



MINUTES
WORKSHOP CITY COUNCIL MEETING
MAY 29, 2002 AT 6:40 P.M.
CITY HALL, 116 FIRST STREET
NEPTUNE BEACH, FLORIDA

Pursuant to proper notice a Workshop Meeting of the City Council of the City of Neptune Beach was held May 29, 2002 at 6:40 p.m., following the special meeting, in the Council Chambers, City Hall, 116 First Street, Neptune Beach, Florida.

Attendance:

IN ATTENDANCE:

Mayor Richard A. Brown
Vice Mayor Robert A. Shimp
Councilor James Gilbert
Councilor Ronald A. Patronik
Councilor Harriet Pruette
City Manager Richard A. Linn

City Clerk Lisa Volpe, CMC
Deputy City Clerk Karla Strait, CMC
Director of Public Services John Galen
Supervisor of Water & Wastewater Leon Smith

ABSENT:

City Attorney Christopher White

Call to Order/Roll Call

The Mayor called the meeting to order at 6:40 p.m.

SEWER PROJECT

Sewer Project

City Manager Linn stated the object of the meeting was to discuss how to proceed with the sewage in Phase B&C of the Master Plan. The engineer would be responsible for keeping the water and sewer construction from overlapping.

City Manager Linn asked Jim Miller, PBS&J to prepare and give a presentation on the different technologies.

Jim Miller, PBS&J, explained the following three sanitary sewer options east of Third Street.

1. **PIPE BURSTING**: Was a method where a pipe was inserted and pulled through the existing pipe. It would expand the existing pipe up to two sizes larger. This method was currently being used by J.E.A. The advantages were 1) no permits or plans would be required, 2) it was fast construction, 3) less ingress and egress interference, and 4) it was widely accepted trenchless technology. The disadvantages were 1) it did not correct depth or slope problems, 2) manholes and services must be rehabilitated to take full advantage of I/I reduction and 3) the Town Center lift station must be upgraded. The estimated cost of contract documents & bid phase would be \$30,000. The estimated cost of construction would be \$4,500,000. A complete estimated total of 4,530,000.
2. **IN-PLACE CURING / PIPE BURSTING**: A form where they set up a scaffolding over a manhole and put a material through the pipe to the next manhole and use

hot water and steam to cure it. In-Place curing was only good for 8" and above pipe. This method would have to be used in combination with pipe bursting because of the 6" lines. The same contractor could do both. The advantages to the pipe curing were 1) no permitting was required, 2) it would be relatively fast, 3) there would be less ingress & egress interference, 4) it was widely accepted trenchless technology, and 5) there would be minimal engineering. The disadvantages were 1) it would not correct depth or slope problems, 2) manholes and services must be rehabilitated to take full advantage of I/I reduction and 3) the Town Center lift station must be upgraded. The estimated cost of contract documents & bid phase would be \$30,000. The estimated cost of construction would be \$4,000,000. A total estimate of \$4,030,000.

3. VACUUM: The vacuum sewer system east of Third Street would require a vacuum station, which would be located close to lift station one. It would have the capability to serve the area east of Third Street as well as the area between Third Street and Fifth Street south of Florida Boulevard and the Bal Harbor area. The advantages are 1) they are clean and simple to operate and maintain, 2) it would eliminate the need for the Town Center lift station, and 3) it would provide a vacuum station for connection of other areas resulting in savings on future improvements. The disadvantages were 1) detailed engineering and permitting plans would be required, 2) the maintenance staff must learn the new technology, 3) it would require approximately 50% more chambers than manholes, and 4) require acceptance of new technology/concept by residents. The estimated cost of contract documents & bid phase would be \$200,000. The estimated cost of construction would be \$4,100,000. A total estimate of \$4,300,000.

If pipe bursting and pipe curing were used the estimated cost for the Town Center lift station upgrade would be \$20,000 for contract documents & bid phase, and \$75,000 for construction. Total estimated cost of \$95,000.

