force main the sewage to the treatment plant, which is located on Pierson Road.

The levels of service for sanitary sewer are established by Policy 1.4.1 of the Village's Comprehensive Plan, which reads as follows:

The sanitary sewer system's rated capacity shall be at least 111 percent of "maximum day flow" of the proceeding year. The sanitary sewer generation standard shall be 93 gallons per capita per day maximum 3-month daily average based on the total population served.

PROJECTED WASTEWATER TREATMENT REQUIRMENTS

FISCAL	AVERAGE
1995	2.19 MGD
2000	2.79 MGD
2005	3.39 MGD
2010	3.99 MGD
2015	4.58 MGD

SOURCE: Village of Wellington Comprehensive Plan

NOTE: 1996 through 2005 consumption demand projections are based on an estimated increase of 535 dwelling units per year, which is above the approximately 450 units per year growth experienced in the five years proceeding 1996. The higher rate of growth is used to project need in order to provide a margin of safety that will ensure future needs are met. The existing capacity will not be exceeded until approximately 2016. Planning and design for the final 1.75 million gallons expansion should commence in 2010 – 2011 to satisfy permit requirements. An additional 1.75 million gallon per day capacity is expected to be needed to serve the buildout population.

According to the Comprehensive Plan, the Pierson Road wastewater treatment facility has a capacity of 4.75 million gallons per day. As the above table indicates, the average daily flow in 1995 was 2.19 million gallons per day. Additionally, the table projects that by year 2015 average daily flows will be 4.58 million gallons per day. Therefore, existing capacity will not be exceeded until approximately 2016. Based on the projected buildout population for the Village, an additional 1.75 million gallon per day capacity will be needed to maintain the level of service. It is estimated that the planning and design for this expansion will commence in 2010 – 2011 in order to satisfy permit requirements.

V. FISCAL ANALYSIS

MICRO ANALYSIS

The Village of Wellington has 4 vacant residential parcels of land, which have their land use and zoning in place or in process, within the Palms West Corridor Study Area. However, 1 (#75) of these 4 parcels will be provided sanitary sewer service by Palm Beach County due to its location outside the Urban Service Boundary of the Village. In addition, there are 3 vacant residential parcels of land which have their land use and zoning in place or in process, that are presently located in Unincorporated Palm Beach County, however, these vacant parcels are within the future annexation area of the Village of Wellington based on the Future Land Use Map (for analysis purposes the Village of Wellington's LOS will be utilized). These parcels are indicated on the committed development map as #'s 73, 75, 79, 82, 71, 77 and 78. Therefore, by utilizing the established sanitary sewer generation standard of 93 gallons per capita per day based on the Village's Comprehensive Plan for sanitary sewer and the projected population generated from these 6 vacant residential parcels, some baseline analysis can be performed.

The following table illustrates for the 3 vacant residential parcels located within the Village of Wellington Urban Service Boundary, there is a potential for approximately 1,227 single-family units (assuming single-family detached units for analysis purposes). Based on this number of units, using 2.39 average persons per household size, the table illustrates there is potential for a population of 2,887. Finally, the table illustrates the potential sanitary sewer demand for the 3 vacant residential parcels based on this approximate population figure and the Village's sanitary sewer level of service is 268,491 gallons per day.

POTENTIAL SANITARY SEWER DEMAND*

ID#	ACRES	POTENTIAL # OF UNITS	ESTIMATED POPULATION BASED ON NUMBER OF UNITS**	SANITARY SEWER LOS	POTENTIAL SANITARY SEWER DEMAND
73	32	64	153	93	14,229
79	215	452	1,035	93	96,255
82	219	711	1,699	93	158,007
TOTALS	466	1,227	2,887	N/A	268,491

*Vacant parcels that have their land use and zoning in place or in process and are currently within the Village boundaries.

**Multiplying the potential number of units by 2.39 persons, which was the average household size utilized by Palm Beach County for Future Land Use Atlas Amendments in 1999, derives this figure.

The following table illustrates for the 3 vacant residential parcels located in Unincorporated Palm Beach County but within the Village of Wellington's future annexation area, there is a potential for approximately 598 single-family units (assuming single-family detached units for analysis purposes). Based on this number of units, using 2.39 average persons per household size, the table illustrates there is potential for a population of 1,429. Finally, the table illustrates the potential sanitary sewer demand for the 3 vacant residential parcels based on this approximate population figure and the Village's sanitary sewer level of service is 132,897 gallons per day.

POTENTIAL SANITARY SEWER DEMAND*

ID#	ACRES	POTENTIAL # OF UNITS	ESTIMATED POPULATION BASED ON NUMBER OF UNITS**	SANITARY SEWER LOS	POTENTIAL SANITARY SEWER DEMAND
71	74	148	354	93	32,922
77	151	302	721	93	67,053
78	74	148	354	93	32,922
TOTALS	299	598	1,429	N/A	132,897

*Vacant parcels that are within Unincorporated Palm Beach County, which have their land use and zoning in place or in process, and are within the Village of Wellington's future annexation area and Urban Service Boundary.

**Multiplying the potential number of units by 2.39 persons, which was the average household size utilized by Palm Beach County for Future Land Use Atlas Amendments in 1999, derives this figure.

Based on the above analysis, it is estimated for the 6 vacant residential parcels, which are within the Urban Service Boundary, there will be a potential sanitary sewer demand of 401,388 gallons per day. This potential demand will not be immediate, it will most likely occur over a 3 – 5 year period depending on potential annexations and the phased timing of the projects by the developers.

Village of Royal Palm Beach

MACRO ANALYSIS

According to the EAR, the Village operates a contact stabilization wastewater treatment plant that was expanded in 1988 to a capacity of 2.2 million gallons. Other improvements were also made during this planning period, which include additional sludge drying beds and holding tanks. However, based on the Village's Evaluation and Appraisal Report another expansion was to be completed by the year 2000 to bring the capacity to 3.30 million gallons. Additionally, based on the EAR, a level of service of 90 gallons per capita per day for treatment capacity was proposed.

The collection system at the time of the EAR consisted of approximately 48 miles of gravity collection mains and approximately 34 miles of force mains. Additionally, at the time of the EAR there were a total of 37 lift stations.

PROJECTED SANITARY SEWER SERVICE AREA POPULATION

2000	2005	2010
21,500	26,134	32,322

SOURCE: Village of Royal Palm Beach EAR

As the above table indicates, the projected sanitary sewer service area population for 2005 is 26,134 and for 2010 is 32,322.

SANITARY SEWER CAPACITY ANALYSIS

	1995	2000	2005	2010
Design Capacity	2.20	3.30	3.30	4.40
Average Daily Flow (mgd) by Year	1.62	2.13	2.63	3.25
Residual Capacity	0.58	1.17	0.67	1.15

SOURCE: Village of Royal Palm Beach EAR

As the above tables indicate, based on the proposed plant expansion to 3.3 million gallons identified in the EAR, there appear to be no capacity problems for sanitary sewer in order to meet the needs of the existing and future users in the service area. Additionally, since the time of the EAR's preparation, the Village via Inter-local Agreements or through additionally plant capacity expansions has adequate sanitary sewer capacity through year 2020.

V. FISCAL ANALYSIS

MICRO ANALYSIS

The Village of Royal Palm Beach has 2 vacant residential parcels of land, which have their land use and zoning in place or in process, within the Palms West Corridor Study Area. However, 1 (#68) of these 2 parcels will be provided sanitary sewer service by Palm Beach County due to its location outside the Urban Service Boundary of the Village. In addition, there are 2 vacant residential parcels of land, which have their land use and zoning in place or in process, that are presently located in Unincorporated Palm Beach County. However, these vacant parcels are currently in the process of being annexed into the Village (for analysis purposes the Village of Royal Palm Beach's LOS will be utilized). These parcels are indicated on the committed development map as #'s 65, 68, 59 and 60. Therefore, by utilizing the proposed sanitary sewer generation standard of 90 gallons per capita per day based on the Village's Evaluation and Appraisal Report for sanitary sewer and the projected population generated from these 3 vacant residential parcels, some baseline analysis can be performed.

The following table illustrates for the 1 vacant residential parcel located within the Village of Royal Palm Beach Urban Service Boundary, there is a potential for approximately 376 single-family units (assuming single-family detached units for analysis purposes). Based on this number of units, using 2.39 average persons per household size, the table illustrates there is potential for a population of 899. Finally, the table illustrates the potential sanitary sewer demand for the 1 vacant residential parcel based on this approximate population figure and the Village's sanitary sewer level of service is 80,910 gallons per day.

POTENTIAL SANITARY SEWER DEMAND*

ID#	ACRES	POTENTIAL # OF UNITS	ESTIMATED POPULATION BASED ON NUMBER OF UNITS**	SANITARY SEWER LOS	POTENTIAL SANITARY SEWER DEMAND
65	47	376	899	90	80,910

*Vacant parcels that have their land use and zoning in place or in process and are currently within the Village boundaries.

**Multiplying the potential number of units by 2.39 persons, which was the average household size utilized by Palm Beach County for Future Land Use Atlas Amendments in 1999, derives this figure.

The following table illustrates for the 2 vacant residential parcels located in Unincorporated Palm Beach County, which are currently in the process of being annexed by the Village, there is a potential for approximately 82 single-family units (assuming single-family detached units for analysis purposes). Based on this number of units, using 2.39 average persons per household size, the table illustrates there is potential for a population of 509. Finally, the table illustrates the potential potable water demand for the 2 vacant residential parcels based on this approximate population figure and the Village's sanitary sewer level of service is 45,810 gallons per day.

POTENTIAL SANITARY SEWER DEMAND*

ID#	ACRES	POTENTIAL # OF UNITS	ESTIMATED POPULATION BASED ON NUMBER OF UNITS**	SANITARY SEWER LOS	POTENTIAL SANITARY SEWER DEMAND
59	72	183	437	90	39,330
60	10	30	72	90	6,480
TOTALS	82	213	509	N/A	45,810

*Vacant parcels that are within Unincorporated Palm Beach County, which have their land use and zoning in place or in process, and are currently in the process of being annexed into the Village.

**Multiplying the potential number of units by 2.39 persons, which was the average household size utilized by Palm Beach County for Future Land Use Atlas Amendments in 1999, derives this figure.

Based on the above analysis, it is estimated for the 3 vacant residential parcels, which are within the Urban Service Boundary, there will be a potential sanitary sewer demand of 126,720 gallons per day. This potential demand will not be immediate, it will most likely occur over a 3 – 5 year period depending on potential annexations and the phased timing of the projects by the developers.

PALM BEACH COUNTY

MICRO ANALYSIS

Unincorporated Palm Beach County has 1 vacant residential parcels of land, which has its land use and zoning in place or in process that is not within a future annexation area, within the Palms West Corridor Study Area. This parcel is indicated on the committed development map as # 58. Additionally, Palm Beach County will provide sanitary sewer service to parcel #75 (which is within the Village of Wellington) and parcel #68 (which is within the Village of Royal Palm Beach) but are outside the Village's Urban Service Boundaries. Therefore, by utilizing the established level of service based on the Palm Beach County Comprehensive Plan for sanitary sewer of 100 gallons per capita per day and the projected population generated from these vacant residential parcels, some baseline analysis can be performed.

The following table illustrates for the vacant residential parcel located within Unincorporated Palm Beach County, there is a potential for approximately 167 single-family units (assuming single-family detached units for analysis purposes). Based on this number of units, using 2.39 average persons per household size, the table illustrates there is potential for a population of 399. Finally, the table illustrates the potential sanitary sewer demand for the vacant residential parcel based on this approximate population figure and Unincorporated Palm Beach County's sanitary sewer level of service is 39,900 gallons per day.

POTENTIAL SANITARY SEWER DEMAND*

ID#	ACRES	POTENTIAL # OF UNITS	ESTIMATED POPULATION BASED ON NUMBER OF UNITS**	SANITARY SEWER LOS	POTENTIAL SANITARY SEWER DEMAND
58***	56	167	399	100	39,900

*Vacant parcels that have their land use and zoning in place or in process and are currently within the Unincorporated Palm Beach County boundaries.

**Multiplying the potential number of units by 2.39 persons, which was the average household size utilized by Palm Beach County for Future Land Use Atlas Amendments in 1999, derives this figure.

***This parcel is proposed to have a 400 bed ACLF. Therefore, the Palm Beach County conversion methodology back to dwelling units is utilized for this analysis. This is based on a average person per household of 2.39.

V. FISCAL ANALYSIS

The following table illustrates for the 1 vacant residential parcel located within the Village of Wellington and the 1 vacant residential parcel located within the Village of Royal Palm Beach but outside the Village's Urban Service Boundaries, there is a potential for approximately 3,494 single-family units (assuming single-family detached units for analysis purposes). Based on this number of units, using 2.39 average persons per household size, the table illustrates there is potential for a population of 8,531. Finally, the table illustrates the potential sanitary sewer demand for the 2 vacant residential parcels based on this approximate population figure and Unincorporated Palm Beach County's sanitary sewer level of service is 835,100 gallons per day.

POTENTIAL SANITARY SEWER DEMAND*

ID#	ACRES	POTENTIAL # OF UNITS	ESTIMATED POPULATION BASED ON NUMBER OF UNITS**	SANITARY SEWER LOS	POTENTIAL SANITARY SEWER DEMAND
75***	836	3,234	7,751	100	775,100
76****	106	251	600	100	60,000
TOTALS	942	3,485	8,351	N/A	835,100

*Vacant parcels which have their land use and zoning in place or in process and are currently within the Village's of Wellington and Royal Palm Beach but are outside their Urban Service Boundaries.
**Multiplying the potential number of units by 2.39 persons, which was the average household size utilized by Palm Beach County for Future Land Use Atlas Amendments in 1999, derives this figure.
***Located within the Village of Wellington but outside of its Urban Service Boundary.
****Located within the Village of Royal Palm Beach but outside of its Urban Service Boundary.

Based on the above analysis, it is estimated for the 3 vacant residential parcels, there will be a potential sanitary demand of 875,000 gallons per day. This potential demand will not be immediate, it will most likely occur over a 5 – 7 year period depending on the phased timing of the projects by the developers.

DRAINAGE

Village of Wellington

The Acme Improvement District (AID) water management facilities consists of a number of interconnecting canals, lakes, culverts, water control structures and dikes around the perimeter of the district. The dikes protect the district from outside flows penetrating its facilities and pumping stations. The district has four (4) pump stations in the event of heavy rainfall, which can remove excess water from the system. These pumps are capable of removing 1.2 inches per day of runoff and can remove more subject to the South Florida Water Management District (SFWMD) approval. The district is comprised of two (2) basins, which total 18,220 acres.

The levels of service for drainage are established by Policy 1.4.1 of the Village's Comprehensive Plan, which reads as follows:

All residential and nonresidential development and redevelopment shall adequately accommodate runoff to meet all federal, state and local requirements. The Village hereby adopts the water quality standards included in Chapter 62, F.A.C. and shall ensure that stormwater shall be treated in accordance with the provisions of Chapter 62, F.A.C. in order to meet receiving water standards in Chapter 62, F.A.C. One inch of runoff shall be retained on site. Post-development runoff shall not exceed pre-development runoff.

Each individual parcel of land that is developed within the Village of Wellington is required to provide adequate drainage based on federal, state and local requirements. The Village's Land Development Regulations require that adequate drainage must be provided in order to receive site plan approval and building permits. Therefore, drainage plans signed and sealed by a Florida Registered engineer must be submitted for all approvals.

Village of Royal Palm Beach

At the time of the EAR, the Village was operating under the SFWMD Surface Water Permit that was issued in 1978. All canals within the Village with exception of the M-1 canal are included in the Village's operation permit. The M-1 canal operation permit has been issued to the Indian Trail Water Control District.

At the time of the EAR, the Village had only constructed 365 acres of 493 aces of lakes and canals that the SFWMD permit authorized in order to accomplish an adequate drainage system for the worst possible flood events (100 year storms). The Village has two major canals, which are located within, or adjacent to its corporate limits which serve as the major discharge canals. These are the M-1 and the C-51. Additionally, at the time of the EAR there was an identified need to improve swale drainage throughout the Village. However, overall the Village has an adequate drainage system to handle the land currently and proposed to be developed.

Each individual parcel of land that is developed within the Village of Royal Palm Beach is required to provide adequate drainage based on federal, state and local requirements. The Village's Land Development Regulations require that adequate drainage must be provided in order to receive site plan approval and building permits. Therefore, drainage plans signed and sealed by a Florida Registered engineer must be submitted for all approvals.

Palm Beach County

Each individual parcel of land that is developed within the Palm Beach County is required to provide adequate drainage based on federal, state and local requirements. Palm Beach County's Land Development Regulations require that adequate drainage must be provided in order to receive site plan approval and building permits. Therefore, drainage plans signed and sealed by a Florida Registered engineer must be submitted for all approvals.

PARKS

Village of Wellington

MACRO ANALYSIS

According to the Comprehensive Plan, until it's recent incorporation, the Village was unable to control the comprehensive planning for parks and recreation. Therefore, parks and recreational facilities were not sufficiently addressed to keep pace with the fast growth of the community in terms of residents. However, with incorporation the Village is much better positioned to plan for adequate parks and recreational facilities.

V. FISCAL ANALYSIS

Levels of service for parks and recreation are expressed in acreage or facility unit necessary to satisfy the demand generated per 1,000 population. The Village's levels of service were derived through a public participation process, which included analyzing comparable communities along with County, State and Federal standards. The adopted acreage level of service for parks and recreation for the Village is 10 acres per 1,000 population. The following table illustrates the Village's current acreage level of service:

COMPARISON OF CURRENT LEVELS OF SERVICE TO ADOPTED LEVELS OF SERVICE FOR ACREAGE STANDARDS

Recreation Type	Adopted LOS	Current Acreage/ Level of Service	Surplus
"Active" Acreage with Facilities	N/A	146 acres	N/A
"Passive" Acreage and Open Space	N/A	153 acres	N/A
Total Acreage	10 acres/1000 population	299 acres/28.58* 10.46	13

SOURCE: Village of Wellington Comprehensive Plan
*Acreage per 1,000 population (28,585 – 1998 population estimate per the Bureau of Business and Economic Research)

As the above table indicates, the Village has a surplus of approximately 13 acres or is providing a level of service of 10.46 acres per 1,000 persons, which is slightly above the adopted 10 acres per 1,000 persons.

ACREAGE GUIDLINE AS A FUNCTION OF POPULATION PROJECTIONS

Recreation Type	Adopted LOS	Current Acreage/ Level of Service	Surplus
"Active" Acreage with Facilities	N/A	146 acres	N/A
"Passive" Acreage and Open Space	N/A	153 acres	N/A
Total Acreage	10 acres/1000 population	299 acres/28.58* 10.46	13

SOURCE: Village of Wellington Comprehensive Plan
*Acreage per 1,000 population (28,585 – 1998 population estimate per the Bureau of Business and Economic Research)

The above table represents projections for the need of future additional recreation and open space acreage based on the 10 acres per 1,000 persons LOS. As the above table indicates, based on the LOS of 10 acres per 1,000 persons additional acreage will be needed in each of the planning periods indicated. The year 2016 is the Village's projected buildout date, at which time a total of 460 acres of recreation and open space will be needed to meet the adopted LOS. It is important to note that these projections are based on population projections, which include permanent population not seasonal population.

MICRO ANALYSIS

The Village of Wellington has 4 vacant residential parcels of land, which have their land use and zoning in place or in process, within the Palms West Corridor Study Area. In addition, there are 3 vacant residential parcels of land which have their land use and zoning in place or in process that are presently located in Unincorporated Palm Beach County, however, these vacant parcels are within the future annexation area of the Village of Wellington based on the Future Land Use Map (for analysis purposes the Village of Wellington's LOS will be utilized). These parcels are indicated on the committed development map as #'s 73, 75, 79, 82, 71, 77 and 78. Therefore, by utilizing the established level of service based on the Village's Comprehensive Plan for recreation and open space of 10 acres of park land per 1,000 persons and the projected population generated from these 7 vacant residential parcels, some baseline analysis can be performed.

The following table illustrates for the 4 vacant residential parcels located within the Village of Wellington boundaries, there is a potential for approximately 4,470 single-family units (assuming single-family detached units for analysis purposes). Based on this number of units, using a 2.39 average persons per household size, the table illustrates there is potential for a population of 10,638. Finally, the table illustrates the potential recreation and open space demand for the 4 vacant residential parcels based on this approximate population figure and the Village's recreation and open space acreage level of service is 106.38 acres.

