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February 27, 2002

Jim Mudd, Principal Planner
Lee County Department of Community Development
P.O. Box 398
Fort Myers, Florida 33902-0398

RE: GREATER PINE ISLAND COMMUNITY PLAN UPDATE
– RESPONSE TO REVIEWER'S COMMENTS –

Dear Mr. Mudd:

Thank you for forwarding the comments you have received on the Greater Pine Island Community Plan. I would like to offer the following responses to these comments:

Lee County Utilities (Ivan Velez, 11/8/01):

Mr. Velez notes that the implementation of Policy 14.1.7 on page 37 is beyond their current staffing levels, and suggests the Health Department as a more likely implementing agency. We would not object to that assignment of responsibility.

Division of Natural Resources (Roland Ottolini, 11/28/01):

Mr. Ottolini notes the absence of funding for implementing Policy 14.1.7 and also suggests the Health Department as "better suited" for this assignment. In previous discussions with the Health Department on this matter, their officials noted the availability of grants to pay for this type of investigation. Apparently the Health Department had previously been awarded such a grant but was unable to use it because of a lack of cooperation by property owners in their target area. There are many many hundreds of canalfront lots on Pine Island, so the chance of finding cooperation from at least some property owners on Pine Island is very high.

Health Department (Dr. Judith Hartner, 2/4/02):

Protecting Aquatic Preserves from Runoff, page 34:

We appreciate the positive comments about the 50-foot vegetated buffer.

Because the stormwater collection system in Greater Pine Island is so rudimentary (where it exists at all), we concur that retrofit measures may be warranted, and would be especially useful along the waterfront where stormwater runs almost directly into canals and the estuary.

Septic Tanks Along Canals, page 36:

We feel confident that new and replacement septic tanks are being required to meet the best standards ever, and that observed problems are likely to result from poor maintenance and the other causes cited in these comments. Thus this plan does not advocate central sewer systems as necessarily the solution to septic tank problems, but instead suggests a moderate approach based on technical analyses prior to considering corrective measures.

As noted in these comments, it is difficult to identify the source of enteric bacterial contaminants in marine waters; that is the reason this plan suggests the use of dyes or viral tracers which can quickly establish whether a group of older septic tanks are functioning properly. We agree that merely noting the presence of fecal coliform in our canals does little to identify the source or point to remedies.

Since this plan was prepared, the Greater Pine Island Civic Association has hosted a community presentation from the Health Department on septic tank maintenance, and is jointly working on a pilot survey of the age of septic tanks in older canalfront neighborhoods in Bokeelia and St. James City. We hope this survey will help the Health Department (or whichever other county agencies may be involved) to meet the new Policy 14.1.7 to “design a program within one year to assess the condition of septic tank drainfields along saltwater canals in St. James City, Bokeelia, and Flamingo Bay.” This is a modest goal, since the program only needs to be *designed* within one year, but we hope this program will become the foundation for addressing this difficult problem. We believe that potential resistance by property owners will be minimized by having this investigation result from a community proposal, rather than being an initiative of a utility provider which would inevitably be perceived as having a vested interest in one outcome.

Division of Public Safety (John Wilson, 11/13/01):

This comprehensive plan update was completed prior to the release of the 2001 Southwest Regional Hurricane Evacuation Study, although its primary author Dan Trescott generously provided the technical analysis upon which this plan is based. Apparently the final version of the Evacuation Study calculates evacuation times in a slightly different way. However, we do not know at this time whether these changes in methodology will cause local and regional policy standards to be revised in the same direction; if that comes to pass, it is possible that some statements on page 5 may no longer be accurate. However, it is clear that the current evacuation

capabilities are dismal and are steadily worsening, and as noted in Mr. Wilson's comments, the year 2000 methods that were used in this comprehensive plan update are not incorrect and are suitable for the purposes of defining and maintaining public policy.

Department of Transportation (David Loveland, 11/26/01):

Policy 14.2.3, page 6:

Mr. Loveland suggests that the language in the current Lee Plan regarding a continuous third lane through Matlacha need not be retained, given the analysis in this plan update and the opposition of the Matlacha Civic Association to adding a third lane through Matlacha. We would have no objection to deleting this language from the current Lee Plan, which would result in Policy 14.2.3 reading as follows (the new deletion is indicated here with shadowed text):

POLICY 14.2.3: In addition to the enforcing the restrictions in the Policy 14.2.2, the county shall take whatever additional actions are feasible to increase the capacity of Pine Island Road. The following measures shall be evaluated:

- The construction of left-turn lanes at intersections with local roads in Matlacha, ~~or a continuous third lane.~~
- Improvements to Burnt Store Road and Pine Island Road to the east of Burnt Store that will prevent premature closure of those roads during an evacuation, closures which now limit the number of Greater Pine Island and Cape Coral residents able to evacuate.

