

UTILITIES INFRASTRUCTURE ADVISORY BOARD MEETING FOR THE TOWN OF OCEAN RIDGE, FLORIDA, TO BE HELD IN THE TOWN HALL ON WEDNESDAY, FEBRUARY 17, 1999, AT 6:00 P.M.

The meeting was attended by Town Manager Gregory Dunham, Town Clerk Hancsak and the following members: Barry Essig, Sandy Foster, Don Matheson, Michael Nevins, Dom Pallaria, Dr. Bob Smith, Peggy Smith and Greg Zink

It was noted that Craig Baskin was absent with notice and Chairman Willens would be arriving late.

II. The minutes of the January 20, 1998 meeting were unanimously approved.

III. PRESENTATION BY SHALLOWAY, FOY, RAYMAN & NEWELL RE: DRINKING WATER AND SEWER SYSTEMS

Town Manager Dunham introduced Lisa Tropepe and Brian LaMotte both professional engineers and advised that they would be giving a short presentation regarding drinking water and sewer systems. He added that he hoped the members had the opportunity to review some or all of the material he had obtained from the internet regarding both subjects.

Lisa Tropepe thanked the board for the opportunity to speak and commended the members for volunteering to participate in what may ultimately change the quality of life for all of the residents in future years. She added that she will discuss exciting ideas for wastewater systems.

Ms. Tropepe distributed two simplified drawings of a single family home's existing water system provided by Boynton Beach and the current septic and drainfield and a possible future condition depicting either the town's own water treatment plant or Boynton Beaches' and sewer lines leading to the City of West Palm Beach Wastewater Treatment Plant. She commented that the current water system is similar to many communities.

Mr. Essig questioned the mechanics of a septic system to which he was advised that the septic tank holds the solids and the liquid effluent percolates through the drainfield. Mrs. Foster stated that she filters yeast cake through her drains monthly, which then breaks down the solids in the septic tank thus eliminating the need for it to be pumped out. It was also mentioned that minimal use of the garbage disposal and not using antibacterial soap reduces the times necessary to pump the tank. Ms. Tropepe commented that the recommendation of this board may ultimately be to keep septic systems, however, she compared Suwannee, Florida to Ocean Ridge in that they are both small waterfront communities. Although, in Suwannee the Health Dept. did not come in and place a moratorium on septic systems, they did shut down the fishing industry in the area. She pointed out that since Suwannee was a tourist area for fishing it directly affected their community so the town made a conscious decision to change its wastewater system.

Ms. Tropepe stated that there were three kinds of wastewater treatment systems available. The first was the Conventional Gravity System whereby the effluent travels through an angled pipe and is sloped to a main line in the road and then travels to a lift station and finally the wastewater treatment plant. She stated that the majority of communities in Palm Beach County have this type of wastewater system. She added that the pluses in this type of system are that the maintenance to the homeowner is practically nil and when the main lines are installed or replaced the entire road also gets repaved. The bad points include the fact that the town is in a high water level area where the ground is not conducive for trenching, which can increase costs.

The second type system is a Low Pressure Sewer System which works similar to the water system in that the effluent flows through the pipes under pressure. The pipes can be installed as little as 30" below the ground. She stated that each house would have a small grinder to reduce the waste which would flow to an intermediate distribution system and then to the wastewater treatment plant. The good point to this system is that the pipes can be installed on the sides of the roadways, which would be less costly. The negative is that each homeowner would be responsible for maintenance on their above ground grinder. Mr. LaMotte stated that the grinder grinds the solids so small that the effluent can fit through a much smaller pipe.

Town Manager Dunham commented that the Town of Gulf Stream is 2/3 on septic systems and 1/3 on a private low-pressure sewer system. Ms. Tropepe advised that Jupiter, Ft. Pierce and Gulf Stream are currently the only municipalities that have low-pressure systems.

Mr. Pallaria advised that the treatment plant that services Ocean Manor, Colonial Ridge and Crown Colony is a conventional system that has been permitted by the EPA and County. The system uses a deep well injection to rid the system of effluents. He added that the initial system cost approximately \$25,000 in 1981 and has an approximate maintenance cost of \$45,000 per year, which includes services provided by Pelican Systems and any professional engineering services. He stated that while he felt the low-pressure system was a good system the town still needed a plant where the waste would go. Ms. Tropepe reiterated that the waste generated in Boynton Beach goes to an intermediate facility and ultimately ends up at the West Palm Beach Wastewater Treatment Plant which would be the same for Ocean Ridge. Mr. Matheson suggested investigating a cost estimate to which he was advised it was still too premature for cost evaluations.

Ms. Tropepe advised that the third type of system is fairly new called a Vacuum System whereby the sewage flows from the house on gravity and for every four houses there is a little system that opens when the water rises and thus sucks the effluent out of the system to a central vacuum pump. She added that there are no municipalities that currently utilize this system, however, Palm Springs is investigating this option.

Mrs. Smith mentioned that it would be necessary for the town to have a 2 story building for house the vacuum system.

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Mrs. Tropepe reminded the board that the town could utilize different systems for different areas or a combination of systems. Town Manager Dunham advised that an analysis of the soil, rock, etc. throughout the town would be necessary. Mr. Zink mentioned that when he had his septic system and drainfield relocated the contractor had a map that showed this information and stated that the county may possibly have this information already completed.