POTENTIAL RECREATION AND OPEN SPACE ACREAGE DEMAND*

ID#	ACRES	POTENTIAL # OF UNITS	ESTIMATED POPULATION BASED ON NUMBER OF UNITS**	RECREATION AND OPEN SPACE ACREAGE LOS	POTENTIAL RECREATION AND OPEN SPACE ACREAGE DEMAND
73	32	64	153	10 AC/1,000	1.53
75	836	3,243	7,751	10 AC/1,000	77.51
79	215	452	1,035	10 AC/1,000	10.35
82	219	711	1,699	10 AC/1,000	16.99
TOTALS	1,302	4,470	10,638	N/A	106.38

*Vacant parcels that have their land use and zoning in place or in process and are currently within the Village boundaries.
**Multiplying the potential number of units by 2.39 persons, which was the average household size utilized by Palm Beach County for Future Land Use Atlas Amendments in 1999, derives this figure.

The following table illustrates for the 3 vacant residential parcels located in Unincorporated Palm Beach County but within the Village of Wellington's future annexation area, there is a potential for approximately 598 single-family units (assuming single-family detached units for analysis purposes). Based on this number of units, using 2.39 average persons per household size, the table illustrates there is potential for a population of 1,429. Finally, the table illustrates the potential recreation and open space acreage demand for the 3 vacant residential parcels based on this approximate population figure and the Village's recreation and open space acreage level of service is 14.29 acres.

POTENTIAL RECREATION AND OPEN SPACE ACREAGE DEMAND*

ID#	ACRES	POTENTIAL # OF UNITS	ESTIMATED POPULATION BASED ON NUMBER OF UNITS**	RECREATION AND OPEN SPACE ACREAGE LOS	POTENTIAL RECREATION AND OPEN SPACE ACREAGE DEMAND
71	74	148	354	10 AC/1,000	3.54
77	151	302	721	10 AC/1,000	7.21
78	74	148	354	10 AC/1,000	3.54
TOTALS	299	598	1,429	N/A	14.29

*Vacant parcels that are within Unincorporated Palm Beach County, which have their land use and zoning in place or in process, and are within the Village of Wellington's future annexation area.
**Multiplying the potential number of units by 2.39 persons, which was the average household size utilized by Palm Beach County for Future Land Use Atlas Amendments in 1999, derives this figure.

Based on the above analysis, it is estimated for the 7 vacant residential parcels, there will be a potential recreation and open space acreage demand of 120.67 acres. This potential demand will not be immediate, it will most likely occur over a 3 – 5 year period depending on potential annexations and the phased timing of the projects by the developers.

V. FISCAL ANALYSIS

VILLAGE OF ROYAL PALM BEACH

MACRO ANALYSIS

The level of service for parks and recreation, based on the EAR's recommendation, is 7.5 acres per 1000 population (2.5 acres for neighborhood parks and 5.0 acres for community parks). At the time of the EAR, the National Recreation and Parks Association standard for parks (neighborhood and community) was 4 acres per 1,000 population. At the time of the EAR, the Village needed 126.2 acres of developed park land to meet the adopted level of service. At that time, there were only 109.2 acres of developed park sites. This left a deficit of 17.0 acres. However, with the completion of a 75-acre district park in 1997 within the Village by Palm Beach County, the adopted level of service was well exceeded. The following table provides projected parks and recreation needs in order to meet the adopted level of service in the future.

PARK LAND LEVEL OF SERVICE REQUIREMENTS

Year	Functional Population	Neighborhood*	Community*	Total*
1995	18,029	36.1	90.1	126.2
2002	21,532	43.1	107.7	150.8
2007	24,028	48.1	120.1	168.2

SOURCE: Village of Royal Palm Beach EAR
*Park Land Needs (Acres)

As the above table indicates, 150.8 acres of park land will be needed in order to meet the adopted acreage level of service based on projected population for 2002. Additionally, 168.2 acres of park land will be needed in order to meet the adopted acreage level of service based on projected population for 2007.

PARK LAND SURPLUS OR DEFICIENCY

	Neighborhood*	Community*	Total*
Existing			
Developed	66.8	42.4	109.2
Undeveloped	10.3	63.8	74.1
Total	77.1	106.2	183.3
2007 Need-Developed	48.1	120.1	168.2
2007 Surplus/Deficit of Developed Park Land	+18.7	-77.7	-59 **

SOURCE: Village of Royal Palm Beach EAR
*Park Land (Acres)
**Assumes no development of new park areas.
NOTES: Village Hall (16.5 acres) is counted as a developed community park but provides limited recreation.
FPL easement (25.5 acres) is not included due to its unique linear configuration and resulting limitations of use.

As the above table indicates, in the future the Village will need to develop additional community parks in order to meet the adopted acreage level of service. By the year 2007, the Village will need to develop at least 40.2 acres (including the 27.8 acre 2002 need) of community park land.

MICRO ANALYSIS

The Village of Royal Palm Beach has 2 vacant residential parcels of land, which have their land use and zoning in place or in process, within the Palms West Corridor Study Area. In addition, there are 2 vacant residential parcels of land, which have their land use and zoning in place or in process, that are presently located in Unincorporated Palm Beach County. However, these vacant parcels are currently in the process of being annexed into the Village (for analysis purposes the Village of Royal Palm Beach's LOS will be utilized). These parcels are indicated on the committed development map as #'s 65, 68, 59 and 60. Therefore, by utilizing the established level of service based on the Village's Evaluation and Appraisal Report (EAR) for recreation and open space of 7.5 acres per 1,000 population and the projected population generated from these 4 vacant residential parcels, some baseline analysis can be performed.

The following table illustrates for the 2 vacant residential parcels located within the Village of Royal Palm Beach boundaries, there is a potential for approximately 627 single-family units (assuming single-family detached units for analysis purposes). Based on this number of units, using a 2.39 average persons per household size, the table illustrates there is potential for a population of 1,499. Finally, the table illustrates the potential recreation and open space acreage demand for the 2 vacant residential parcels based on this approximate population figure and the Village's recreation and open space acreage level of service is 11.24 acres.

POTENTIAL RECREATION AND OPEN SPACE ACREAGE DEMAND*

ID#	ACRES	POTENTIAL # OF UNITS	ESTIMATED POPULATION BASED ON NUMBER OF UNITS**	RECREATION AND OPEN SPACE ACREAGE LOS	POTENTIAL RECREATION AND OPEN SPACE ACREAGE DEMAND
65	47	376	899	7.5 AC/1,000	6.74
68	106	251	600	7.5 AC/1,000	4.5
TOTALS	153	627	1,499	N/A	11.24

*Vacant parcels that have their land use and zoning in place or in process and are currently within the Village boundaries.
**Multiplying the potential number of units by 2.39 persons, which was the average household size utilized by Palm Beach County for Future Land Use Atlas Amendments in 1999, derives this figure.

The following table illustrates for the 2 vacant residential parcels located in Unincorporated Palm Beach County, which are currently in the process of being annexed by the Village, there is a potential for approximately 82 single-family units (assuming single-family detached units for analysis purposes). Based on this number of units, using 2.39 average persons per household size, the table illustrates there is potential for a population of 509. Finally, the table illustrates the potential recreation and open space acreage demand for the 2 vacant residential parcels based on this approximate population figure and the Village's recreation and open space acreage level of service is 3.82 acres.

POTENTIAL RECREATION AND OPEN SPACE ACREAGE DEMAND*

ID#	ACRES	POTENTIAL # OF UNITS	ESTIMATED POPULATION BASED ON NUMBER OF UNITS**	RECREATION AND OPEN SPACE ACREAGE LOS	POTENTIAL RECREATION AND OPEN SPACE ACREAGE DEMAND
59	72	183	437	7.5 AC/1,000	3.28
60	10	30	72	7.5 AC/1,000	.54
TOTALS	82	213	509	N/A	3.82

*Vacant parcels that are within Unincorporated Palm Beach County, which have their land use and zoning in place or in process, and are currently in the process of being annexed into the Village.
**Multiplying the potential number of units by 2.39 persons, which was the average household size utilized by Palm Beach County for Future Land Use Atlas Amendments in 1999, derives this figure.

Based on the above analysis, it is estimated for the 4 vacant residential parcels, there will be a potential recreation and open space acreage demand of 15.06 acres. This potential demand will not be immediate, it will most likely occur over a 3 – 5 year period depending on potential annexations and the phased timing of the projects by the developers.

V. FISCAL ANALYSIS

PALM BEACH COUNTY

MICRO ANALYSIS

Unincorporated Palm Beach County has 1 vacant residential parcel of land, which has its land use and zoning in place or in process that is not within a future annexation area, within the Palms West Corridor Study Area. This parcel is indicated on the committed development map as # 58. Therefore, by utilizing the established level of service based on the Palm Beach County Comprehensive Plan for recreation and open space of 5.12 acre per 1,000 population and the projected population generated from this vacant residential parcel, some baseline analysis can be performed.

The following table illustrates for the vacant residential parcel located within Unincorporated Palm Beach County, there is a potential for approximately 167 single-family units (assuming single-family detached units for analysis purposes). Based on this number of units, using 2.39 average persons per household size, the table illustrates there is potential for a population of 399. Finally, the table illustrates the recreation and open space acreage demand for the vacant residential parcel based on this approximate population figure and Unincorporated Palm Beach County's recreation and open space acreage level of service is 2.04 acres.

POTENTIAL RECREATION AND OPEN SPACE ACREAGE DEMAND*

ID#	ACRES	POTENTIAL # OF UNITS	ESTIMATED POPULATION BASED ON NUMBER OF UNITS**	RECREATION AND OPEN SPACE ACREAGE LOS	POTENTIAL RECREATION AND OPEN SPACE ACREAGE DEMAND
58***	56	167	399	5.12 AC/1,000	2.04

*Vacant parcels that have their land use and zoning in place or in process and are currently within the Unincorporated Palm Beach County boundaries.

**Multiplying the potential number of units by 2.39 persons, which was the average household size utilized by Palm Beach County for Future Land Use Atlas Amendments in 1999, derives this figure.

***This parcel is proposed to have a 400 bed ACLF. Therefore, the Palm Beach County conversion methodology back to dwelling units is utilized for this analysis. This is based on an average person per household of 2.39.

Based on the above analysis, it is estimated for the 1 vacant residential parcel, there will be a potential recreation and open space acreage demand of 2.04 gallons per day. This potential demand will not be immediate, it will most likely occur over a 1 - 2 year period depending on the phased timing of the project by the developer.

SCHOOLS

Currently, the Palm Beach County School District, like most school districts in South Florida, is dealing with a significant backlog due to the tremendous growth that is taking place. It is estimated that each year approximately 4,500 – 5,000 students will enter the Palm Beach County School system. There is no question that the future development of the residential parcels within the Palms West Corridor Study Area will play a part in this addition of students to the school system. Therefore, it will be of the utmost importance for those municipalities within the corridor to coordinate with the Palm Beach County School District in reducing school overcrowding.

One coordination mechanism may be through the use of Interlocal Agreements between municipalities and the School District. An example of this is the 1993 Interlocal Agreement between Palm Beach County and the School District to coordinate the planning process involved with school site acquisition and approval. This is a two-phase process by which alternative school locations are expedited in terms of review and comment (10 days) by various County Departments as submitted by the School District. Based on the initial review and comment by the County, the district is able to determine the best site for acquisition. Once the site has been determined, the School District submits more detailed information to the County and if all comments from the initial phase are addressed, it receives expedited sign off from the County. The coordination of this process should include the local level as well. In addition, municipalities should coordinate with the School District and Palm Beach County on population projections and new developments and/ or annexations.

POLICE AND FIRE/EMS

Police, firefighter, paramedical, emergency, and other public safety functions are essential parts of community services that must be provided with resources and equipment. The overall cost of providing these services, resources and equipment by the municipality is generally considered a costly expenditure in terms of a municipal economy. However, there is a general difference in the cost of providing these services to different land use categories, specifically in terms of residential land uses versus commercial and industrial land uses. The revenues that are generated by property, sales and other tax sources by these land uses, which offset the overall cost to the municipality providing or contracting to provide these services, can quantify this difference. Commercial and Industrial land uses provide much higher tax revenue than residential land uses. With this in mind, it is simple to determine that the costs of providing these services to residential land uses will be more overall than for commercial and industrial uses.

Residential land uses provide a property tax (ad valorem) revenue for a municipality. This tax revenue can be utilized along with the costs of providing police and fire/EMS services, to determine the overall cost/benefit of providing these services to this land use. It is important to note that most single-family detached homeowners within the State of Florida take advantage of the homestead tax exemption, which exempts $25,000 of the taxable value of the home. Therefore, the overall taxable value of the home, which helps to offset the cost to the municipality for providing these services, is in most cases less than the actual real taxable value of the home due to the homestead exemption. Therefore, from the beginning, residential land uses are a disadvantage to the municipality in terms of tax revenue generation. Additionally, residential land uses are going to generate more of a population than commercial and industrial land uses. Therefore, more police and fire/EMS personnel and equipment will be needed to provide the appropriate level of service. The addition of more personnel means more costs to the municipality for providing the services. In addition, residential land uses are a twenty-four hour residence, whereas, commercial and industrial land uses usually have limited hours of operations. Therefore, personnel are needed more often for residential land uses versus commercial and industrial uses, which again equates to more costs.

The Palms West Corridor is comprised of primarily residential future land uses. It is estimated that slightly over 79% of the entire Palms West Corridor Study Area is designated with a residential future land use. On the other hand, it is estimated that only approximately 8% of the entire Palms West Corridor Study area is designated with a commercial or industrial future land use. Based on these percentages and the information above, it can be assumed that the cost of providing police and fire/EMS services to the Palms West Corridor Study Area will exceed revenues generated from any tax sources. It is important to note that this is not something to be considered out of the ordinary. This is common knowledge for fiscal analysts. In a study that was prepared for the City of Palo Alto, California, 22 different alternative development patterns were studied as possibilities for several thousand acres of vacant land above the City. In every case, the cost of local public services exceeded revenues from property, sales and other tax sources.

V. FISCAL ANALYSIS

PROJECTED REVENUES FROM POTENTIAL FUTURE DEVELOPMENT

Projected revenues from potential future development (those vacant parcels which have their land use and zoning designations in place or in process) within the Palms West Corridor can be addressed in terms of impact fee revenue. This section will provide a general idea of the amount of revenue that can be generated through the implementation of each municipalities impact fee schedule, specific to those vacant parcels which are identified on the committed development map as having their land use and zoning designations in place or in process. Those parcels that already have master/site plan approval are not part of this analysis since they already can be determined as meeting the concurrency requirements.

Since each of the municipality's impact fee schedules is different for certain criteria, the impact fee analysis is broken down by municipality. Each parcel identification numbers under each municipalities heading corresponds with those parcel identification numbers on the committed development map.

VILLAGE OF WELLINGTON

The Village of Wellington has 4 vacant residential parcels of land, which have their land use and zoning in place or in process, within the Palms West Corridor Study Area. In addition, there are 3 vacant residential parcels and 1 vacant commercial parcel of land which have their land use and zoning in place or in process that are presently located in Unincorporated Palm Beach County, however, these vacant parcels are within the future annexation area of the Village of Wellington based on the Future Land Use Map (for analysis purposes the Village of Wellington's impact fee schedule will be utilized). These parcels are indicated on the committed development map as #'s 73, 75, 79, 82, 71, 77, 78 and 70. Therefore, by using the Village's impact fee schedule some baseline impact fee analysis can be performed. It is very important to note, that assumptions are made with regards to the size and type of the residential units and the type of commercial uses. The fees calculated based on these parcels are a generalized estimate.

For the 4 vacant residential parcels of land within the Village of Wellington that have their land use and zoning in place or in process, there is the potential for a total of 4,470 units (assuming single-family detached units for analysis purposes). The residential impact fee schedule for the Village of Wellington includes county fees for parks, libraries, public buildings, schools, fire rescue, law enforcement and roadways. The total impact fees for these items is $5,939.15 for a single family detached unit ranging in net unit square footage of 2,000 – 3,599 under air conditioning. Additionally, the Village of Wellington's impact fees for recreation and roads totals $1,742.89. This results in projected county impact fee revenue for the 4 vacant residential parcels of $26,548,001.00 and Village impact fee revenue of $7,790,718.30. For the 3 vacant residential parcels of land which have their land use and zoning in place that are presently in Unincorporated Palm Beach County but are within the Village of Wellington's future annexation area, there is a potential for a total of 598 units (assuming single-family detached units for analysis purposes). This results in projected county impact fee revenue for the 3 vacant residential parcels of $3,551,611.70 and projected Village impact fee revenue of $1,042,248.30

For the 1 vacant commercial parcel of land, which has its land use and zoning in place or in process that is in Unincorporated Palm Beach County but is within the Village's future annexation area, there is the potential for 304,920 square feet of development (assuming general commercial retail for analysis purposes). This number is calculated using a .35 floor area ratio (FAR). The general commercial retail impact fee schedule for the Village of Wellington includes county fees for public buildings, fire rescue, law enforcement and roadways. The projected county total impact fees for these items are $835,960.97 for a 304,920 square foot general commercial retail structure. Additionally, the Village of Wellingtons projected impact fees for roads totals $197,600.00.

VILLAGE OF ROYAL PALM BEACH

The Village of Royal Palm Beach has 2 vacant residential, 1 vacant industrial, 1 vacant professional office and 1 vacant general commercial retail parcels of land which have their land use and zoning in place or in process, within the Palms West Corridor Study Area. In addition, there are 2 vacant residential parcels of land, which have their land use and zoning in place or in process, that are presently located in Unincorporated Palm Beach County. However, these vacant parcels are currently in the process of being annexed into the Village (for analysis purposes the Village of Royal Palm Beach's impact fee schedule will be utilized). These parcels are indicated on the committed development map as 65, 68, 64, 67, 69 59 and 60. Therefore, by utilizing the Village's impact fee schedule some baseline impact fee analysis can be performed. It is very important to note, that assumptions are made with regards to the size and type of the residential units and the type of commercial uses. The fees calculated based on these parcels are a generalized estimate.

For the 2 vacant residential parcels of land within the Village of Royal Palm Beach that have their land use and zoning in place or in process, there is a potential for a total of 627 units (assuming single-family detached units for analysis purposes). The residential impact fee schedule (no differentiation between single-family and multi-family units) for the Village of Royal Palm Beach includes parks, fire/EMS, public buildings and law enforcement. The total impact fees for these items is $1,768.00 for a residential unit ranging in net unit square feet of 2,000 – 2,599 under air conditioning. This results in projected Village impact fee revenue for the 2 vacant residential parcels of $1,108,536.00. For the 2 vacant residential parcels of land which have their land use and zoning in place or in process that are currently in the process of being annexed by the Village, there is the potential for a total of 213 units (assuming single-family detached units for analysis purposes). This results in projected Village impact fee revenue for these 2 vacant residential parcels of $376,584.00.

For the 1 vacant industrial parcel of land, which has its land use and zoning in place or in process, there is the potential for 511,830 square feet of industrial development. This number is calculated using a .25 floor area ratio (FAR). The general industrial impact fee schedule for the Village of Royal Palm Beach includes fees for fire/EMS, public buildings and law enforcement. The projected total impact fees for these items are $373,760.00 for a 511,830 square foot industrial structure. For the 1 vacant professional office parcel of land, which has its land use and zoning in place or in process, there is the potential for 182,952 square feet of professional office development. This number is calculated using a .35 FAR. The office impact fee schedule for the Village of Royal Palm Beach includes fees for fire/EMS, public buildings and law enforcement. The projected impact fees for these items are $79,239.00 for an 182,952 square foot professional office structure. For the 1 vacant general commercial retail parcel of land, which has its land use and zoning in place or in process, there is the potential for 218,000 square feet of general commercial retail development. The general commercial retail impact fee schedule for the Village of Royal Palm Beach includes fees for fire/EMS, public buildings and law enforcement. The projected impact fees for these items are $127,312.00 for a 318,000 square foot general commercial retail structure.

V. FISCAL ANALYSIS

PALM BEACH COUNTY

Unincorporated Palm Beach County has 1 vacant residential and 1 vacant commercial parcels of land which have their land use and zoning in place or in process, within the Palms West Corridor Study Area. These parcels are indicated on the committed development map as #'s 58 and 81. Therefore, by utilizing Palm Beach County's impact fee schedule some baseline impact fee analysis can be performed. It is important to note, that assumptions are made with regards to the size and type of the residential units and the type of commercial uses. The fees calculated based on these parcels are a generalized estimate.