Development Limitation Standard, pages 7-10:

DOT staff feels that the legal defensability of the 810/910 standards would be stronger if a more sophisticated technical analysis were undertaken. We agree, and had intended to do so ourselves, but were daunted to find out that much of the input data that is required to use the most up-to-date method correctly is simply not available. We chose not to use that method in the absence of essential input data that accurately describes Matlacha conditions, such as free flow speed, peak-hour characteristics of traffic flow, and adjusted saturated flow rates.

We would be pleased if Lee County were to undertake this analysis at its most sophisticated level; it was simply beyond the budget of the community planning process and not essential for supporting a policy that has already been in force for a dozen years.

These comments suggest that Policy 14.2.2 would be clearer if the *origin* of the 810 and 910 figures were described (as 80% and 90% of the LOS "D" capacity as calculated using the 1965 *Highway Capacity Manual*). When Lee County first adopted this policy in 1989, it proposed exactly this approach, providing the formula for the computation rather than the result. However, DCA formally objected, insisting that the results of the computations, rather than the formula, be placed in the policy, to avoid confusion that might be caused in the future by changes in methodology. This policy was thus amended as a result of the 1989 settlement agreement. (Neither the amendment nor the original policy were well-documented until the preparation of this plan update.)

We would have no objection if the two methods were merged at this time, which would result in the following language (new changes are indicated here with shadowed text):

POLICY 14.2.2: In order to recognize and give priority to the property rights previously granted by Lee County for about ~~6,675~~ 6,800 additional dwelling units, the county shall keep in force effective ~~consider for adoption~~ development regulations which address growth on Pine Island and which implement measures to gradually limit future development approvals. ~~The effect of These~~ regulations shall ~~would be to appropriately~~ reduce certain types of approvals at established thresholds prior to the capacity of Pine Island Road ~~adopted level-of-service standard~~ being reached, measured as follows at the permanent count station on Little Pine Island at the western edge of Matlacha:

- When traffic on Pine Island Road ~~between Burnt Store Road and Stringfellow Boulevard~~ reaches 810 peak hour, annual average two-way trips, the regulations shall ~~provide restrictions~~ on further rezonings which would increase traffic on Pine Island Road: through Matlacha. These regulations shall provide reasonable exceptions for minor rezonings on infill properties surrounded by development at similar intensities and those with inconsequential or positive effects on peak traffic flows through Matlacha, and may give preference to rezonings for small enterprises that promote the nature and heritage of Greater Pine Island.
- When traffic on Pine Island Road ~~between Burnt Store Road and Stringfellow Boulevard~~ reaches 910 peak hour, annual average two-way trips, the regulations shall ~~provide restrictions~~ on the further issuance of residential development orders to one-third the maximum density otherwise allowed on that property. (pursuant to the Development Standards Ordinance), or other measures to maintain the adopted level of service, until improvements can be made in accordance with this plan.

The 810 and 910 thresholds were based on 80% and 90% of level-of-service "D" capacity calculated using the 1965 Highway Capacity Manual, as documented in the 2001 Greater Pine Island Community Plan Update.

These development regulations may provide exceptions for legitimate ongoing developments to protect previously approved densities for final phases that have a Chapter 177 plat or site-plan approval under Ordinance 86-36.

Bike Paths, pages 22–23:

Mr. Loveland's comments take issue with the second and third sentences of proposed Policy 14.2.4, which this plan update proposes as follows:

POLICY 14.2.4: The county shall make every effort to continue extending the bicycle path to run the entire length of Stringfellow Road. Wherever possible, this path should be designed as a major public amenity, not as an afterthought. Where needed to provide a high-quality bicycle path, power poles and swales should be relocated to avoid unnecessary jogs in the bike path.