Mr. Matheson questioned when septic systems would no longer be permitted to which he was advised that the Health Dept. has not mandated any changes at this point, however, water quality samples may affect this decision. Brian LaMotte commented that it might reach the point that the Health Dept. may push to clean up the systems. Town Manager Dunham stated that the coastal City Managers are aware that the Health Dept. may eventually mandate changes due to possible contaminants seeping into the ICWW.

David Berger, 45 Bimini Cove Drive, questioned if there would be a grandfathered clause for septic systems. Mr. LaMotte advised that he did not believe there would be a grandfathered provision.

Chairman Willens arrived at approximately 6:50 PM.

At this point Ms. Tropepe recommended that the board use a three step process to list the concerns, create solutions (possibly with professional assistance), and reach a united goal in choosing what projects to recommend for completion.

Mr. Pallaria stated Briny Breezes delivers their waste to an intermediate area in Boynton Beach via an underground pipe across the ICWW which is then ultimately routed to the West Palm Beach Wastewater Treatment Plant. He suggested that the town consider doing the same thing so we could eliminate the need for our own facility. Town Manager Dunham stated that he was unsure if the town would even consider having its own plant. Mr. Matheson stated that in addition to evaluating our town it would be necessary to evaluate whether Boynton Beach would even have the capacity to accept our waste.

Dr. Smith stated that while the waste systems needed to be discussed he felt the priority should be the drinking water supply because of the concern regarding the need to act quickly to get permitting for the aquifer below us. Town Manager Dunham advised that state permitting would be one of the first requirements.

Town Manager Dunham commented that earlier today he had attended a seminar regarding drinking water. He stated that while he has not had the opportunity to absorb all the information as of yet he was sure that there was a lot of valuable information that would be distributed in the future. One of the topics included information on alternative water sources.

Town Manager Dunham stated that the Town of Highland Beach currently gets its own water by drawing from four wells from the Biscayne Aquifer located in Boca Raton and

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also has a treatment plant in Boca Raton. However, he stated that the water supply is slowly being depleted and added that when the water table reduces salt water intrusion may occur.

Mrs. Foster questioned the aquifer that Mayor Kaleel has referred to. She was advised that it is called the Floridan Aquifer and is approximately 1500-1800 feet down. Dr. Smith stated that with any deep water well it is necessary to have a reverse osmosis system. Mr. LaMotte commented that a reverse osmosis system requires constant maintenance, which can be expensive without even considering the initial cost. Town Manager Dunham stated that when desalinating the usable water only amounts to approximately 10% and the EPA considers the other 90% industrial waste. However, he added that the 90% eventually recycles back into the system.

Dr. Smith commented that there may federal funding for a project such as this, especially considering that using a well this deep is a fairly new concept. Mr. Zink agreed and added that the new technology may attract much publicity. Town Manager Dunham stated this would need to be explored.

Town Manager Dunham suggested that a representative from South Florida Water Management (SFWM) come and speak with the town regarding this and other issues.

Chairman Willens stated that he and the Town Manager had comprised a draft of dates and specific topics to be discussed at future meetings with the approval of the board. The draft was distributed to the members.

At this point Ms. Tropepe suggested that the board prepare a list of concerns in ranking order which included: money, sewer systems, water supply, dependency on other agencies, mandates, and environmental impact and limitations.

Mr. Matheson stated that he thought the goal of this board was to bring forth recommendations to the Commission not the funding source. Mrs. Foster stated that the board would prefer that the projects be completed without a tax increase and possibly create a new revenue source. Town Manager Dunham commented the new revenue source could possibly assist in erasing the debt.

The board concurred that the primary concerns listed were water supply and then sewer systems. She suggested a further breakdown for these two items.

Concerns involving the water supply included: dependency, mandates, governmental regulation (treatment of), environmental, quality (acceptable), location, resource (alternatives), viability, money, water quality, and revenue source.

Ms. Tropepe stated that ultimately the research done by the board would necessitate hiring an engineering to analyze the project.

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Dr. Smith questioned Manalapan's water supply to which he was advised that it was believed that they purchase the water in bulk from Lantana and sell it to the residents and also Hypoluxo.

Regarding the sewer systems, the concerns included: mandates, environmental, dependency, money, disposal alternatives, viability, analysis of 3 systems, maintenance and operation, and location.

Chairman Willens reminded the board that while the water supply and sewer were identified as long term priority items they still needed to address drainage as a short-term priority. The board felt no seeums were also a priority.

The board briefly discussed and approved the concept of the draft schedule. Town Manager Dunham stated that the term limit for the board was Sept. of 2000 and that he was concerned that the quality of the meetings may suffer if the staff could not adequately prepare the board for these scheduled meetings. He added that should it become a real hardship the board may need to alter the meetings slightly.

Regarding the subcommittees listed on the draft schedule, Town Manager Dunham reminded that these meetings are also subject to the Sunshine Law which would mean that the staff would have to be present. It was suggested that the board work in the subcommittees while all at one meeting provided at the end of the meeting they provided a summary for submittal into the minutes.

Town Manager Dunham thanked Ms. Tropepe and Mr. LaMotte for donating their time.

ADJOURNMENT

The meeting was adjourned at approximately 8:00 P.M.

ATTEST:

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Town Clerk