For the 1 vacant residential parcel of land within Palm Beach County that has its land use and zoning in place or in process, there is a potential for a total of 167 units (assuming single-family detached units for analysis purposes). The residential impact fee schedule for Palm Beach County includes fees for parks, libraries, public buildings, schools, fire rescue, law enforcement and roadways. The total fees for these items is $6,250.86 for a single family detached unit ranging in net unit square footage of 2,000 – 3,599 under air conditioning. This results in projected county impact fee revenue for the 1 vacant residential parcel of $1,043,893.60.

For the 1 vacant commercial parcel of land within Palm Beach County that has it land use and zoning in place or in process, there will be 35,503 square feet of general commercial retail and a 3,610 square foot bank. The general commercial retail impact fee schedule for Palm Beach County includes fees for public buildings, fire rescue, law enforcement and roadways. The projected county total impact fees for these items are $435,629.02 for a 35,503 square foot general commercial retail structure and a 3,610 square foot bank.

PROJECTED EXPENDITURES TO SERVE POTENTIAL FUTURE DEVELOPMENT

The following section provides a summary of those expenditures that are identified in each municipality's Capital Improvement Element of the Comprehensive Plan and/or the Evaluation and Appraisal Report. The summary attempts to focuses on those improvements that can be considered a direct or indirect benefit to the Palms West Corridor Study Area.

Village of Wellington

According to the Comprehensive Plan's Capital Improvement Element, the following table represents the planned sanitary sewer improvements for the Village of Wellington.

PLANNED SANITARY SEWER IMPROVEMENTS

Project	Proposed Budget 1999-00	Proposed Budget 2000-01	Proposed Budget 2001-02	Proposed Budget 2002-03
Force Main Adjustment @ - Forest Hill Blvd. Widening (mall)	$115,000			
Belts Filter Press	$440,000			

As for financing the provision of sanitary sewer future needs, the Acme Improvement District (AID) has in place a plan the will ensure the adequate financing for all future expansions of the treatment plants. Every time a new meter is installed a capacity charge will be assessed. Twenty-nine percent of this charge is utilized for wastewater treatment plant expansion. Based on this charge and funds that are already available guarantees that when additional capacity is needed regardless of the rate of population growth adequate funds will be available. Additionally, the district has a reservation fee policy, which requires all new develop reserve capacity for future use. Specific language is included in developer's agreements to ensure that developers fund their share of connecting facilities as well as completely paying for their on-site facilities.

According to the Comprehensive Plan's Capital Improvement Element, the following table represents the planned potable water improvements for the Village.

PLANNED POTABLE WATER IMPROVEMENTS

Project	Proposed Budget 1999-00	Proposed Budget 2000-01	Proposed Budget 2001-02	Proposed Budget 2002-03
4.7 MGD Lime Plant Expansion	$4,400,000	$3,600,000		
Booster Pump Station No. 2 – Orange Point		$1,864,000		
12" Water Main @ Wellington's Edge/Forest Hill to c-28	$135,000			

As for financing the provision of potable water future needs, the AID has in place a plan the will ensure the adequate financing for all future expansions of the treatment plants. Every time a new meter is installed a capacity charge will be assessed. Seventy-one percent of this charge is utilized for potable water treatment plant expansion. Based on this charge and funds that are already available guarantees that when additional capacity is needed regardless of the rate of population growth adequate funds will be available. Additionally, the district has a reservation fee policy, which requires all new develop reserve capacity for future use. Specific language is included in developer's agreements to ensure that developers fund their share of connecting facilities as well as completely paying for their on-site facilities.

According to the Comprehensive Plan's Capital Improvement Element, there is over $1,300,000 in planned drainage improvements; however, none of these improvements directly or indirectly benefit the Palms West Corridor. However, as stated earlier in this section, the Village's Land Development Regulations require that for each individual parcel of land that is developed that adequate drainage must be provided in order to receive site plan approval and building permits.

According to the Comprehensive Plan's Capital Improvement Element, the following table represents the planned park and recreation improvements for the Village.

PLANNED PARK AND RECREATION IMPROVEMENTS

Project	Proposed Budget 1999-00	Proposed Budget 2000-01	Proposed Budget 2001-02	Proposed Budget 2002-03
Village Park Lands	$100,000	$100,000	$100,000	$100,000
Village Park Phase II	$200,000	$1,000,000		

V. FISCAL ANALYSIS

VILLAGE OF ROYAL PALM BEACH

PLANNED SANITARY SEWER IMPROVEMENTS

According to the EAR, there were no planned sanitary sewer improvements beyond 1998. However, based on the Village of Royal Palm Beach's adopted budget for 1999 – 2000, there is over $3,400,000 in sanitary sewer improvements scheduled for FY 2000 that directly or indirectly affect the Palms West Corridor, not including funds for administration. This figure includes new projects as well as carry over projects. The projects include a rotator jet, telemetry system, reconditioning of lift station # 6, rehabilitation of lift station # 1, lift station pump replacements, sewer line bracing repair, sewer main relocations and a wastewater plant improvement project construction.

PLANNED POTABLE WATER IMPROVEMENTS

According to the EAR, there were no planned sanitary sewer improvements beyond 1999. However, based on the Village of Royal Palm Beach's adopted budget for 1999 – 2000, there is over $955,000 in potable water improvements scheduled for FY 2000 and $500,000 for FY 2001 that directly or indirectly affect the Palms West Corridor. These figures include new projects as well as carry over projects. The FY 2000 projects include new wells 13 and 15, a concentrate recycling system, a backwash water recovery system, water main interconnects, well inspection and repairs, high service pump station improvements, 3 million gallon ground storage tank and water main replacements. The FY 2001 project includes the completion of the backwash water recovery basin.

PLANNED DRAINAGE IMPROVEMENTS

According to the EAR, the following table represents the planned drainage improvements for the Village. However, based on the Village of Royal Palm Beach's adopted budget for 1999 – 2000, there is over $1,700,000 in storm water improvements scheduled for FY 2000 and $50,000 for FY 2001 that directly or indirectly affect the Palms West Corridor. These figures include new projects as well as carry over projects. The FY 2000 projects include in-line drainage, canal bank restoration, M-1 canal bank restoration and the completion of a storm water master plan. The FY 2001 project includes the completion of the M-1 canal restoration.

Project	Description	Estimated Cost	Type*	Target Year
1.) Swale Improvements	Improve swale drainage throughout village.	$500,000	PN	1997-2002

PN – Projected Need

PLANNED PARK AND RECREATION IMPROVEMENTS

According to the EAR, the following table represents the planned park and recreation improvements for the Village. However, based on the Village of Royal Palm Beach's adopted budget for 1999 – 2000, there is over $852,000 in park and recreation improvements scheduled for FY 2000, over $1,150,000 for FY 2001, over $285,000 for FY 2002 and $90,000 for FY 2003 that directly or indirectly affect the Palms West Corridor. These figures include new projects as well as carry over projects. The FY 2000 projects include Crestwood Park (planning phase and development), Preservation Park (expanding parking lot, facelift and field lighting), Willows Park (ball field lights, t-ball complex, facelift and phase II paving), Camellia Park (parking lot improvements), Ewing Park (parking lot, lighting improvements and pavilion), Challenger Park (restroom facilities, fountain and plaza), Village Commons Park (planning phase), Village Hall Park (enhancements to complex and lighted recreation path), Grand Oaks Civic Site (park development), Grandview Way (linear park) and Robiner Park (upgrade). The FY 2001 projects include Crestwood Park, Village Commons Park, Grand Oaks Civic Site and the Grandview Way Linear Park. The FY 2002 projects include Crestwood Park and Village Commons Park. Finally, the FY 2003 project includes the completion of the Village Commons Park.

Project	Description	Estimated Cost	Type*	Target Year
1.) Preservation Park	Build asphalt pad for basketball/roller hockey.	$20,000	PN	2000
2.) Preservation Park	Build softball complex.	ND	PN	2001
3.) Saratoga Property	Construct T-ball complex (tentative)	ND	PN	2002

PN – Projected Need
ND – Not Determined

PALM BEACH COUNTY

According to Palm Beach County's Comprehensive Plan Capital Improvement Element, there are only a few improvements scheduled that will indirectly benefit those parcels located within the Palms West Corridor Study Area. The few improvements scheduled include system wide improvements for potable water and sanitary sewer and the development of Sansbury Way Park. There is $7,750,000 of system wide improvements scheduled for FY 1999/00, $8,120,000 for FY 2000/01, $8,950,000 for FY 2001/02 and $8,000,000 for FY 2002/03. Additionally, there is $175,000 scheduled for the development of Sansbury Way Park for FY 2000/01, $175,000 for FY 2001/02 and $300,000 for 2002/03.

Infrastructure Funding Alternatives

The following sections provide a general description of different infrastructure funding alternatives. These alternatives include special assessment districts, impact fees, tax increment financing, general obligation bonds, revenue bonds and state and federal grants. Municipalities to fund infrastructure programs currently utilize each of these funding alternatives. It is recommended that each municipality within the Palms West SR 7/US 441 Corridor Study Area consider each of these alternatives as a way of financing future infrastructure needs based on increases in population due to new development and annexations. In addition, each municipality should consider a more detailed study, which analyzes these funding alternatives in more detail and can provide specific examples of what other municipalities with similar increase in growth are utilizing in terms of these alternatives.

Special Assessment District

A special assessment district is defined as an area that is designated a district and subject to a special property tax assessment for the purpose of financing special improvements in the district. These districts are established by the local government, in the form of assessment districts or public improvement districts, in which a special tax is levied on property owners in order to fund public improvements that will directly benefit those owners. Such districts are commonly formed for making improvements to curbs, gutters, sidewalks, streetscapes, utilities, etc.

Additionally, special assessment districts can be formed to supply almost all the facilities and services required to serve new development. These districts are generally established according to state legislation that spells out the requirements for initiating, financing and operating specific types of districts. These types of districts are particularly numerous in the State of Florida. The main advantage of these districts is that it circumvents the need to tax existing residents for facilities required for new development and spreads the costs of improvements over a targeted group of owners for usually a period of 15 to 20 years.

V. FISCAL ANALYSIS

IMPACT FEES

Impact fees are charges levied on developers by local governments to pay for the cost of providing public facilities necessitated by a given development. There are several ways in which impact fees can be levied. Some examples include the dedication of land, construction of facilities, or the payment of fees to be used for public facility construction. Subdivision regulations generally require developers to fund, build, and dedicate for public use the basic facilities including local streets, sewer and water lines, drainage facilities, and parks and recreation facilities. In addition, developers are usually required to fund selected improvements to major streets within or at the borders of their projects or at nearby intersections.

GENERAL OBLIGATION BONDS

Some projects may be financed through general obligation bonds. Through this method, the taxing power of the jurisdiction is pledged to pay interest upon, and retire the debt. General obligation bonds can be sold to finance permanent types of improvements such as schools, municipal buildings, parks, and recreational facilities. Voter approval is usually required for general obligation bonds.

REVENUE BONDS

Revenue bonds frequently are sold for projects, such as water and sewer systems, that produce revenue. Such bonds usually are not included in state imposed debt limits, as are general obligation bonds, because they are not backed by the full faith and credit of the local jurisdiction, but are financed in the long run through service charges or fees. The interest rates are almost always higher than are general obligation bonds' interest rates, and voter approval is seldom required.

STATE AND FEDERAL GRANTS

State and federal grant-in-aid programs are available to finance a number of programs. These may include streets and water and sewer facilities. The cost of funding these facilities may be borne completely by grant funds or a local share may be required. Federal General Revenue Sharing and Community Development Block Grants have given local governments more choice in how to spend their grant money. Much of this money has been used to finance capital improvements. Following is a sample list of federal grants and the administering federal agency.

DEPARTMENT OF COMMERCE

Public Works and Development Facilities

Support for Planning Organizations

Public Works Impact Projects

Public Telecommunications Facilities Construction and Planning

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Housing Development Grants

Community Development Block Grant/Small Cities Program

Community Development Block Grant/Entitlement

Urban Development Action Grant

DEPARTMENT OF INTERIOR

Outdoor Recreation – Acquisition, Development, and Planning

Urban Park and Recreation Recovery Program

DEPARTMENT OF TRANSPORTATION

TEA 21

Urban Mass Transportation Capital Improvement Grants

Urban Mass Transportation Technical Studies Grants

ENVIRONMENTAL PROTECTION AGENCY

Construction Grants for Wastewater Treatment Works

Comprehensive Estuarine Management

Recommendations

1) Based on the Comprehensive Plan and the previous analysis, it is recommended that the Village of Wellington begin planning and design for additional potable water capacity by the year 2004.

2) Based on the Comprehensive Plan and the previous analysis, an additional 1.75 million gallon per day capacity for sanitary sewer will be needed to maintain the level of service for the projected buildout population of the Village of Wellington. Therefore, it is recommended that the Village of Wellington begin planning and design for this expansion by 2020-2011 in order to satisfy permit requirements.

3) Based on the EAR and the previous analysis, it is recommended that the Village of Royal Palm Beach continue the construction of lakes and canals (up to 493 acres) that the South Florida Water Management District (SFWMD) permit authorizes in order to accomplish an adequate drainage system for the worst possible flood events (100 year storms).

4) Based on the EAR and the previous analysis, it is recommended that the Village of Royal Palm Beach continue to improve swale drainage throughout the Village.

5) Based on the Comprehensive Plan and the previous analysis, it is recommended that the Village of Wellington continue to acquire and develop additional acreage to meet the recreation and open space level of service of 10 acres per 1,000 population. The Comprehensive Plan indicates acreage shortages for each 5-year planning period beginning with 23 needed acres in the year 2000.

6) Based on the EAR and the previous analysis, it is recommended that the Village of Royal Palm Beach continue to acquire and develop additional acreage to meet the recreation and open space level of service of 7.5 acres per 1,000 population.

V. FISCAL ANALYSIS

7) Based on the previous analysis, it is recommended that the Village of Wellington and the Village of Royal Palm Beach coordinate with the Palm Beach County School District on population projections and new developments and/or annexations. Additionally, both municipalities should explore Interlocal Agreements with the School District to coordinate and expedite the planning process involved with school site acquisition and approval.

8) Based on the previous analysis, it is recommended that the Village of Wellington and the Village of Royal Palm Beach reevaluate their impact fee schedules.

9) Based on the previous analysis, it is recommended that the Village of Wellington and the Village of Royal Palm Beach coordinate with Palm Beach County on the future annexation of land. Especially for those parcels of land that are within either municipalities boundaries or future annexation areas but are outside of the municipality's Urban Service Boundary.

10) Based on the previous analysis, it is recommended that the Village of Wellington and the Village of Royal Palm Beach consider each of the identified and summarized funding alternatives as a way of financing future infrastructure needs based on increases in population due to new development and annexations. Additionally, each municipality should consider pursuing a more detailed study, which would analyze the identified and summarized funding alternatives comprehensively and provide specific examples of what other municipalities with similar increases in growth are utilizing in terms of the identified funding alternatives.

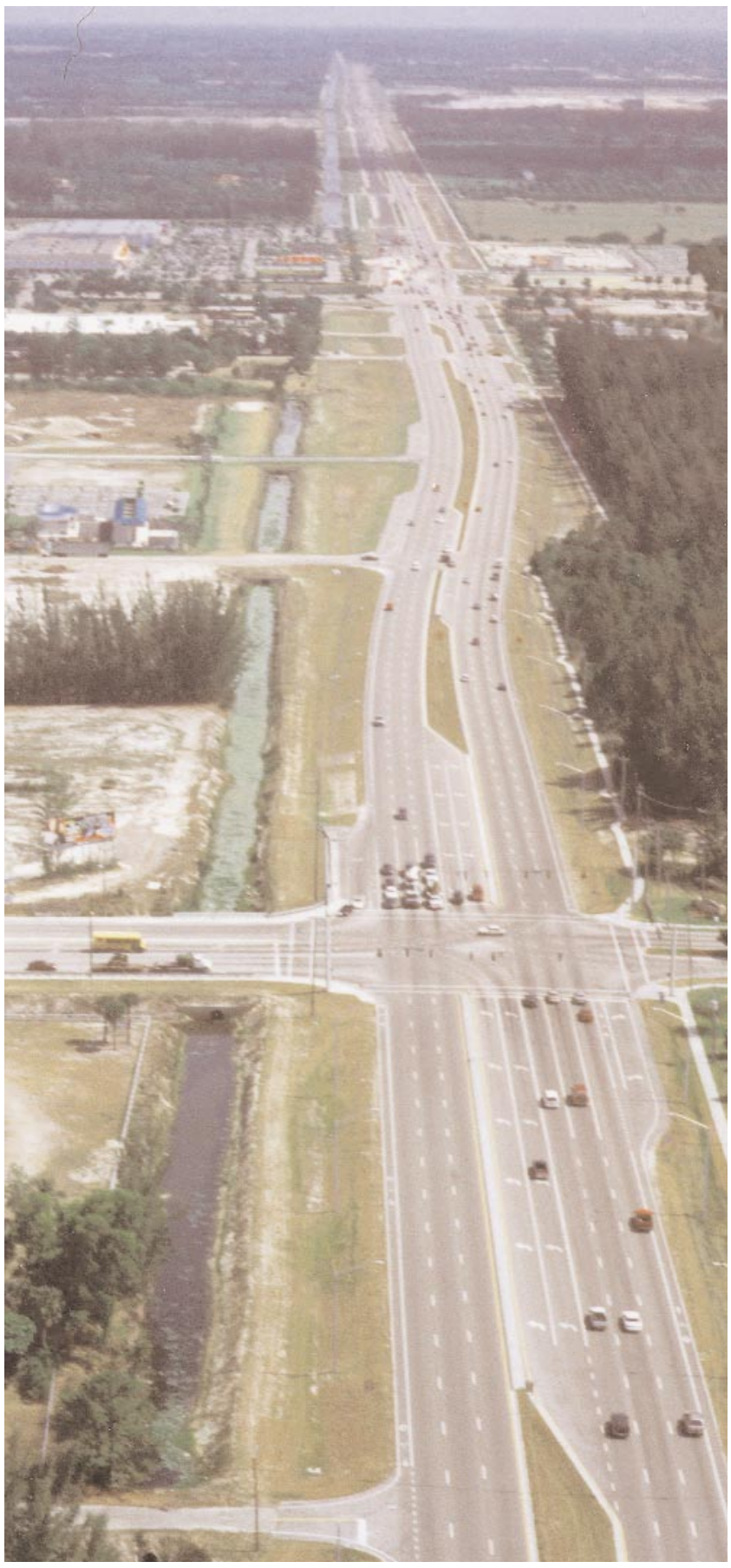
VI. URBAN DESIGN

INTRODUCTION

Urban Design is charged with the future three-dimensional appearance of this corridor. The vision of the three communities culled from the public forum meetings have directed and inspired the design elements to follow. The Landscape Architecture and Architectural Art elements promise coherency and place making quality.

The designs will follow the directives of the three communities and Palm Beach Counties landscape ordinances along with FDOT codes for transportation corridor planning. Design standards for the district shall include Xeriscape principals and Florida Grades and Standards for the selection of plant materials. American Disability Act (ADA) will direct all design access and safety requirements. The following will act as a preliminary design framework. This is the first step toward an energized artful artery; actual designs should follow directed by a team of Landscape Architects and Public Artists to further refine and embark on these suggestions. The public art portion will have a secondary benefit in terms of opening up further funding possibilities for this corridor.