It is apparent from Mr. Loveland's comments that this wording did not properly convey our intentions as to what constitutes a "high quality" bicycle path. Lee DOT's improved design for the most recent segment of the Stringfellow path demonstrates the very characteristics that are encouraged by this plan update – fewer jogs, minimal use of unsightly concrete walls and metal railings, and placing the path *over* an enclosed drainage system where there isn't enough right-of-way to keep them side by side. Revised wording is suggested below, with changes indicated with shadowed text):

Mr. James Mudd
February 27, 2002
Page 5 of 5

POLICY 14.2.4: The county shall make every effort to continue extending the bicycle path to run the entire length of Stringfellow Road. Wherever possible, this path should be designed as a major public amenity similar to the high-quality design used for the bicycle path north of Pineland that was completed in 2001. ~~, not as an afterthought. Where needed to provide a high-quality bicycle path, power poles and swales should be relocated to avoid unnecessary jogs in the bike path.~~

Please contact me if you have any other questions or concerns on these proposed Lee Plan amendments.

Sincerely,

William M. Spikowski, AICP

ATTACHMENTS – COMMENTS FROM:

- Lee County Utilities (Ivan Velez, 11/8/01)
- Division of Natural Resources (Roland Ottolini, 11/28/01):
- Health Department (Dr. Judith Hartner, 2/4/02)
- Division of Public Safety (John Wilson, 11/13/01)
- Department of Transportation (David Loveland, 11/26/01)

COPIES TO:

- Greater Pine Island Civic Association
- Matlacha Civic Association
- Ivan Velez
- Roland Ottolini
- Dr. Judith Hartner
- John Wilson
- David Loveland

From: Ivan Velez
To: Mudd, James
Date: 11/8/01 4:14PM
Subject: Greater Pine Island Community Plan Update

The following are comments from the Utilities Division with respect The G.P.I. Community Plan:

Septic Tanks Along Canals (page 36)

1. Appears that some of the statements made at the last paragraph of page 36 are based on perception and not in facts.

2. **Getting There:** The Utilities Division is not staffed and cannot execute the duties that must be added by implementing the modifications suggested to the Policy 14.1.7.

The Lee County Health Department is charged with some of the duties related to septic tanks and permit requirements.

S. Ivan Velez, P.E.
Prof. Engineer III
Lee County Utilities
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velezsi@leegov.com

CC: Diaz, Rick; Wegis, Howard

From: Roland Ottolini
To: Mudd, James
Date: 11/28/01 2:28PM
Subject: Greater Pine Island Community Plan

modification to Policy 14.1.7 requires Lee County to develop a program to assess the impacts of septic systems on water quality for Pine Island and identify corrective measures (if needed) , within one year. Such an effort will require additional funding. This work may be better suited to the Health Dept. as they are the ones who are permitting the septic systems.

Roland Ottolini
Division Director, Natural Resources
ottolire@leegov.com
phone: (941) 479-8127
fax: (941) 479-8108

CC: Pellicer, Tony

February 4, 2002

Mr. Jim Mudd, Principal Planner
Department of Community Development
P.O. Box 398
Ft. Myers, Florida 33902-0398

Dear Mr. Mudd,

Thank you for your letter of January 22, 2002 requesting the Lee County Health Departments review of the draft community plan for Greater Pine Island. A review and comments have been made by members of our Environmental Health Section of those parts of the plan you have flagged.

Protecting Aquatic Preserves from Runoff page 34

The Lee County Health Department recognizes the importance of environmental issues associated with the sensitive wetland zones on Pine Island serving as habitat for aquatic and wetland-dependent wildlife and vegetative species. The proposed 50 foot vegetated buffer separating new development and agricultural land from sensitive areas would serve to capture contaminants and sediment. In addition, a storm water collection and reuse plant might be considered to help area irrigation and replenish groundwater.

Septic Tanks Along Canals page 36

The Pine Island Community Plan accurately describes the benefits and conversely the hazards associated with the use of onsite wastewater systems. A septic system is both simple in design and complex in its collection, treatment and disposal of wastewater. A 91 page Florida Administrative Code, Chapter 64E-6, regulates septic system installation. These legislated standards are the product of input from the engineering community, building industry, registered contractors, state environmental agency representatives, health officials and research data collected as a part of a state mandate funded from permit fees. The concerns expressed for bacterial and viral pollution on Pine Island resulting from porous soils, small lots, shallow wells, proximity to water bodies, seasonally inundated lands, high water tables and tidal influence are all concerns shared by health departments statewide. Fortunately, each of these is addressed in the administrative rule governing septic systems. Systems, both new and repaired are permitted only after a complete application and field evaluation along with a myriad of other compliance considerations are reviewed. It should be noted that Florida's requirements are among the most stringent in the nation due largely in part to such a diverse and sensitive environment. Lee County ranks number one in the issuance of new system permits statewide and yet boast only a 2.8% failure rate of new systems installed within a two-year period. These system failures are however seldom the result of poor installation construction but rather to occupant abuse of poor maintenance, excessive water use and the introduction of grease, oils and chemicals creating conditions deleterious to the systems operation.