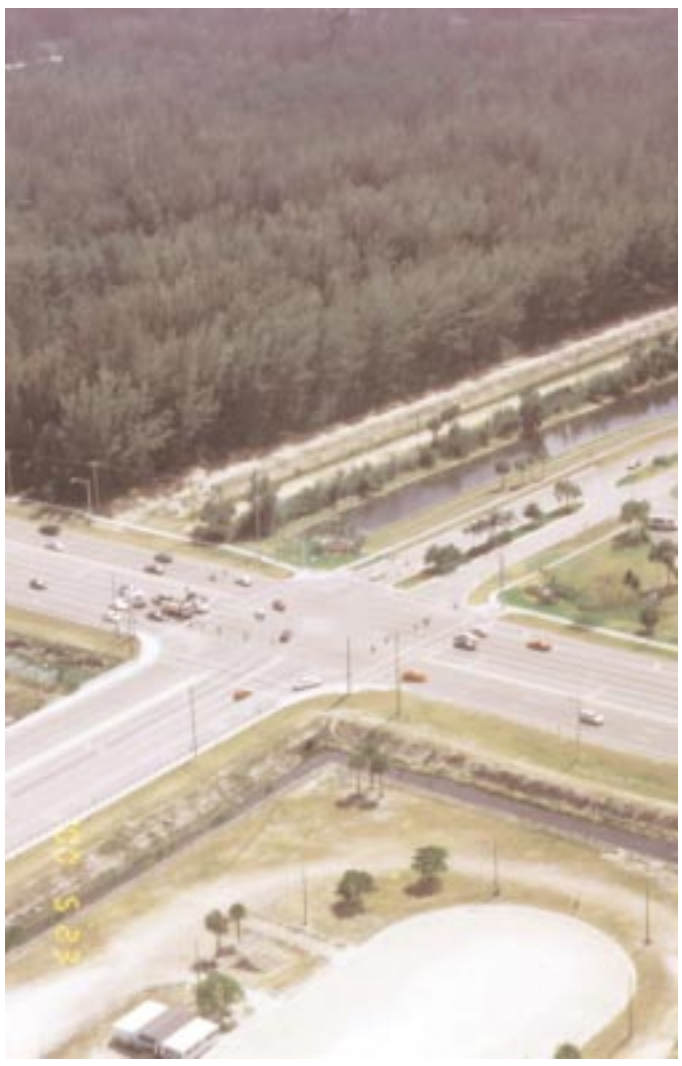
VI. URBAN DESIGN



Existing Conditions along
SR7/441 Villages of
Wellington, Royal Palm Beach
and the City of Greenacres.

VI. URBAN DESIGN

Existing Intersectional 2000



photographs; cmparker5/24/2000

Palms West Corridor

VI. URBAN DESIGN

CORRIDOR PLANNING

Safe sight distances triangles shall be in accordance with the Florida Transportation Manual of Uniform Standards for Design, Construction and Maintenance for Streets and Highways (current edition) Clear zones exist from 4’ from face of outside curb and 6’ from edge of median traffic. Landscape shall be planted to allow for an unobstructed view at a level between 30” and 8’ above pavement level. Safe sight distances have been calculated using FDOT criteria.

Urban Design planning will be guided by the Palm Beach County, Village of Wellington, Village of Royal Palm and City of Greenarces Landscape Ordinance Manuals. Permitting for projects within Palm Beach County right of Ways shall be obtained through the Land Development Division, Permit Section. Plans shall be drawn at 1” =20’ (25 mm = 6m) or 1” = 40’ (50mm=12m) Plans are to be prepared in continuous format with match lines. Urban Design plans to be sealed by a Landscape Architect in accordance with Palm Beach County Streetscape Standard Manual and Village of Royal Palm, City of Green Acres and Village of Wellington Landscape Ordinances.

VI. URBAN DESIGN

Corridor district design to enliven, provide
coherent placemaking focus with strategically placed amenities.

Results to give the corridor an new focus.

Selected Urban design elements serve to place the focus
on the identity and the vitality of the communities.

The unifying Urban Design elements to provoke and instill
this vision include

AN ENERGIZED ARTERY

Corridor Icon

Landscape Architecture

Intersection Mast Head Structures

Gateways

Public Art

Street Lighting

Signage

Sidewalks, Bike Trails and Boardwalks

Mile Markers

Linear Parks

Pedestrian Crosswalks

Community Information Banners

Fences

Sound Walls

Architectural Detailing

Access Management

VI. URBAN DESIGN

Palms West Corridor Urban Design Intent

- To improve overall aesthetics and unity of the Corridor.
- To provide Gateways into the district.
- To establish a hierarchy of special visual elements as a narrative of the district.
- To cultivate a palette of themed design models for use in the implementation of this project, which are unique and cohesive.
- To conform to current state roadway and right of way safety standards and criteria.

The Urban Design principles should be used to invigorate, not inhibit design expression.

URBAN DESIGN MOTIF

Icons of cultivated land forms.

Icons of jump stations

Themes from the Community's Agricultural and Equestrian character and history.

Typical Urban design details might showcase the colorful bars from the sport of equestrian jumping or focus on the silhouette of tropical plants, while mile markers. The plant palettes, benches and lighting will reiterate the design motif at the multi-scales involved across this site. The Vehicular, Aerial and Pedestrian scaled urban design are elements to be paced rythmatically across the corridor.

VI. URBAN DESIGN

THEMED GATEWAYS

Corridor Icon

Icon to be unique and uniform in character across this district. The selected Icon to be used at different scales to serve as visual link for diverse corridor in an enlivened reference to the past and present of the three communities. Coloration and Fabrication to conform to all state regulations. See Prototype as starting place example.

Experiential Perspectival Views of masthead, mile marker and lighting details

Gateways and Intersection Mast Head Structures

The vertical interest of the Specialized Gateways and Mast Head Intersection structures further define and make apparent the boundaries of this District.

These new structures to provide a visual boundary and community identity thresholds. The Masthead structure should be of tubular steel Truss for sign and signal support and fiberglass or tubular steel support posts.

The traffic signals and roadway signage font and colorations to conform to FDOT regulations. Information and annual Western Communities activities signage could be located on or near these structures. Gateway structure could also be defined by large public art inspired vertical elements.

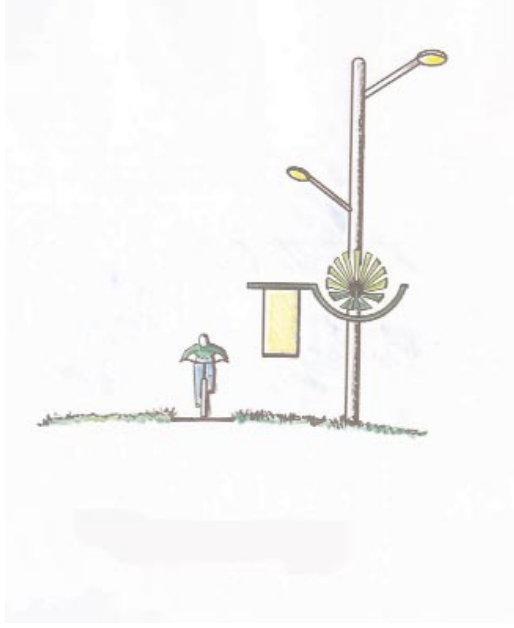
VI. URBAN DESIGN

Corridor Lighting

LIGHTING

Second vertical design element of light poles to light pedestrian and vehicular travel corridors provide another zone for the corridor icon and community banner attachment. One type of light pole for the corridor is recommended to add another visual layer to design intent. Poles should have an elegant clean line and anodized finish for ease of maintenance. Pole Base, coloration and light fixture styles to coordinate with Masthead and gateway structures. Poles should have frangible bases. Lighting for the pedestrian should be scaled accordingly.

Lighting in the district must meet or exceed the state and federal standards and specification codes. Existing cobra head poles could be utilized for the corridor icon and community information banners. Pedestrian scale poles for the linear landscape buffer would be added in the motif of the Icon pole work type.



conceptual light/icon system

VI. URBAN DESIGN

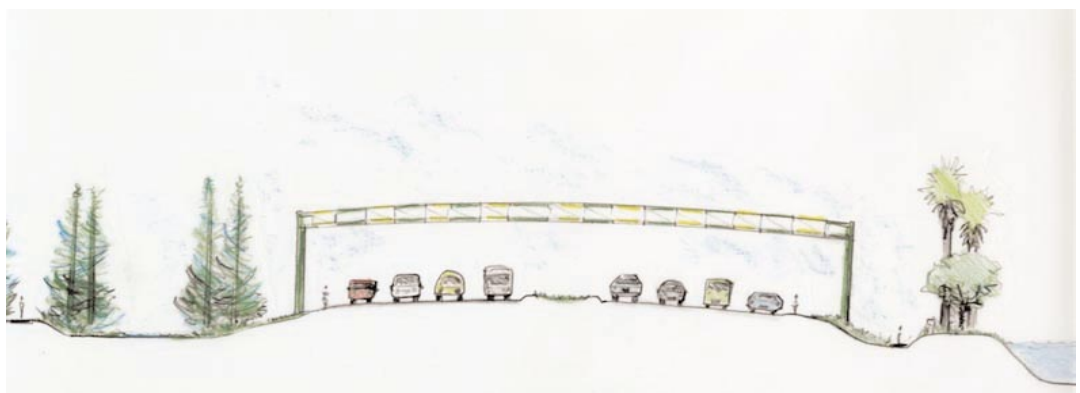
Intersections

Link this diverse urban corridor together in a enlivened reference to the past and the present of the three communities.

INTERSECTION AS GATEWAY

Intersections to be a different set of colorations for providing interest and extra focus.The boundaries of each village could be exposed by coloration change, ie., Blue and Orange for Royal Palm and Green and Orange for Wellington.

Horse Farm Fence Conceptual Design
Six Lane Sectional Version



Equestrian Jump Conceptual Design
Eight Lane Sectional Version

Palms West Corridor

VI. URBAN DESIGN

The future of the corridor in terms of traffic control may result in use of the over pass.

OVER PASS STRUCTURES

Over Pass textures to be running bond brick in reference to a equestrian jump structure, or a series of etched rows, the analogy of the land patterning of agriculture practice. The railings provide another location for design motif placement.

Over Pass Conceptual
Section Views

VI. URBAN DESIGN

Signage

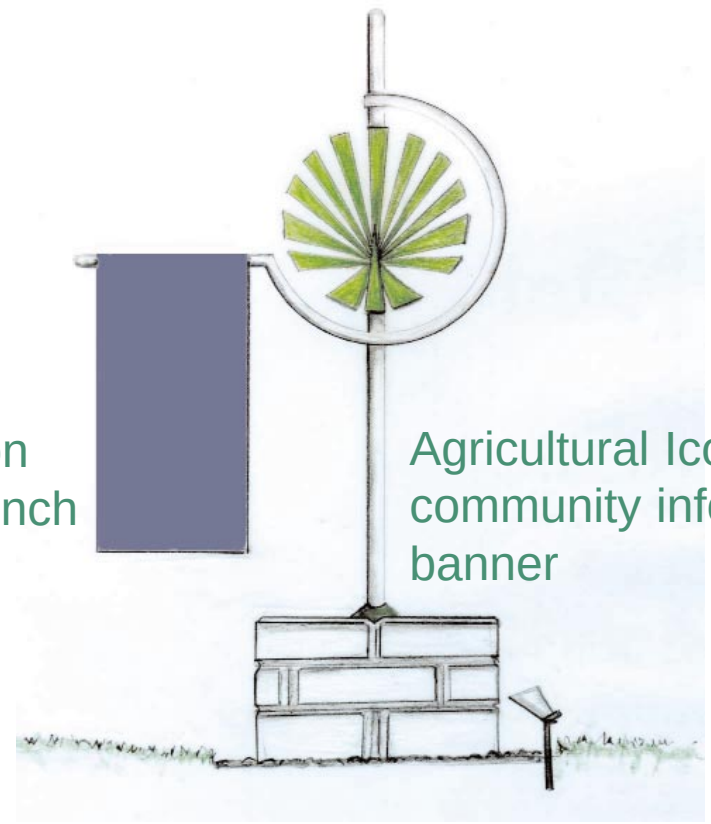
Signage will utilize running bond white brick bases in appropriate sizes to continue the theme of both the equestrian and agricultural histories of the three communities. Pedestrian benches are built into these structures for respite and waiting areas.

SIGNAGE/BANNERS

Community Information Banners

Can be attached to the lighting systems and the Mile Marker structures. They can be also shown centrally on the gateways structures according to state regulations and codes. Colorations will replicate and be consistent with themed Urban Design elements and enhance legibility. See prototype examples

Equestrian Icon on sign base with bench



Agricultural Icon with community informational banner

VI. URBAN DESIGN

MILE MARKER

Mile Markers

Act as uniform neighborhood locaters for the community and visitors and allow for the placement of the corridor icon at another visual scale. The finishes and coloration to conform to the Corridor Icon, masthead and gateway structures. Number Placement will proceed from the southern project boundary to higher numbers at the northern district boundary. Style of font to match with roadway signage fonts across the district.

Milemarkers will reiterate the design theming, and will become emblematic of district.

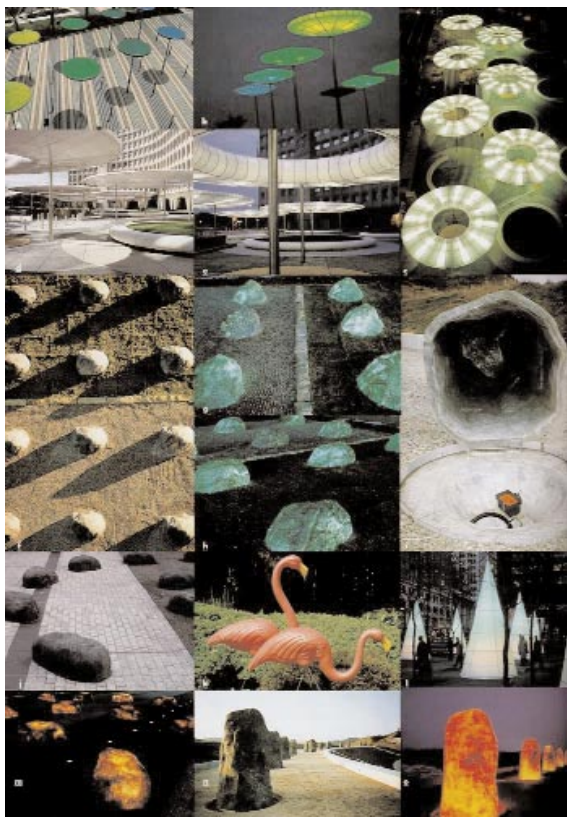
VI. URBAN DESIGN

PUBLIC ART

Public Art

To be unique, site specific, site generated and or site conditioned to this district. The works should be celebrate the creative process and enhance and affirm a special sense of place. Scale should take into consideration the many rates of view across the corridor.

The Art pieces should have day and evening viewing interest. Rate of view design scales to consider concerning the following; Pedestrian, bicycles, multi- vehicular, and small aircraft.



VI. URBAN DESIGN

Landscape Buffer

Heavily planted and with the addition of curvilinear sidewalks and 6-8’wide recycled material boardwalks for use over detention basins. Green spaces to provide a buffer for pedestrian usage and retention infiltration areas to cleanse road run-off before entering the ground water via the plant uptake. If the corridor is changed to an eight lane capacity additional right of way will be required for this strategy. Street trees in massed shrub groupings without sidewalks could be a second landscape solution to a constricted right of way land availability.

LANDSCAPE BUFFERS

Conceptual
Detention/Swale Detail

VI. URBAN DESIGN

Plant List

Suggested listing of appropriate upland and aquatic plant materials. All landscape plants should meet or exceed FDOT's Standard Specifications for Road and Bridge Construction, Section 580. All plants must be Florida Grade number 1 quality or better as per Florida Department of Agriculture and Consumer *Services' Grades and Standards for Nursery Plants*, Part 1 and Part 2. If located in clear sight line must be 8' clear trunk measured from grade to bottom of canopy. Trunks of trees in the limits of the intersection sight distance should never block more than 50% of driver's view of passenger car. Trees to be clustered to create natural looking stands. Varieties to be considered

PLANT PALETTE

TREES:

Acer rubrum
Cordia sebestena
Ilex cassine
Jacaranda acutifolia
Quercus virginiana
Taxodium distichum
Ligustrum lucidium
Simarouba glauca

PALMS:

Paurotis wrightii
Pinus elliottii
Psuedophoenix sargentii
Ptychosperma macurthuii
Chamaerops humilis
Livistonia chinensisPhoenix reclinata
Roystonea elata
Sabal palmetto
Thrinax radiata
Washingtonia robusta

GROUND COVERS:
At time of maturity will not exceed 30" (.76m) in height or can be appropriately maintained at 30" or less.

Catharanthus roseus
Hymenocallis latifolia
Ilex vomitoria
Juniperus chinensis
Lantana montevidensis
Liriope muscari
Portulaca grandiflora
Rhapiolepsis indica
Rhoeo spathacea
Russelia eqisteformis
Setcresea pallida
Yucca smalliana
Wedelia trilobata
Zamia pumila

SHRUBS:
Massed in large groups to provide visual coherence and ease maintenance requirements and costs with no-mow zones.

Acrostichum spp.
Caesalpinia pulherrima
Capparis cynophallophora
Callicarpa aericanam
Myrica cerifera
Myrsine guianensis
Nerium oleander
Hamelia patens
Illicium floridanum
Juniperus chinensis
Rhapiolepsis indica
Sabal minor
Serenoa repens
Tecoma stans
Zamia furfuracea

AQUATICS AND LITTORAL ZONE:

Nelumbo lutea
Nuphar luteum
Nymphaea mexicana
Pontederia cordata
Spartina patens
Tripsacum dacttlopsi

VI. URBAN DESIGN

Conceptual Study Sketch

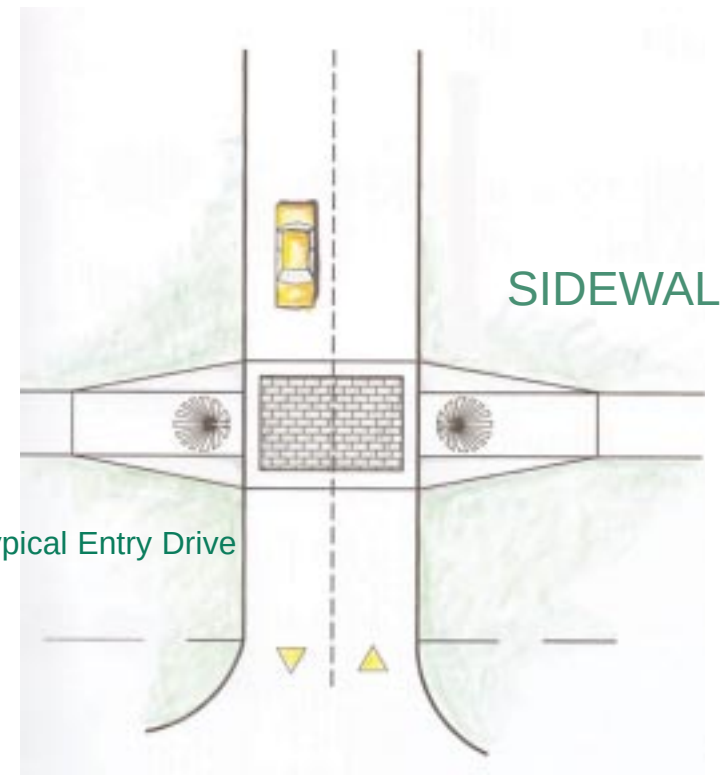
Pedestrian Crosswalks

Special emphasis crosswalk to be located at all intersections to enhance the visual gateway experience and safety factors for pedestrians.

PEDESTRIAN CROSSING

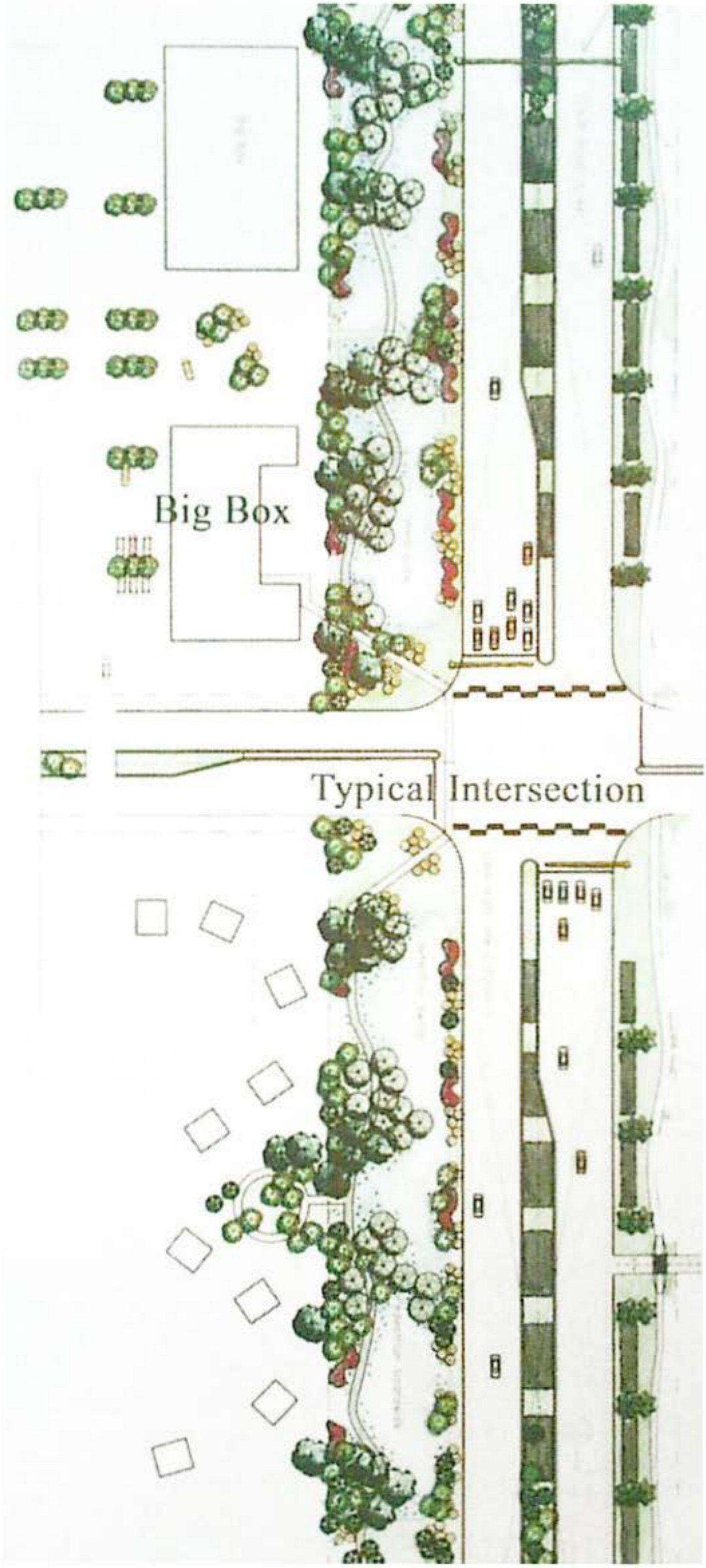
Sidewalks, Bike Trails and Boardwalks

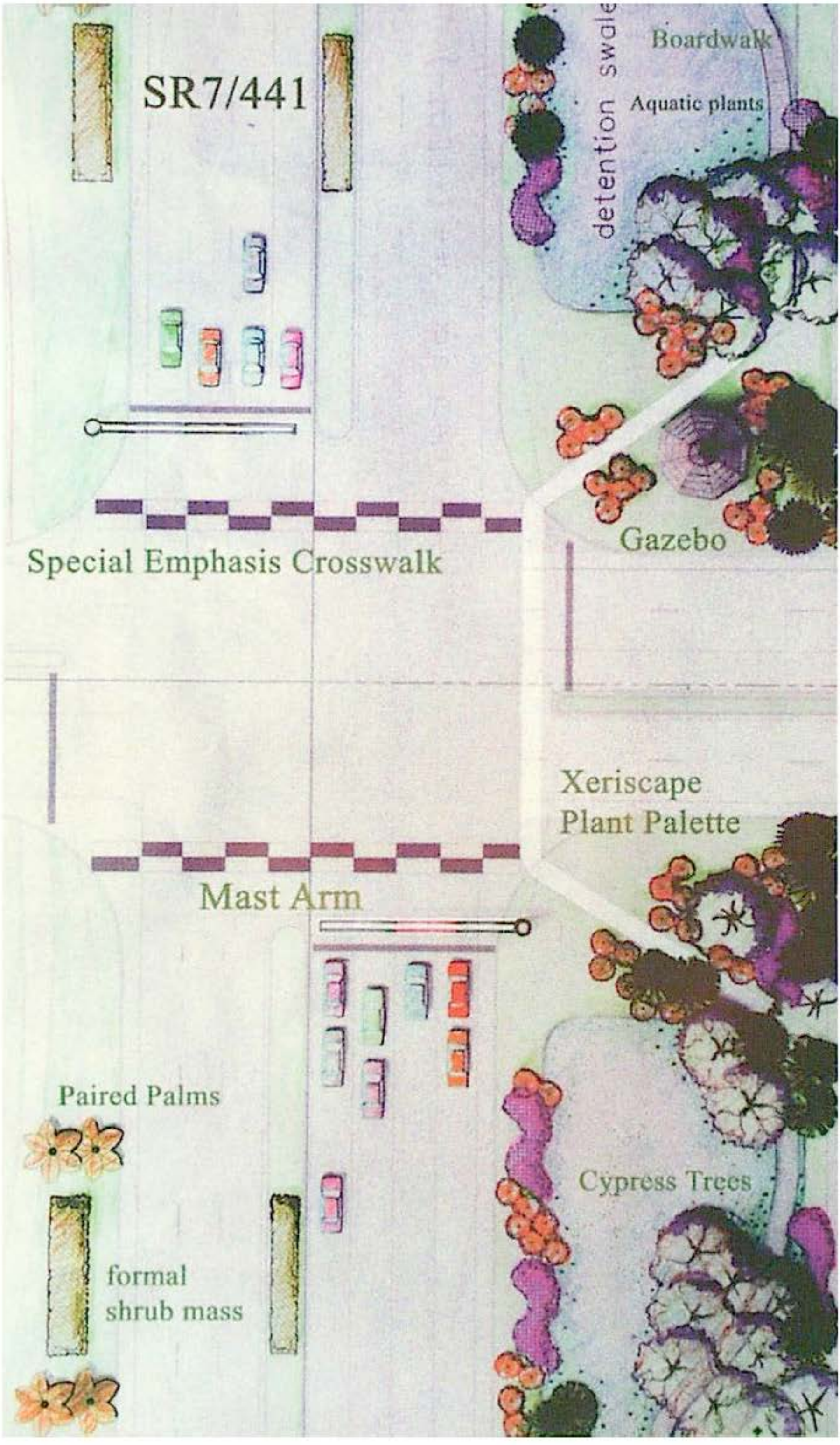
Critically important for community street security, neighborly contact and assimilation of children into adult society as per Jane Jacobs, calling sidewalks the most “public of public places” a special design focus will be reiterated throughout the district. Sidewalks are to be embossed with Corridor Icon at driveway breaks to focus on the pedestrian scale of the design. Green buffer Boardwalks will have hand railings and be constructed of PVC or pressure treated wood in a typical deck type patterning for aesthetic value, safety, ease of maintenance and ADA requirements. For the separate bike trails suggested tree limbs must be maintained 3.0m above the bike path.

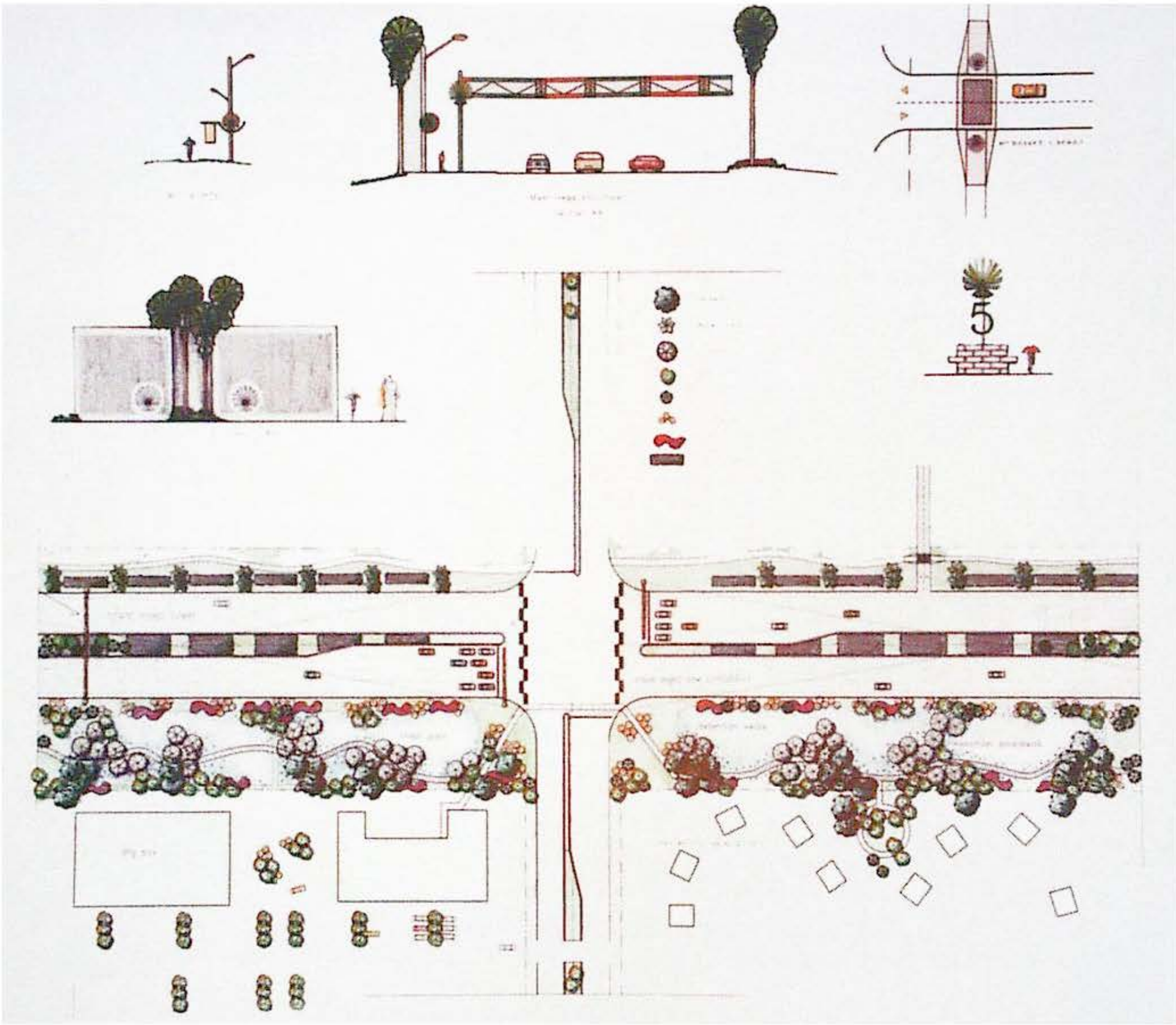


SIDEWALK DETAIL

Typical Entry Drive


Big Box
Typical Intersection


SR7/441
detention swale
Boardwalk
Aquatic plants
Special Emphasis Crosswalk
Gazebo
Xeriscape
Plant Palette
Mast Arm
Paired Palms
Cypress Trees
formal
shrub mass



VI. URBAN DESIGN

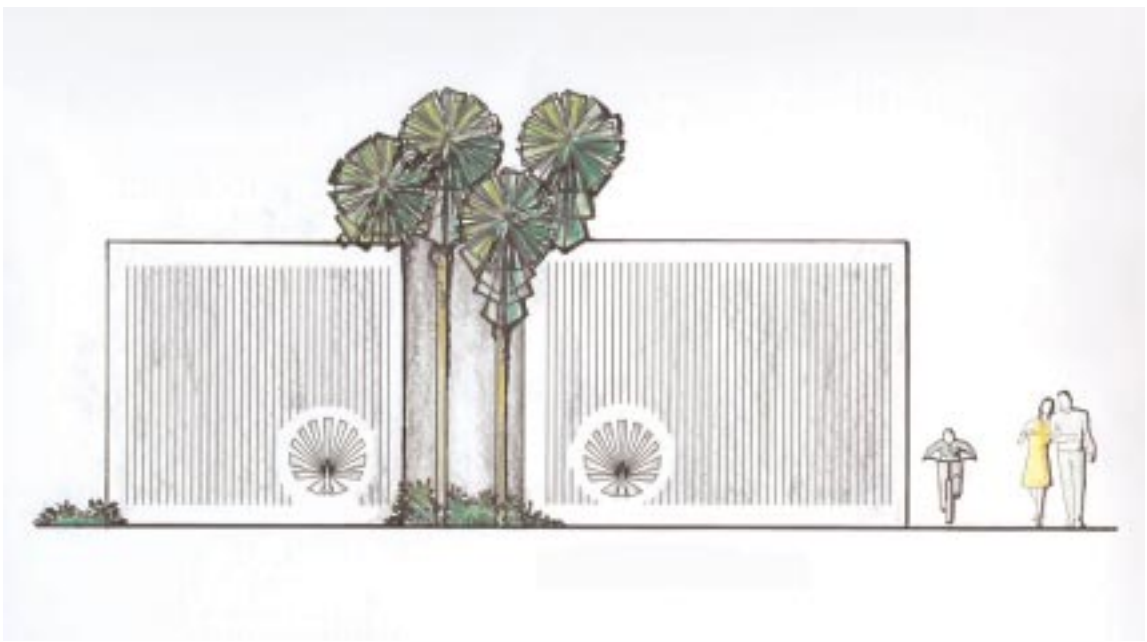
Fences

Typical Crossed Board Pattern which is the motif of the district and an analogy to the districts many horse farms and plant nurseries. Materials should reflect the visual character of the district and can include white washed wood, and color coated galvanized steel or aluminum in the similar patterning.

SOUND WALL/FENCES

Sound Walls

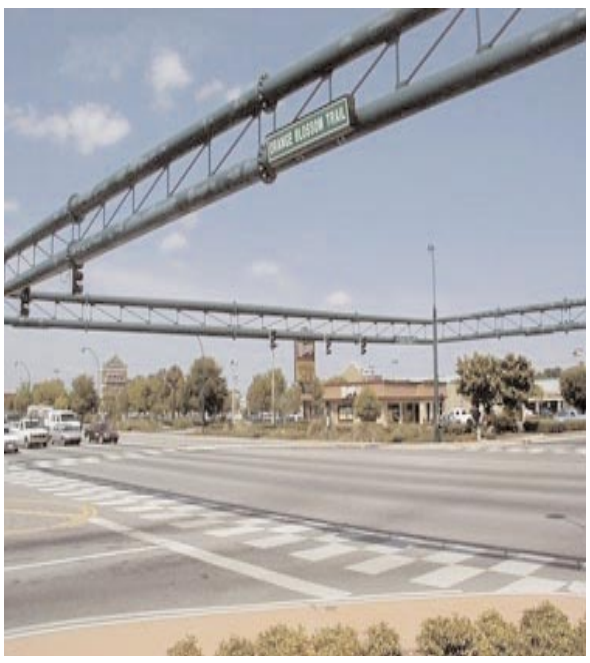
Shall be embossed with the Palms West Icon within etched rows arrayed vertically from top to bottom across the wall's surfaces. The etched row provides an analogy to the agricultural land construct of the district. This wall treatment to have anti-graffiti coatings. Coloration of wall to be neutral, off-white, beige or gray. Palms and shrubs should be incorporated in the placement of the sound walls for visual focus.



VI. URBAN DESIGN

Examples of design precursors in
Orlando, Florida
on Orange Blossum Trail-441.

FDOT PRECEDENTS



State Road 441

Palms West Corridor

VI. URBAN DESIGN

ARCHITECTURAL DETAILING

Architectural Detailing

Gazebos with Horse Race Spires for accents to illustrate the equestrian theme, additions of formally rows of Palms and seasonal color at Gateway structures and thresholds to linear park will illuminate the agricultural theme. These architectural elements can be used as focal points, pedestrian shelters and theme enhancing elements.

VI. URBAN DESIGN

For best practice in Urban nodes, Commercial Buildings “Big Box” should be sited near the street with parking located behind to urbanize this corridor and encourage corridor pedestrian usage.

BEST PRACTICE

Best Practice Design Criteria for roadway safety recommended by the Florida Department of Transportation requires clear sight lines at all intersections. This figure is based on urban roadways with a design speed of 45 miles per hour.Planting areas shall begin 4 feet from face of outside curb or 6 feet from edge of median traffic lane. Signage shall be 2 feet from face of curb and not block sidewalk. Light poles shall be 4 feet minimun from face of outside curb and 6’ from edge of median traffic lane. Median width shall be 19.5’ or greater for roadways with design speed of 45 miles per hour.

Access Management

Limit the number of driveways on high order streets. Right in and right outs are suggested, also limiting breaks in State Road 7/441to maintain even flow of traffic. Frontage roads can ameliorate traffic density for this traffic-impacted roadway. Interior access routes should be provided for passage from commercial to residential areas to also lessen *short trip* impact on main corridor. Full and directional median openings can be added for class 5 roads 1/4 mile from state roads, with or without signal. For class 3 roads 1/2 mile from stop bar back is recommended.

VI. URBAN DESIGN

RECOMMENDED ACTIONS

Overlay District

Create an Overlay district or Infill/redevelopment regulations. Eliminate base building line setback requirements. Allow for construction of new or expanded buildings in closer proximity to the road. The front set back could be reduced to a maximum of 15 -20’. For locations where application of recommended build-to line is not feasible, landscape and architectural features will provide continuity along the corridor

To instill coherent Urban Design elements. Parcel interconnectivity shall be encouraged via incentives such as density or intensity bonuses.

Access management strategies should be enacted with various incentives for the existing commercial and residential developments to retrofit. Joint drives and rear cross access routes are essential along this corridor.

Immediately discuss and define strategy for Palms West Corridor overpass structures, icons, intersections, lighting, flyovers, gateways and all urban design elements with the FDOT

Lastly, grants and other financial incentives to entice public and private investment in the corridor. Examples of which are TEA21 or the Transit Equity Act for the 21st Century.

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VI. URBAN DESIGN

Prepared for:

The Communities of
The Village of Royal Palm Beach,
The Village of Wellington,
The City of Greenacres.

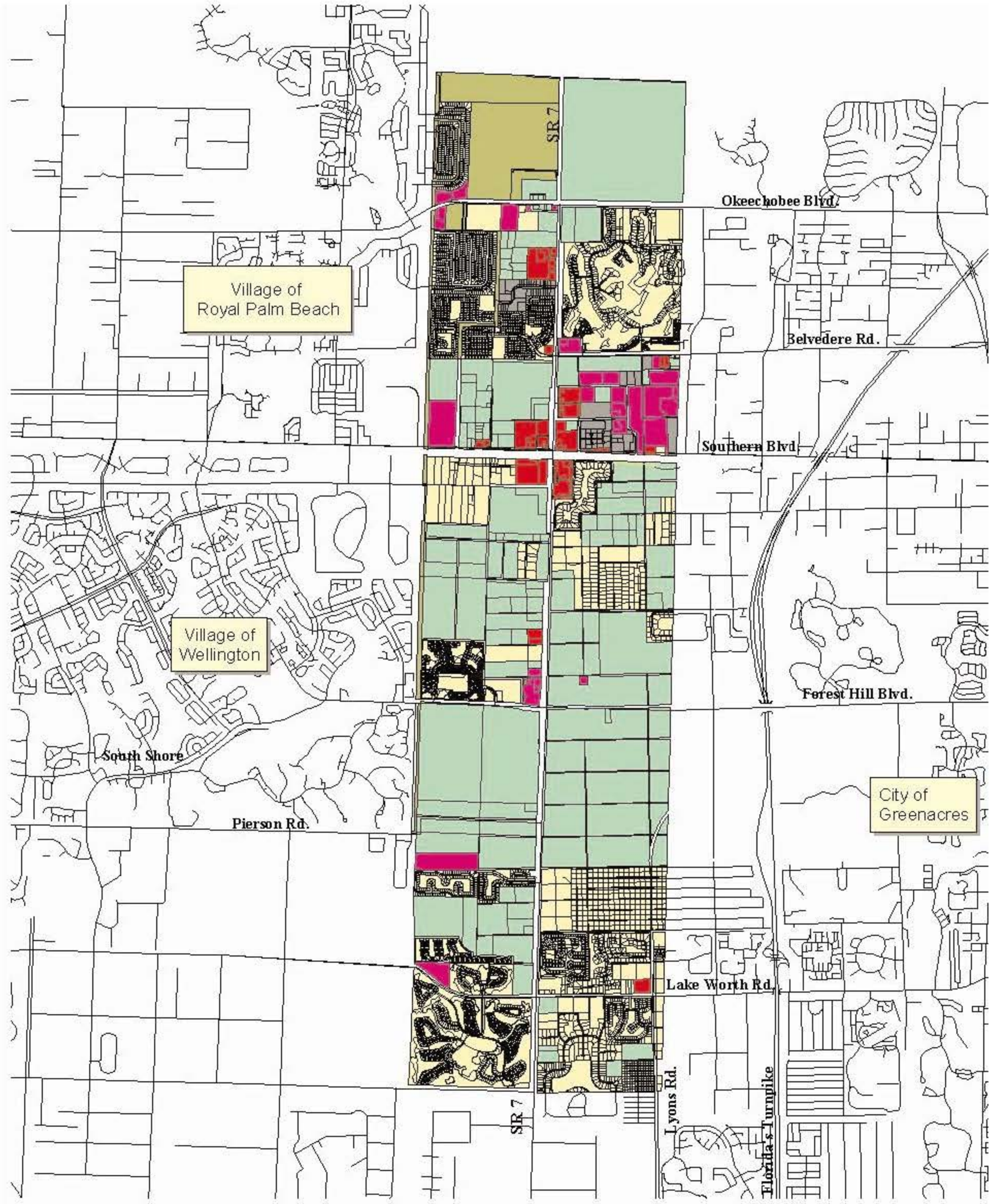
STATE ROAD 7/441

Skip Harvey P.E., Dale Siska AICP, Maria Tejera P.E., Regina Hagger APA,
Henry Iler, David Anderton, APA,and Carolyn Pendelton-Parker, MLA