LEE COUNTY HEALTH DEPARTMENT
Judith Hartner, M.D., M.P.H.
Director

Environmental Health
3920 Michigan Avenue
Ft. Myers, Florida 33916

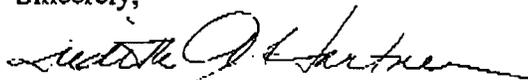
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Older existing septic systems, such as might be found on Pine Island that experience failure must be permitted and repaired in accordance with present code standards. The code has changed many times over the years to accommodate new technology and concepts current with today's onsite wastewater research. For example, since 1994 all repaired drain beds are required to meet a minimum separation from the seasonal high water table. This often necessitates elevating the drain bed above the previous height. The repaired system location may also be altered to meet more stringent set backs when site conditions permit. This however may not always be possible due to pre-existing landscaping, driveways and building additions. Conditions that may contribute to environmental concerns on Pine Island may stem from illegal repair of failing systems without benefit of permit whereby corrections were made bypassing environmental safeguards provided under the rule. Periodic maintenance of septic systems is recommended and should be encouraged in any plan where there exists nearby sensitive lands or aquatic preserves. The leaching of untreated effluent containing elevated levels of nitrates, phosphates, bacteria, viruses and chemicals through the soils provides the potential for contamination of nearby water bodies. Testing for enteric bacterial contaminants of marine waters through the identification of fecal coliform and enterococci can be performed. Contamination can originate from birds, dogs, cats, livestock, other animals and humans. DNA testing, though expensive, can differentiate between animals and humans. There are laboratories locally and around the state that can provide the necessary testing services. These include the Lee County Lab, D.E. P. lab services and the University of Florida. Difficulty often arises in determining the source of human contamination once it is implicated, as possible sources include septic systems, public and private wastewater treatment facilities and live-a-boards docked at marinas and residences. If it is determined by various survey methods that septic systems are an obvious contributor a corrective action plan as suggested in the draft may be implemented, given available funding. Such a plan may be limited to single identified structures or as broad as entire communities and may include an inspection program, upgrading or maintenance upon home sale or extension of central sewer service collection lines for communities now served by septic systems or investor owned and poorly maintained treatment plants.

The Lee County Health Department is most willing to assist in any way possible where we have statutory responsibility and resources to ensure the environmental health of Lee County is protected in accordance with the highest standards provided by law.

If my staff or I can be of any further assistance in this matter please do not hesitate to call.

Sincerely,



Judith Hartner, MD, MPH, Director
Lee County Health Department
941-332-9510

cc: Joseph Barker, RS, Environmental Administrator
H. Michael Clevenger, RS, Environmental Supervisor

RECEIVED
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LEE COUNTY HEALTH DEPARTMENT
11/10/07



LEE COUNTY
SOUTHWEST FLORIDA

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Writer's Direct Dial Number: _____

November 13, 2001

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Mr. Paul O'Connor, Director
Lee County Division of Planning
P.O. Box 398
Fort Myers, FL 33902-0398

Re: Greater Pine Island Community Plan Update

Dear Paul:

We have reviewed the proposed update to this portion of the Lee Plan.

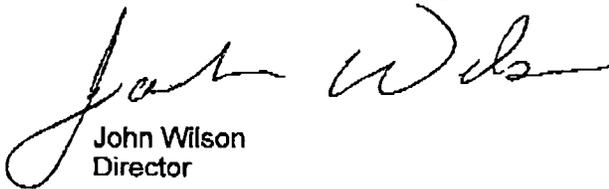
We have no objections to any of the proposed amendments; however, we would like to point out an issue in how the term "evacuation time" is defined as it relates to the discussion on page 5 of the document. On this page, the second footnote defines evacuation time which includes both a clearance time component (12 hours) and an pre-landfall hazards time component (8 hours). These two components are used together to come up with a 20 hour time frame for a category 2 (presumably a landfalling) hurricane. The third paragraph on this page then states this evacuation time exceeds both regional and county standards for evacuation times.

The recently completed 2001 Southwest Regional Hurricane Evacuation Study indicates a clearance time estimate between 8.0 - 10.8 hours for a category 2 landfalling storm occurring late in the hurricane season for Pine Island (p. II-B-48, Table 11). The evacuation time estimate for the same storm ranges from 13.6 hours to 17.2 hours taking into account the worst case assumptions (p. II-B-52, Table 13A).