PBS&J

Palms West Corridor

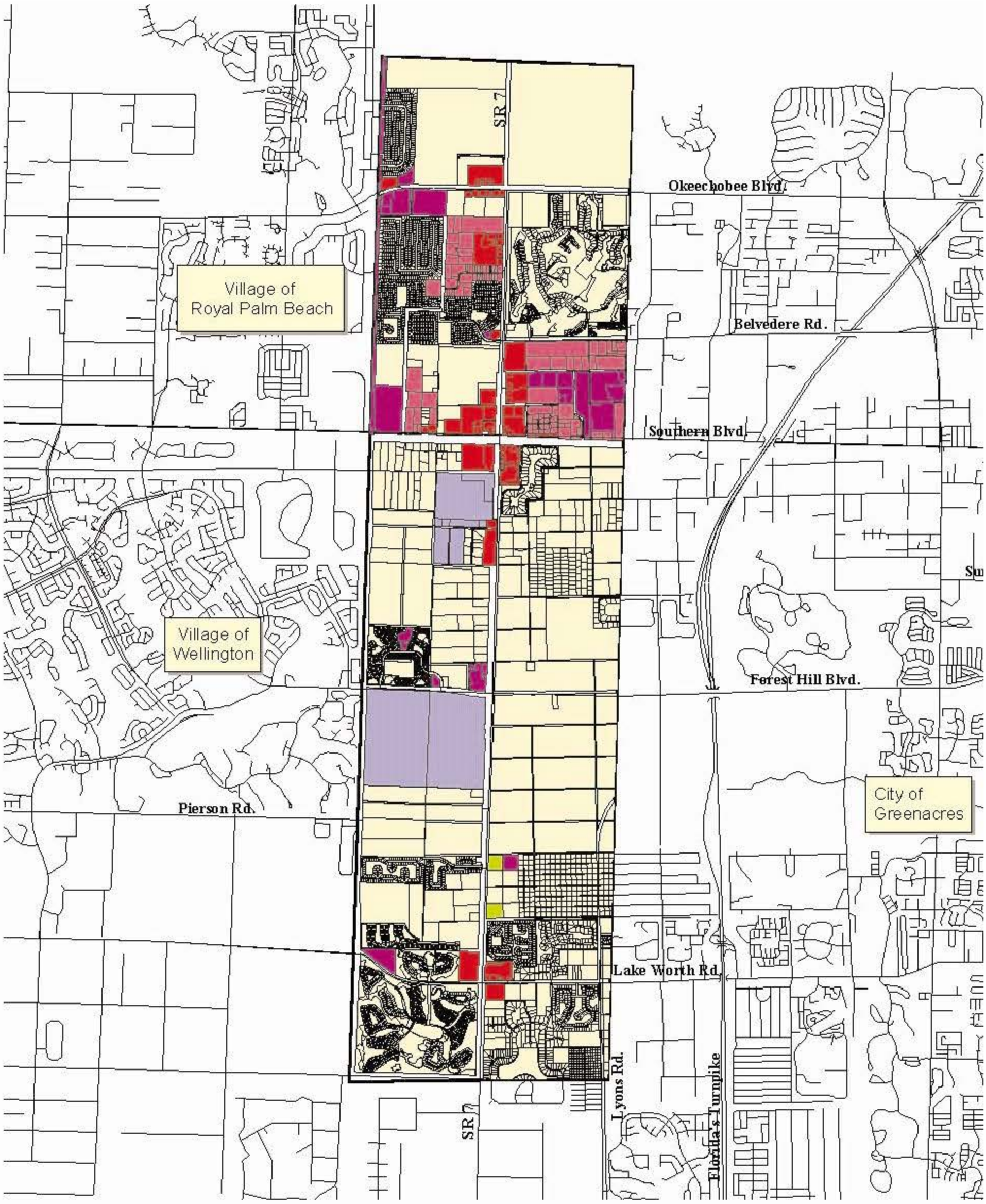
VII. APPENDIX - MAPS



Existing Land Use Map

PALMS WEST SR7/441 CORRIDOR STUDY

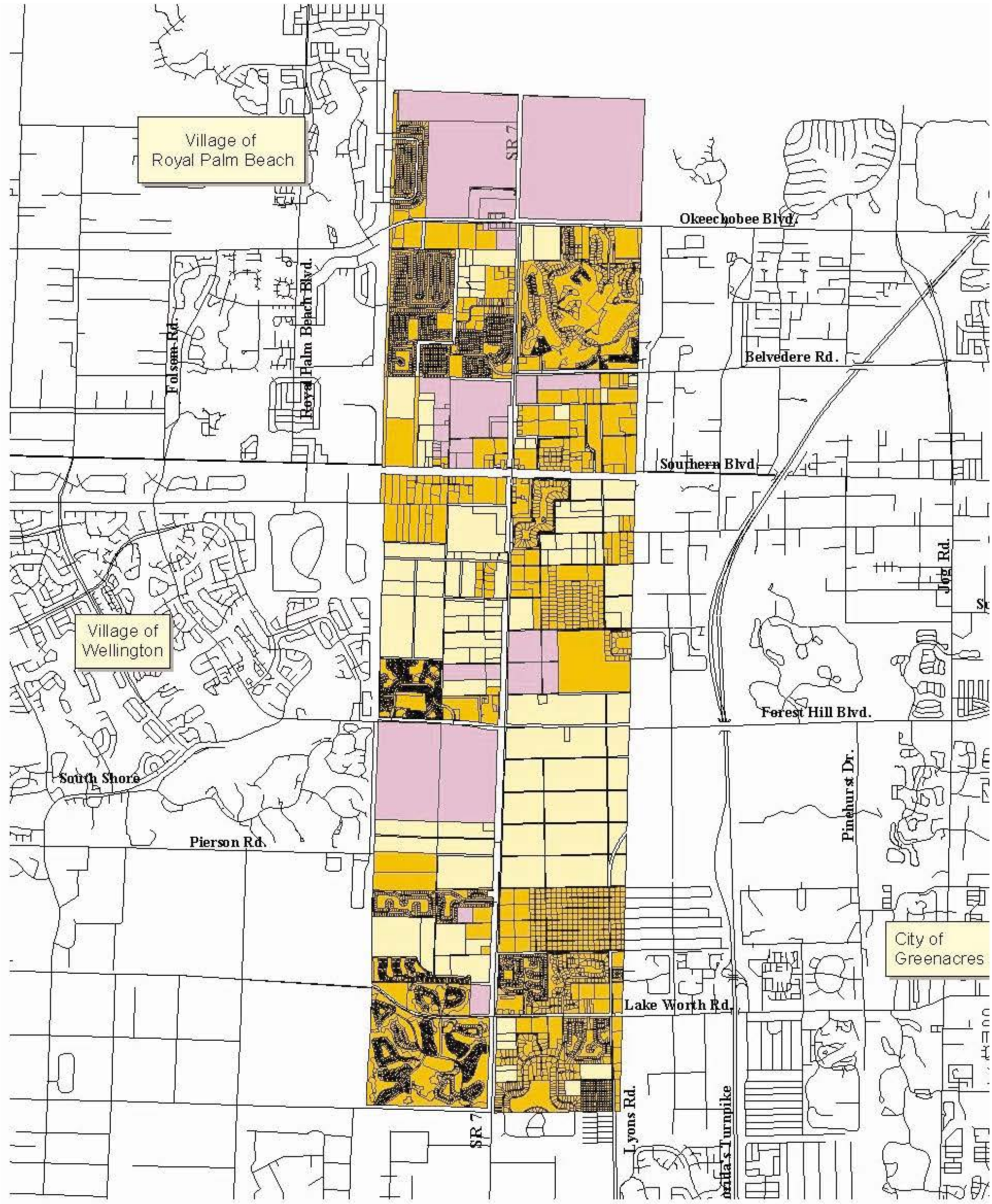
City of Greenacres | Village of Royal Palm Beach | Village of Wellington | 6/00



Future Land Use Map

PALMS WEST SR7/441 CORRIDOR STUDY

City of Greenacres | Village of Royal Palm Beach | Village of Wellington | 6/00



Committed Development Map

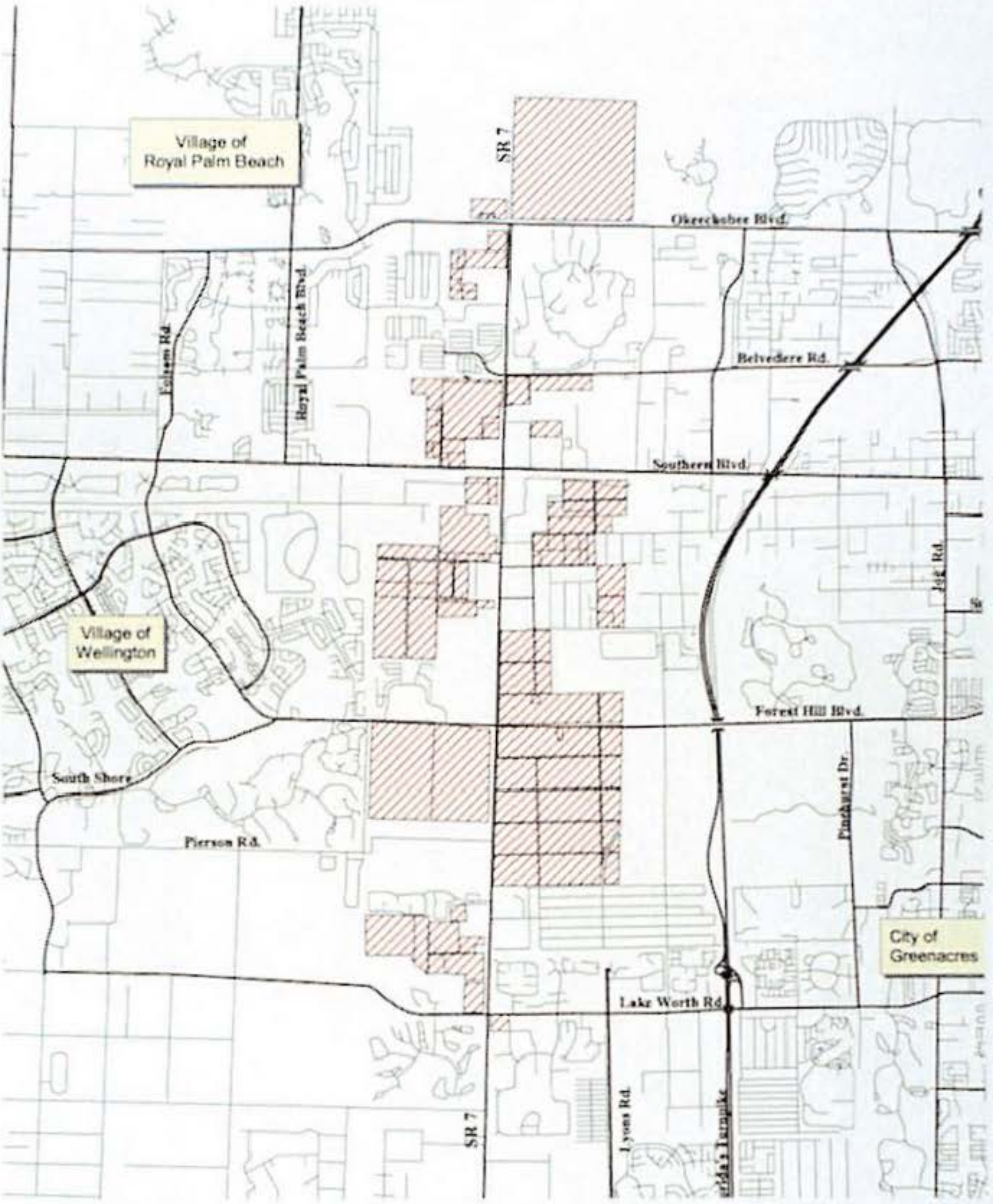
PALMS WEST SR7/441 CORRIDOR STUDY

City of Greenacres | Village of Royal Palm Beach | Village of Wellington | 6/00

VII. APPENDIX - MAPS

KEY TO PARCEL LISTINGS
COMMITTED DEVELOPMENT MAP

1. La Mancha – Residential 278 DU
2. Royal Palm Beach Park + Water Plant – Community Facility
3. Royal Palm Beach High School – Community Facility
4. Courtney Village Rental Apts. – 232 units
5. Regal Center - Retail
6. Royal Palm Business Park - Industrial
7. The Willows, First Addition 450 DU
8. Counterpoint Estates – 912 DU
9. Belgate Plaza - Retail
10. Cemetery – Our Lady Queen of Peace
11. Al Packer Ford - Commercial
12. Southern Center (Retail)
13. Lowe's Plaza (Retail)
14. Palm Beach Farms Ranchettes
15. Wellington Regional Medical Center
16. Polo Lakes Rental Apts. – 366 DU
17. Wellington's Edge
18. Wycliffe Golf & Country – 1045 DU
19. Whitehorse Residential PUD – 247 DU
20. Palm Beach Trap & Skeet Club
21. Legend Lakes Estates – 179 DU
22. The Hunt – 66 DU
23. Regency Lake – 160 DU
24. Tropical Country Estates
25. Woods Walk Plaza (Retail)
26. Woods Walk – 225 DU
27. Cypress Trace – 106 DU
28. Cypress Hammock
29. Palm Beach Ranchettes, Unit A
30. Banyan Lakes Golf Course
31. Banyan Estates
32. Whipporwill Lakes
33. Palm Beach Farms
34. Westwoods
35. Westen Plaza (Retail)
36. Target (Retail)
37. Jay's Business Corner - Retail
38. 95th Street Industrial Park
39. Palms Wellington Medical Center - Empty
40. Coral Sky Plaza (Retail)
41. Industrial Businesses: Fla Lawn & Garden, Marine Service, Gorman, Palm Beach Springs
42. Rinker Materials - Industrial
43. Florida Institute For Girls, PB Stockade, WPB and Atlantic Correction Centers
44. Palm Beach County Fairgrounds
45. West Central Transfer Station
46. Industrial Business (3) Tarmac, Fairgrounds, Auto Recycling, Magnum Soil Recyling
47. South Florida Water Mgmt. District Field Office
48. Business (4) Noland, Poma, SFWM District Office, and Vendors Outlet
49. Palm Beach Mounted Posse
50. Breaker's West – DU 601
51. Ranger Construction Mfg. Facility
52. Ranger Construction
53. Single Family Residence
54. Restaurant
55. Fox Property MUPD North of Okeechobee
56. Baywinds PUD
57. Fox Property MUPD South of Okeechobee
58. Residential Parcel – 175 MF units
59. Palm Beach Country West
60. Vacant Parcel
61. Sawgrass
62. Rubin/Lennar Residential
63. Rubin/Lennar Commercial
64. Vacant Industrial
65. Vacant Residential
66. Palms Wellington Medical Center
67. Anthony Groves (Commercial)
68. Anthony Groves (Residential)
69. 312 Clematis Professional Office
70. Ching Property
71. Vacant – AR + PO zoning
72. Rayside Excavation +15.4 acres residential sp except.
73. Vacant AR zoning
74. Wellington Glen Lakes
75. Minto Homes
76. Wellington Green Mall
77. Lanier
78. Kahlert
79. Victoria Lakes
80. Shoppes at Wycliffe
81. SR #7 MUPD
82. Black Diamond
83. Diamond C



LEGEND

Traffic Concurrency Roads

PBSJ

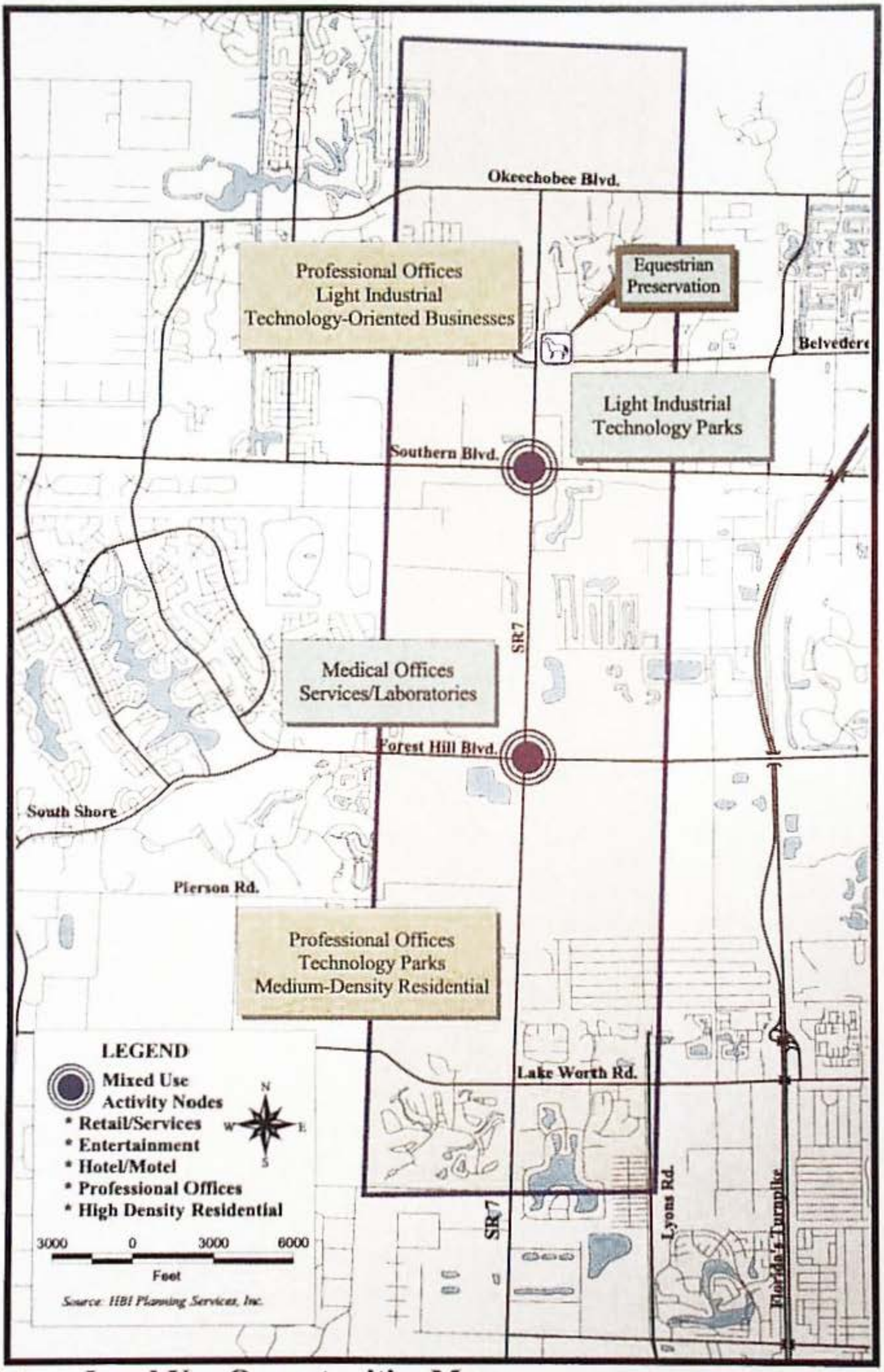
N W E S

3000 0 3000 6000 Feet

Traffic Concurrency

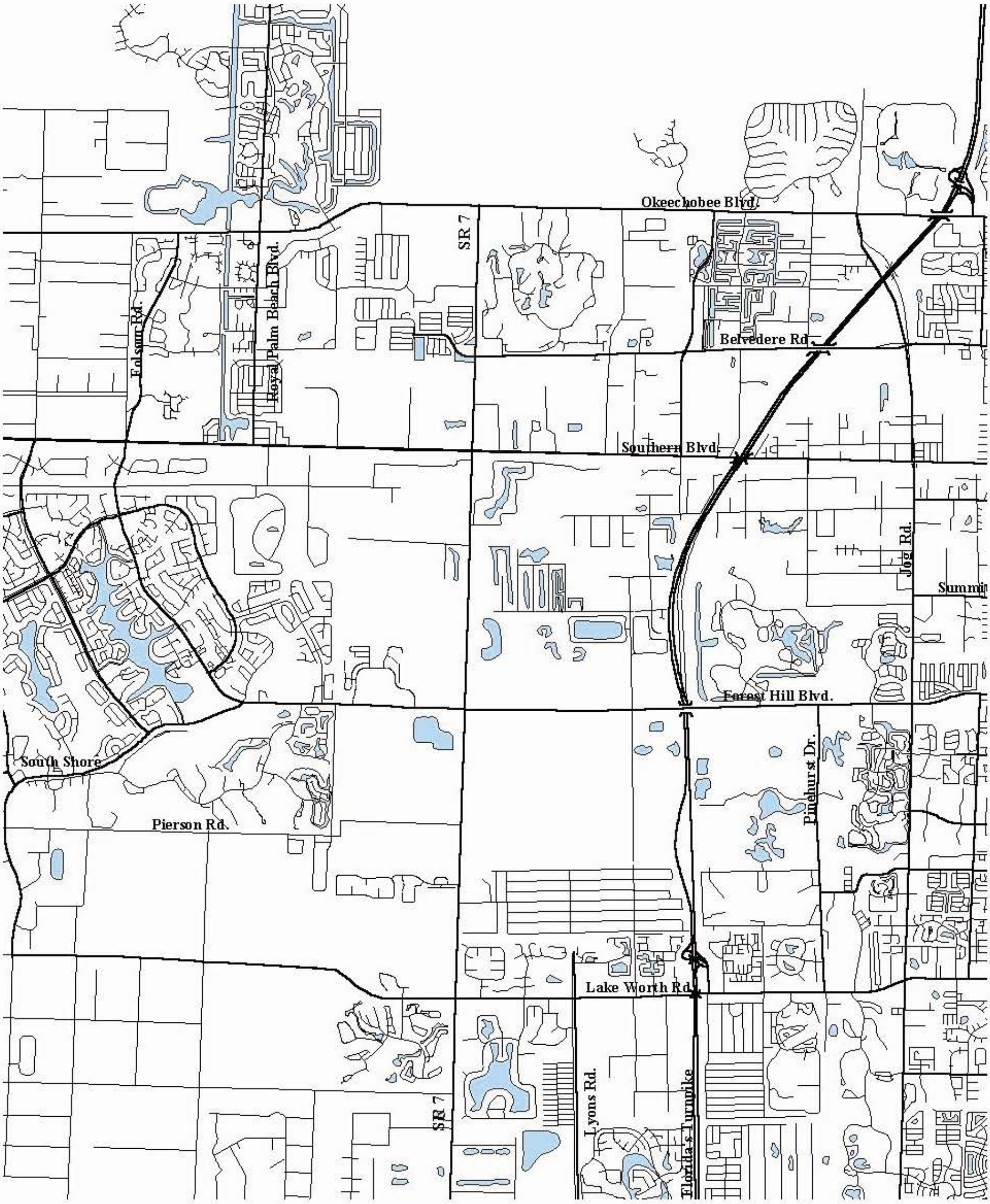
PALMS WEST SR7/441 CORRIDOR STUDY

City of Greenacres | Village of Royal Palm Beach | Village of Wellington | 6/00



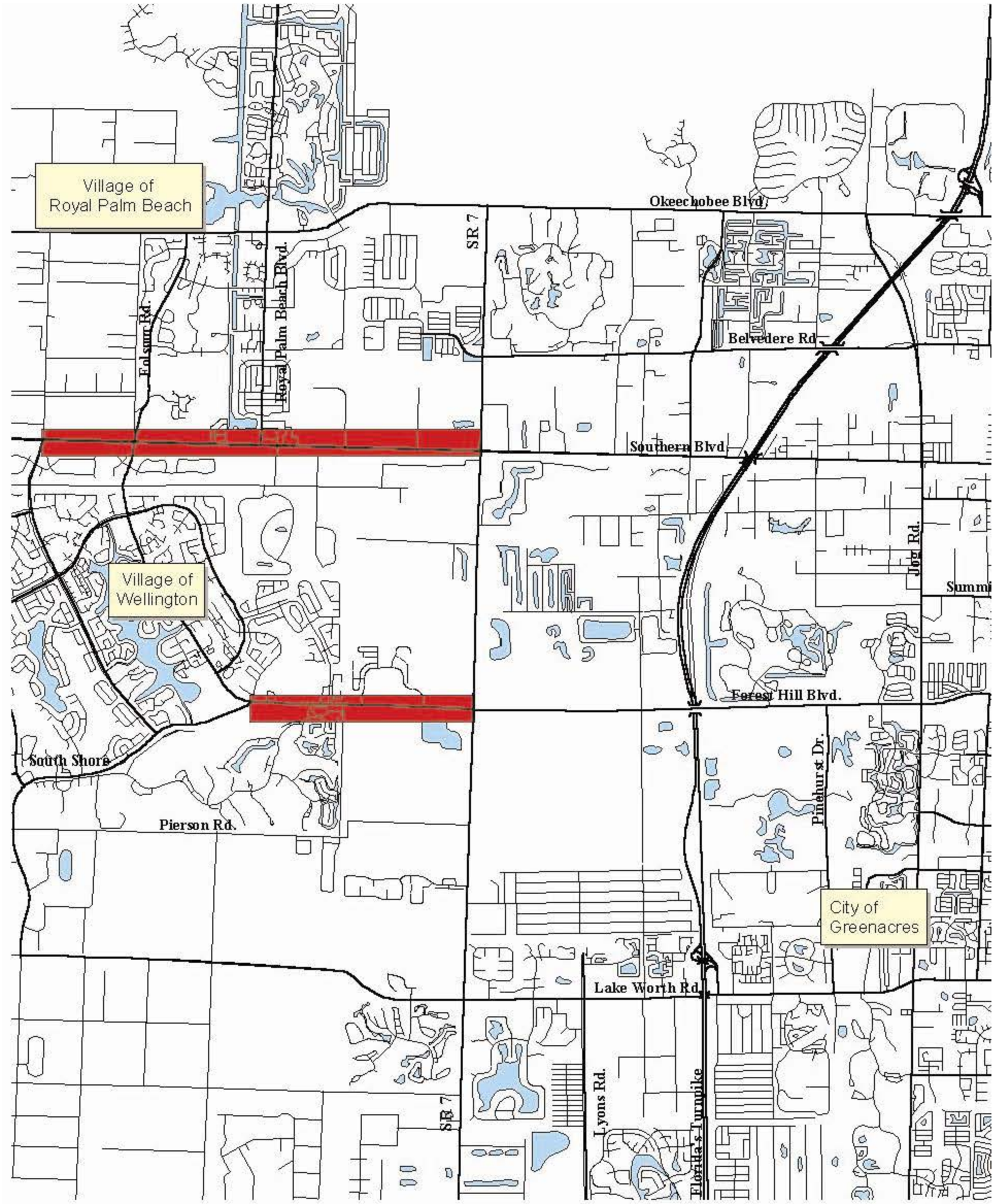
Future Land Use Opportunities Map

PALMS WEST SR7/441 CORRIDOR STUDY



Transportation Study Area
PALMS WEST SR7/441 CORRIDOR STUDY

City of Greenacres | Village of Royal Palm Beach | Village of Wellington | 6/00

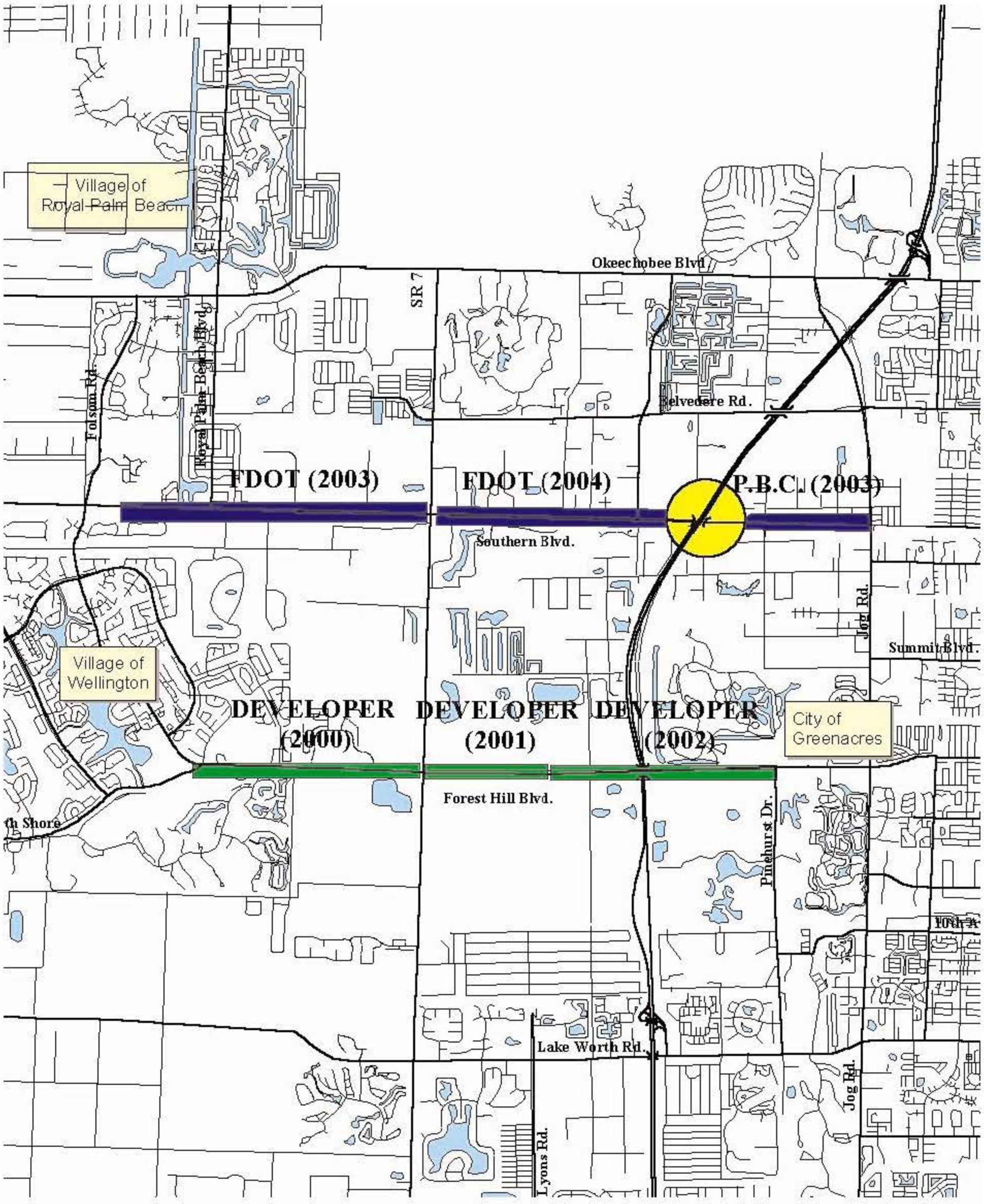


Roadways Exceeding Adopted Level of Service 1999

SOURCE: Palm Beach County Metropolitan Planning Organization

PALMS WEST SR7/441 CORRIDOR STUDY

City of Greenacres | Village of Royal Palm Beach | Village of Wellington | 6/00

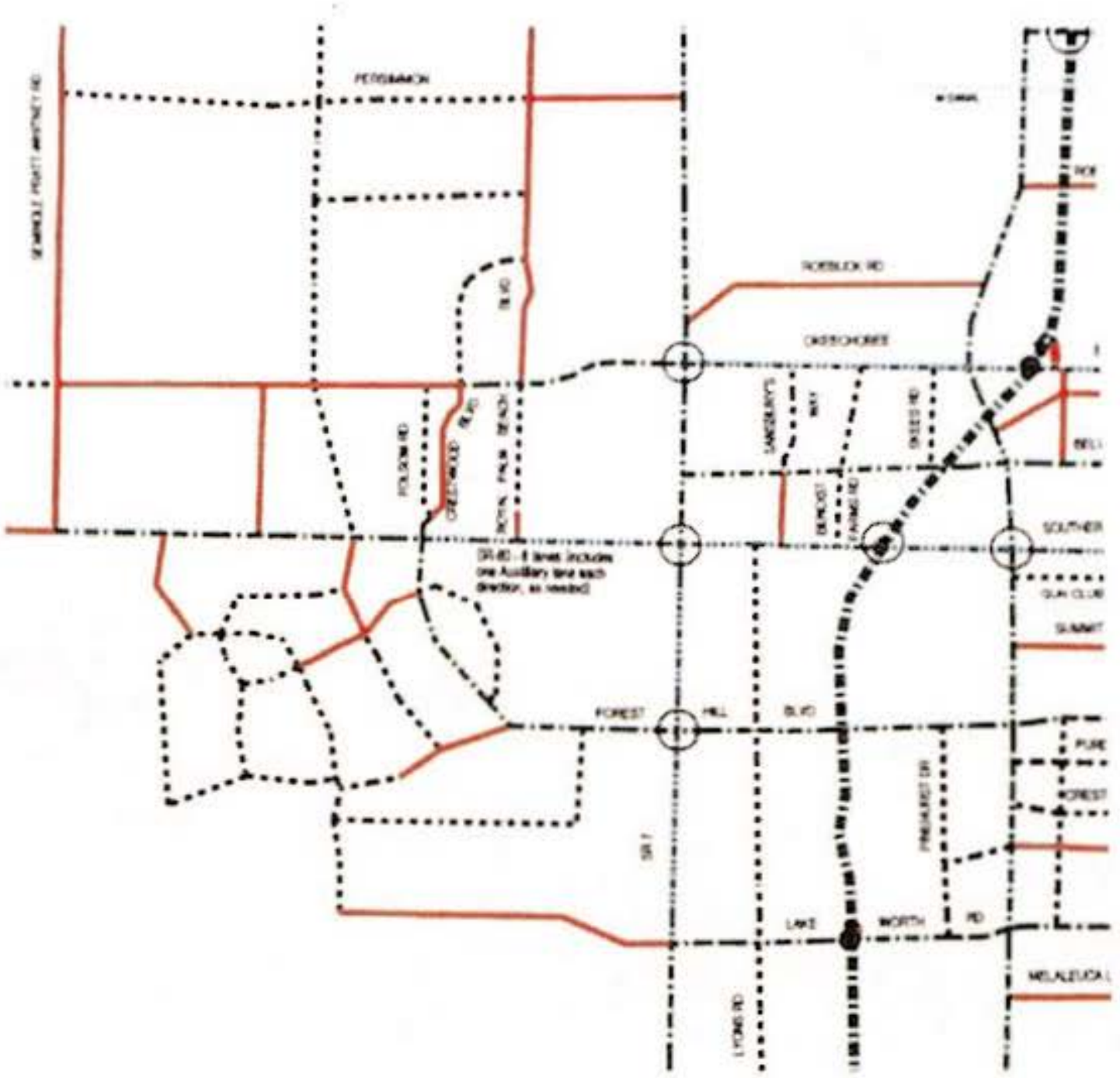


Planned Roadway Improvements (2000-2005)

SOURCES: 1.) FDOT 2001-2005 'Tenative' 5 Year Transportation Plan, 2.) Palm Beach County 5 Year Road Program Adopted 01/11/00, 3.) Wellington Greens DRI Development Order

PALMS WEST SR7/441 CORRIDOR STUDY

City of Greenacres | Village of Royal Palm Beach | Village of Wellington | 6/00



Legend

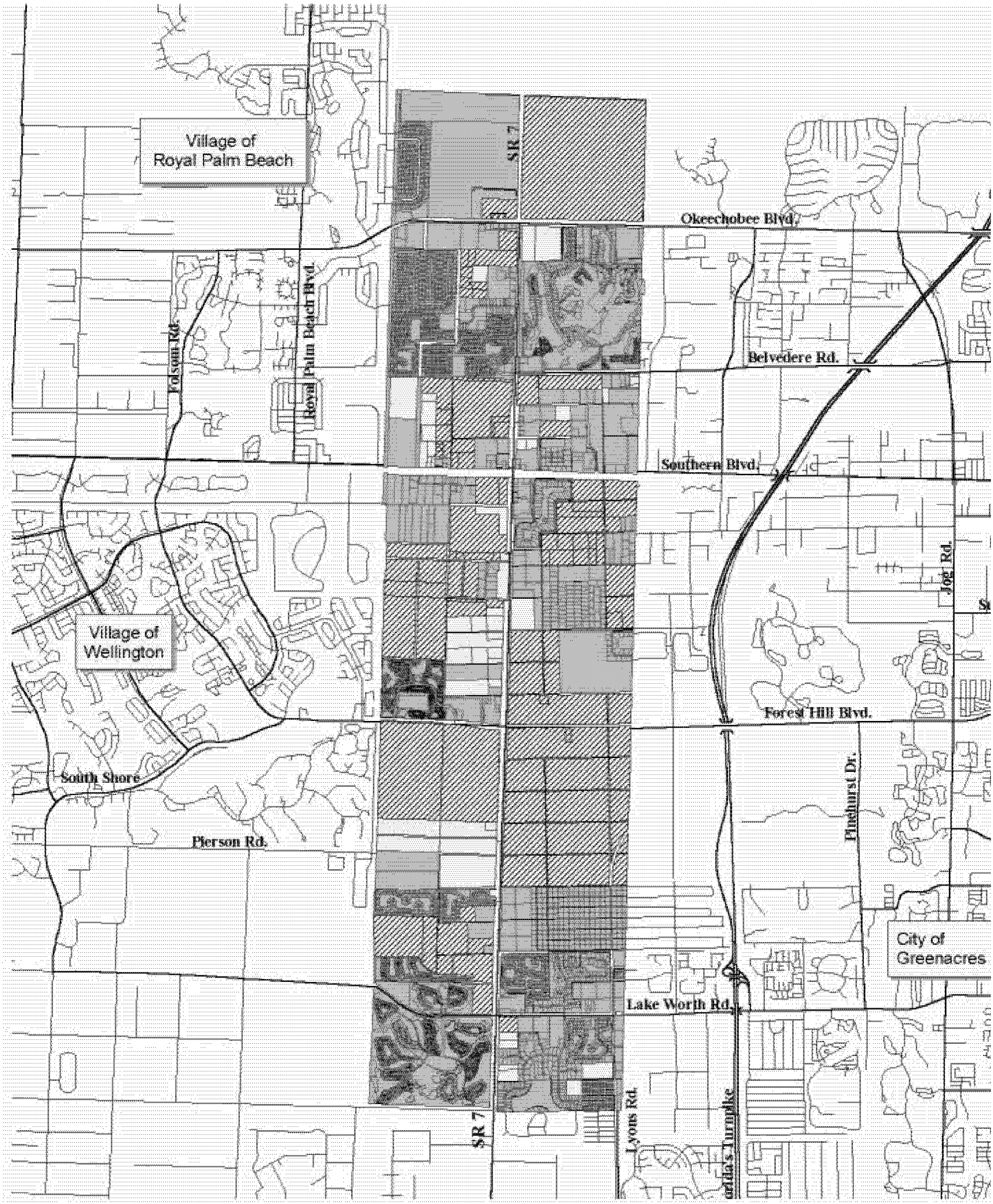
- 2 LANES
- 4 LANES
- 6 LANES
- 8 LANES
- 10 LANES
- INTERCHANGE
- PROPOSED INTERCHANGE