The point we would like to make is that the way the Pine Island Community Plan Update defines evacuation time exceeds both the regional and county thresholds. However, the current clearance time and evacuation time estimates are below the language presented in both the Strategic Regional Policy Plan and the Lee County Comprehensive Plan, as defined by these planning documents. This is not to say that a hurricane evacuation problem does not exist on Pine Island, nor is the way the update defines evacuation time is incorrect for the purposes of defining policy.

Sincerely,

DIVISION OF PUBLIC SAFETY



John Wilson
Director

JDW:cmm

cc: Michael Bridges, Deputy Director
David Saniter, Emergency Programs Manager
Terry Kelly, Emergency Management Coordinator

Memo

To: Jim Mudd, Principal Planner

From: David Loveland, Manager, Transportation Planning *DM*

Date: November 26, 2001

Subject: **LCDOT COMMENTS ON DRAFT
GREATER PINE ISLAND COMMUNITY PLAN UPDATE**

NOV 28 11 51 AM '01
LEE COUNTY
TRANSPORTATION

The Lee County Department of Transportation has reviewed the draft community plan update for Greater Pine Island dated September 30, 2001. On a general note, the plan documentation is very well written and presented in an easy-to-follow format, and the supporting data and analysis seems thorough. However, we have concerns about a couple of issues.

POLICY 14.2.3

The discussion on page 8 and in Appendix A suggests that adding a third lane on Pine Island Road would not be desirable, even though it is an option to be evaluated in existing Policy 14.2.3. The Matlacha Civic Association has apparently recently taken a position opposing the addition of a third lane through Matlacha. While some changes to Policy 14.2.3 are proposed on page 6 to address hurricane evacuation concerns, the language regarding evaluating a continuous third lane is retained in the policy. Perhaps the retention of this language should be reconsidered.

DEVELOPMENT LIMITATION STANDARD

Appendix A includes a fairly thorough discussion of the capacity calculations that led to the 810 and 910 traffic limitation standards and the changes in capacity calculations over time, but instead of actually calculating new capacities the report attempts to justify sticking with the old capacity calculations based on a comparison to Estero Boulevard. Staff feels the legal defensibility of the standard would be better served by calculating a new capacity based on the most up-to-date methods, even if some of the inputs for the calculation have to be estimated and even if the results are not much different.

Also, there is no attempt to reconcile the old standard, defined in terms of peak hour, annual average two-way trips, with the more modern standard used throughout the rest of the Lee Plan, which is peak season, peak hour, peak direction trips. Finally, the analysis

in Appendix A suggests that the level of service "D" capacity was purposely used to develop the 810/910 standards instead of the normal level of service "E" used for most other County roads. Assuming that policy position is retained, the policy would be much clearer if language was added that indicated the 810 and 910 standards were calculated as 80% and 90% of the level of service "D" capacity as calculated using the 1965 Highway Capacity Manual.

BIKE PATHS

We appreciate the recognition of Lee County efforts toward building a bike path along major portions of Stringfellow Road, and understand the completion of the path would be a high priority to Pine Islanders. Proposed new policy 14.2.4 reads as follows:

***POLICY 14.2.4:** The county shall make every effort to continue extending the bicycle path to run the entire length of Stringfellow Road. Wherever possible, this path should be designed as a major public amenity, not as an afterthought. Where needed to provide a high-quality bicycle path, power poles and swales should be relocated to avoid unnecessary jogs in the bicycle path.*

It is not clear to staff what is meant by the second sentence – is there an example of a bike path being designed as an afterthought? If the intention is to indicate that bike paths should be part of the up-front design for a major road improvement, then the policy should say that – although no major road improvements are contemplated on Stringfellow Road.

As far as the third sentence, what defines a "high-quality" bicycle path? Who determines the need to relocate power poles and swales to provide such a high-quality path? The supporting analysis acknowledged that the reason for the jogs in the existing portions of the path was the costs of relocating the power poles. Is the intent of the third sentence to require the relocation of power poles and swales to create a straight path irregardless of cost? If so, staff objects to the inclusion of this sentence – limited dollars for sidewalk and bike path installation countywide requires us to seek the most cost-effective solutions.

Thank you for this opportunity to comment on the draft Greater Pine Island Community Plan Update. Please contact me if you have any questions.

DML/mlb

cc: Bill Spikowski
Greater Pine Island Civic Association
Donna Loibl, President, Matlacha Civic Association
Administrative File