PBSJ

2020 Feasibilty Plan

PALMS WEST SR7/441 CORRIDOR STUDY

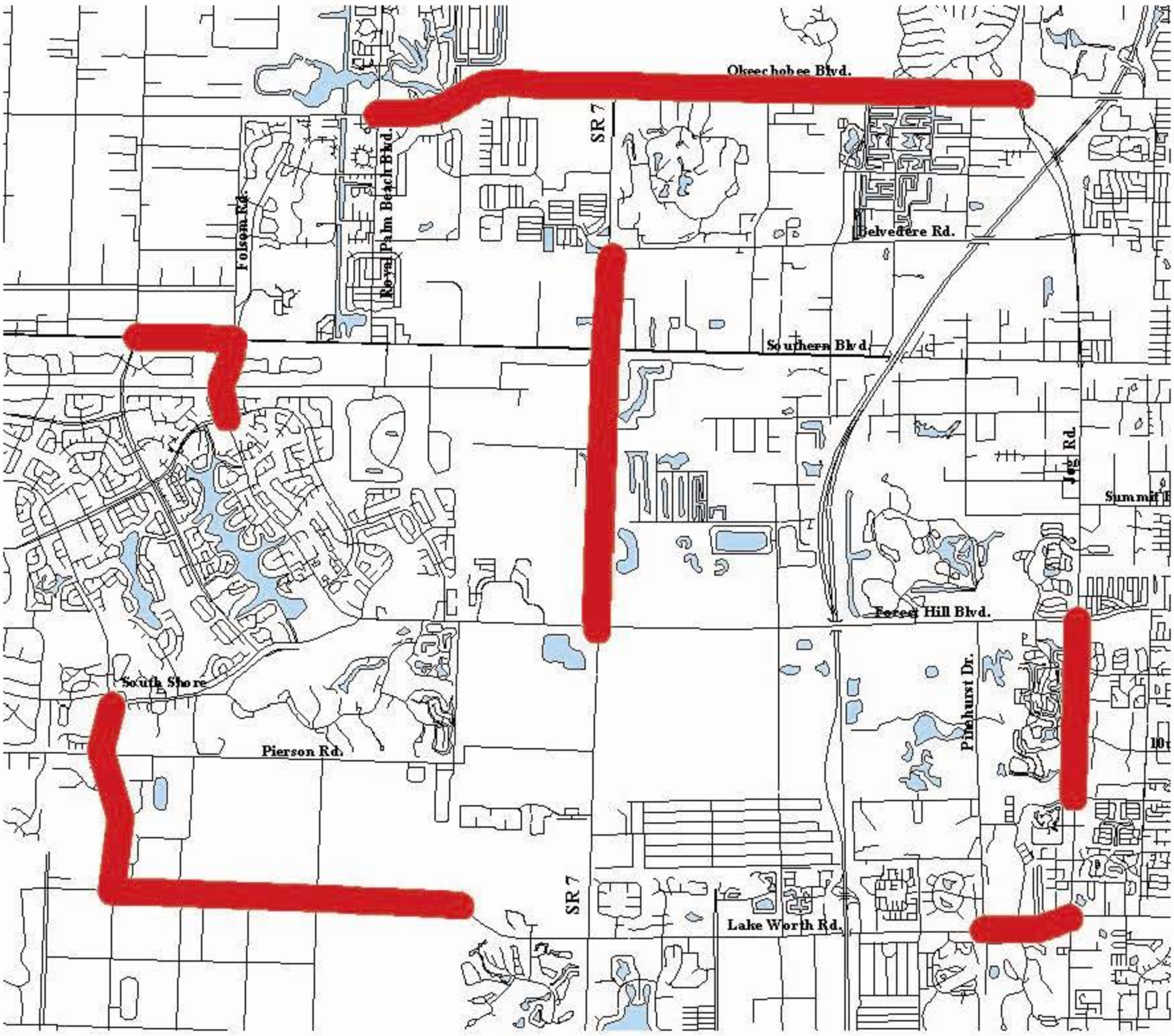
City of Greenacres | Village of Royal Palm Beach | Village of Welington | 6/00



Projects Approved for Traffic Concurrency Map

PALMS WEST SR7/441 CORRIDOR STUDY

City of Greenacres | Village of Royal Palm Beach | Village of Wellington | 6/00



Roadways projected to be over capacity in the year 2004 (Daily Traffic)
Roads

PBSJ

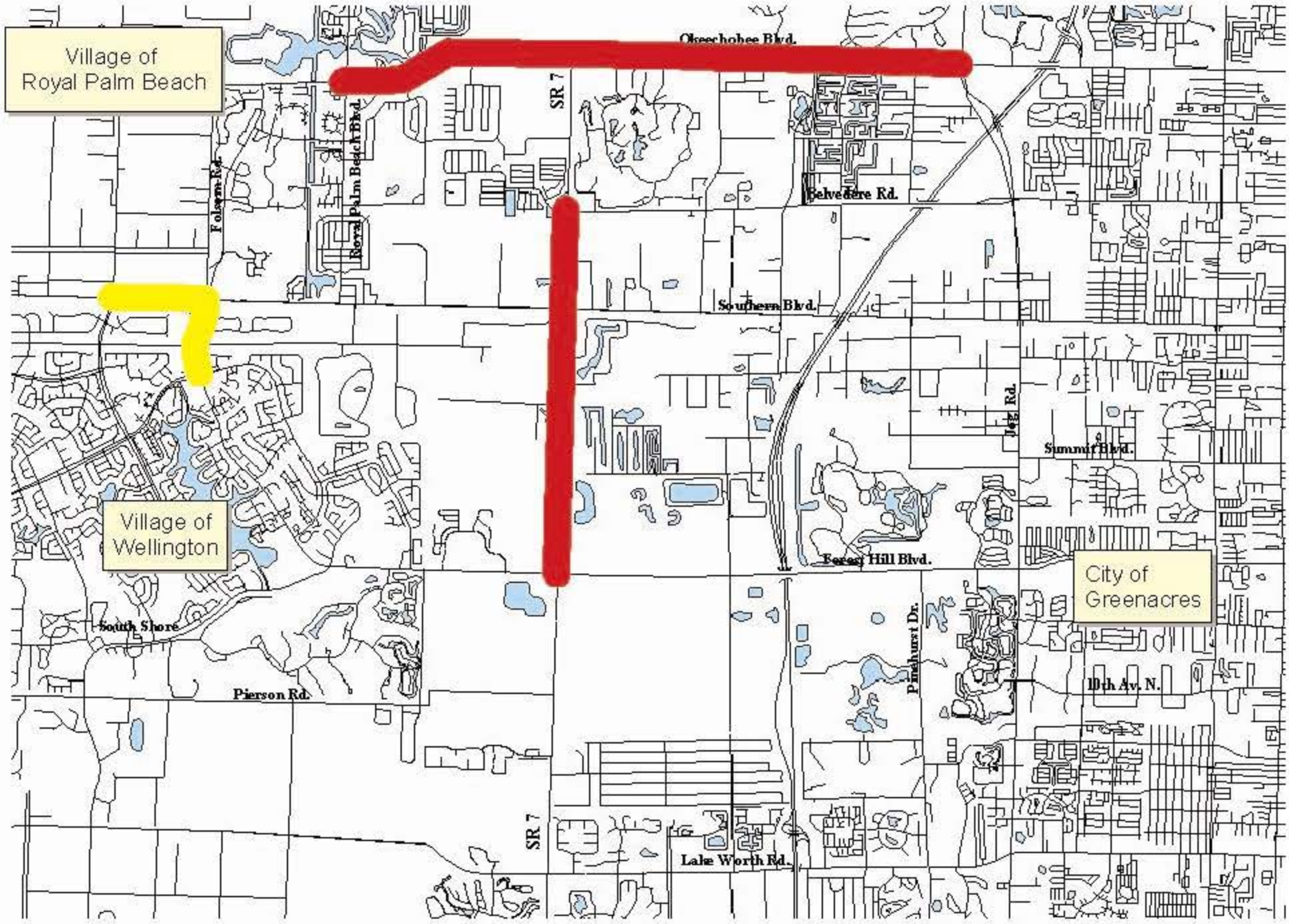
N
W E
S

4000 0 4000 8000 Feet

Over Capacity Roads 2004

PALMS WEST SR7/441 CORRIDOR STUDY

City of Greenacres | Village of Royal Palm Beach | Village of Wellington | 6/00



LEGEND

Roadway projected to exceed Palm Beach County T.P.S. in year 2004
Roadways which may exceed Palm Beach County T.P.S. in year 2004
Roads

PBSJ

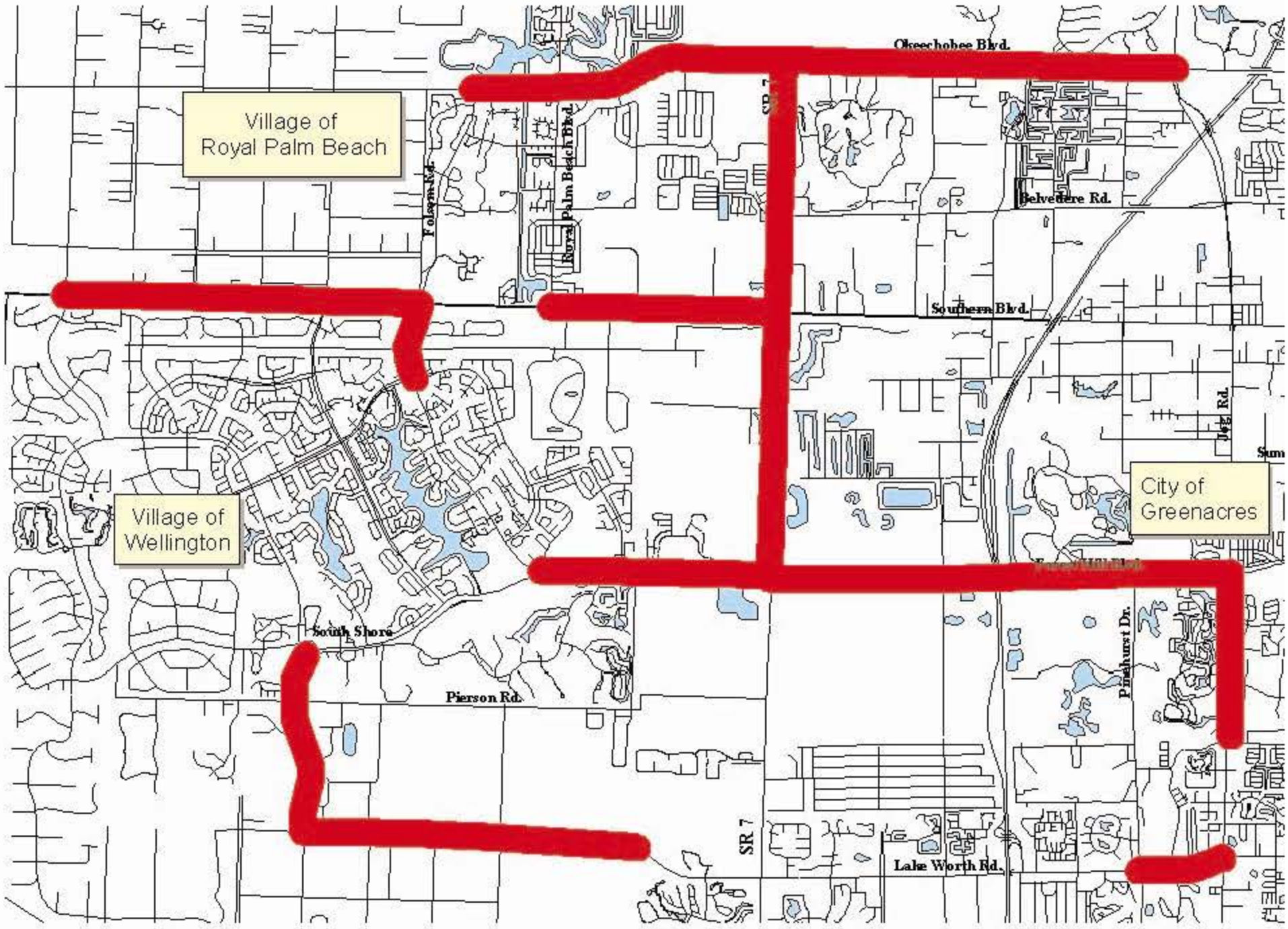
N
W E
S

4000 0 4000 8000 Feet

Palm Beach County Traffic Performance Standards (2004)

PALMS WEST SR7/441 CORRIDOR STUDY

City of Greenacres | Village of Royal Palm Beach | Village of Wellington | 6/00



LEGEND

Roadways projected to be over capacity in the year 2009 (Daily Traffic)
Roads

PBSJ

N
W E
S

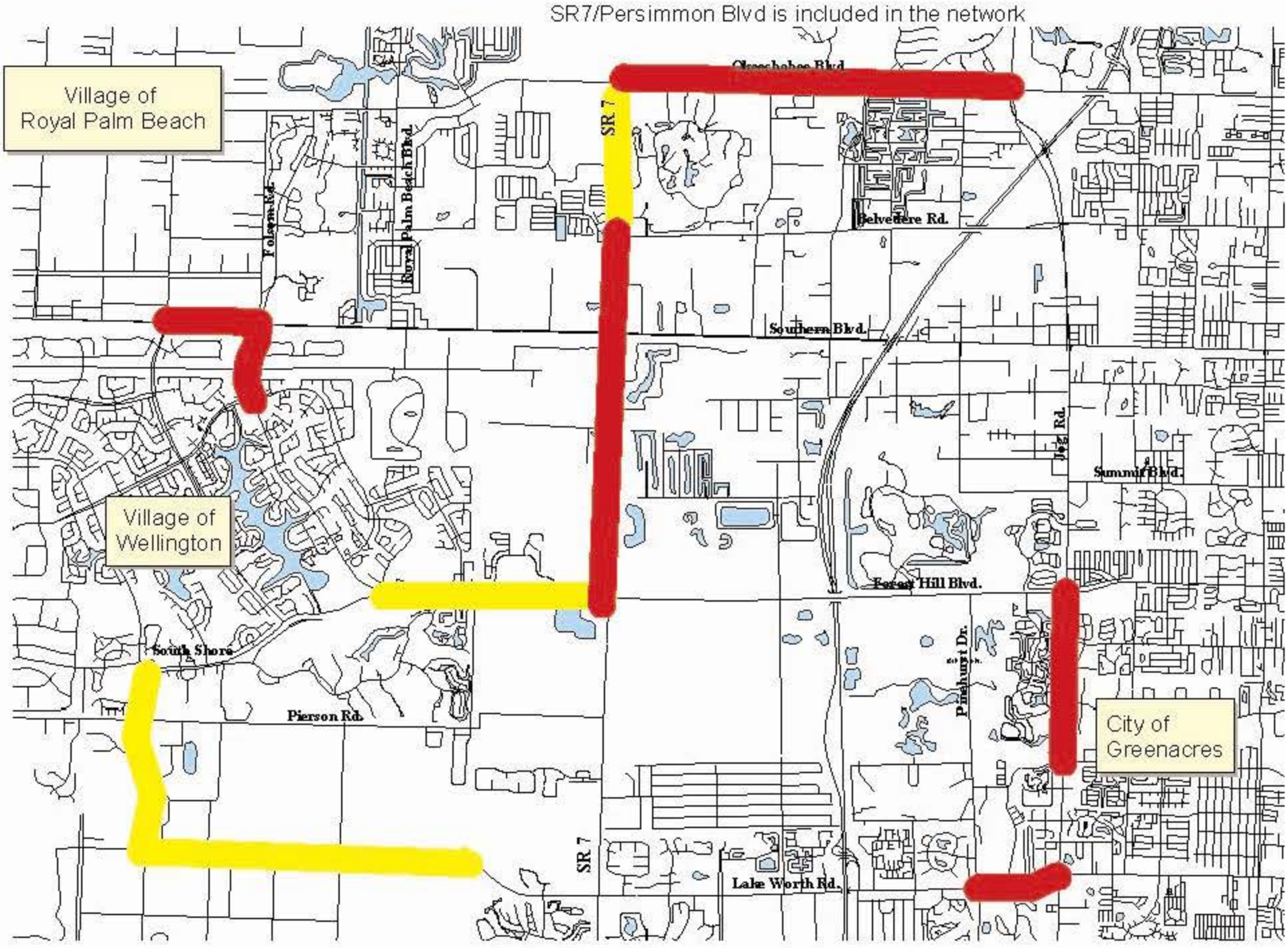
4000 0 4000 8000 Feet

Over Capacity Roads 2009 (Daily Traffic)

PALMS WEST SR7/441 CORRIDOR STUDY

City of Greenacres | Village of Royal Palm Beach | Village of Wellington | 6/00

SR7/Persimmon Blvd is included in the network



LEGEND

Roadway projected to exceed Palm Beach County T.P.S. in year 2009
Roadway may exceed Palm Beach County T.P.S. in year 2009
Roads

PBSJ

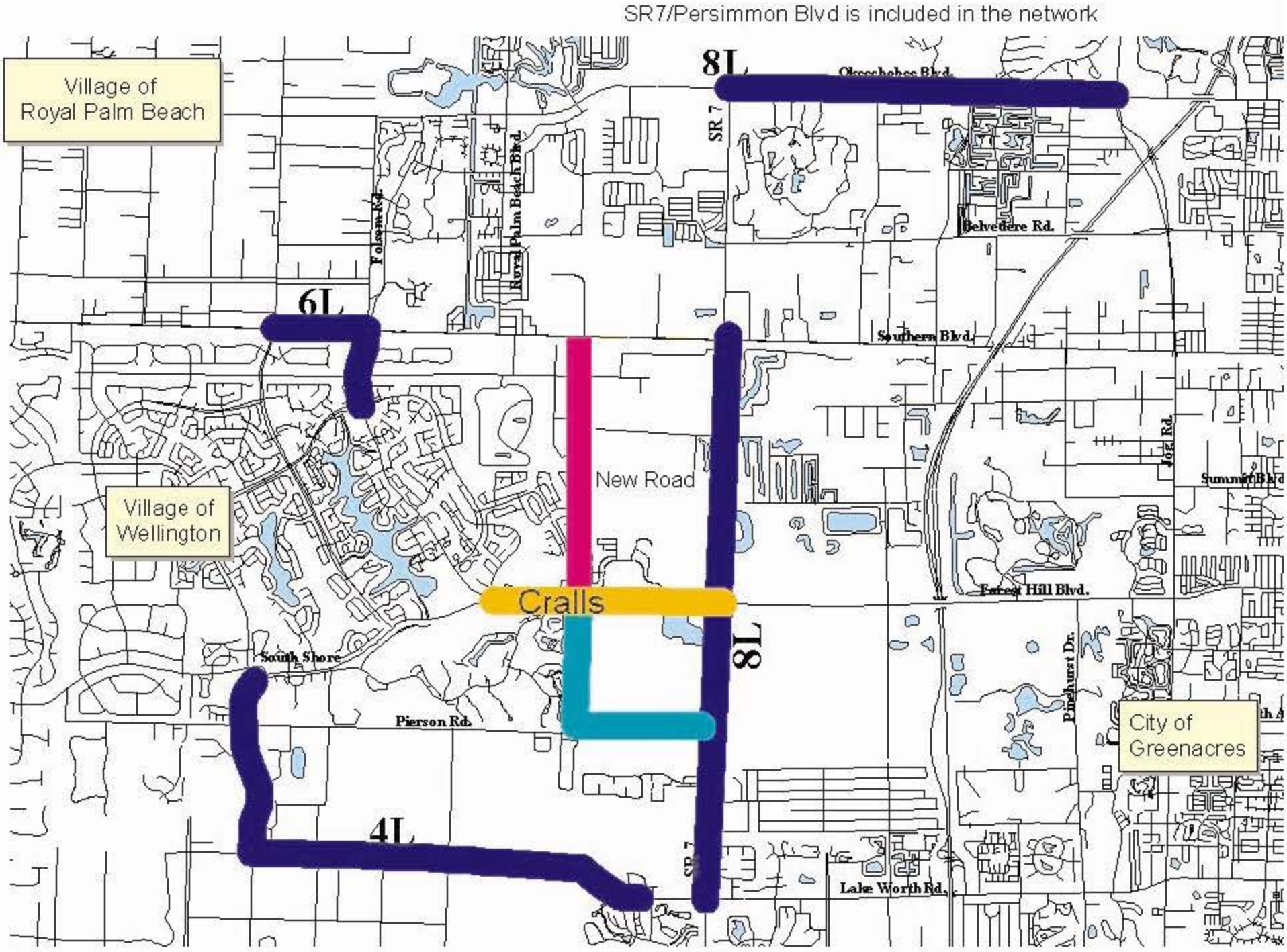
N
W E
S

4000 0 4000 8000 Feet

Palm Beach County Traffic Performance Standards (2009)

PALMS WEST SR7/441 CORRIDOR STUDY

City of Greenacres | Village of Royal Palm Beach | Village of Wellington | 6/00



LEGEND

- Widen Road
- Cralls
- By-Pass Road
- New Road
- Roads

PBSJ

N W E S

4000 0 4000 8000 Feet

Recommendations

PALMS WEST SR7/441 CORRIDOR STUDY

City of Greenacres | Village of Royal Palm Beach | Village of Wellington | 6/00