Director of Public Services John Galen stated the system was currently working, the only problem was infiltration. The pipe bursting from 6" would go to 8" with the current slopes. He had reservations about the vacuum system. He felt the vacuum system would work well west of Third Street between Florida Boulevard and Seagate Avenue because those lots were laid out neatly. He felt it would also work well in Oceanwood and Neptune by the Sea. It would be environmentally ideal to get the Nightfall area off septic tanks.

Director of Public Services John Galen stated the pipe curing technique was used on Forest Avenue and Penman Road.

Mr. Miller stated there were two contractors who could do both the pipe bursting and the pipe curing. If we could get approval by D.E.P. they would let us piggyback a J.E.A. contract without bidding.

Mr. Galen stated the pipe bursting system would need to be used east of Third Street because they were 6" lines and a minimum of 8" lines would be needed.

Mayor Brown asked if the infiltration causes any problems at the water treatment plant. Mr. Galen responded there is a big influx in the plant. The other thing was it surcharged the sewers and there was a tendency to see manholes rising up from the street. If the infiltration was eliminated then it would not happen and the water would most likely stay on the top and there would be a storm water problem.

Councilor Pruette was concerned about the maintenance on the vacuum system. Mr. Galen stated he did not expect any problems with the vacuum system other than not being adaptable east of Third Street.

Vice Mayor Shimp was concerned about pipe bursting in the low spots. Mr. Miller explained that if there were structural damage in the pipe it would have to be replaced. Vice Mayor Shimp also liked the vacuum system because it was environmentally conscious and could save water.

City Manager Linn stated the vacuum system would require more excavation to install the canisters. The pipe bursting would require every connection to be excavated to make the lateral connections. Mr. Linn stated one advantage of the vacuum system was the future reduction of cost and the elimination of lift stations. He felt there would be a problem east of Third Street no matter what system but the vacuum system would be the biggest.

Councilor Pruette spoke with the City Manager in Sanford and he told her they had a lot of maintenance problems. Mr. Galen responded they tied into the storm sewer system and it was not the same thing. He had no doubt the vacuum system worked, but felt it would be a problem installing it east of Third Street.

Councilor Patronik was concerned about the cost of maintenance if the pipe bursting system were used. Mr. Galen replied with either system the maintenance cost would be lower.

Councilor Gilbert asked if the old sewer lines in the back of properties in Bal Harbor would be abandoned. Mr. Miller recommended putting it in the street. He added that some sewers east of Third Street were not in right-of-ways and would also have to be addressed.

Mayor Brown asked about high priorities. Mr. Miller replied Bal Harbor and the area south of Florida Boulevard were high priorities but that at this point we had only applied to the state for loan money for Phase 1. After being urged by D.E.P. he gave Mr. Linn a proposal to prepare an amendment and apply for funds to complete the entire Master Plan.

Councilor Pruette asked what the total estimate was to complete the sewer work. Mr. Linn replied the estimate was 15.4 million dollars for both water and sewer and did not include the stormwater system.

Mayor Brown concluded this was a good update and asked what was recommended.

Tim Slater, 573 Magnolia Street, questioned the size of the pods and maintenance on the vacuum system. Mr. Miller replied they were the same size or smaller than a manhole cover. The maintenance was very minimal. The air controller may have to be replaced every three to four years, and the vacuum valve may need to be replaced every year or two.

Lynda Padrta, 1113 First Street, had heard a navy ship was planning to discontinue the use of the vacuum system and go to a gravity system. The reason was salt water and air corrosion caused a lot of maintenance. She was also concerned about power outages. Mr. Miller responded the only electricity would be the main vacuum station and it would be on a generator. The system on a ship was an entirely different system. We would not be dealing with vacuum toilets.

Mayor Brown asked Mr. Linn how he would like to proceed. Mr. Linn stated the council needed to evaluate the three different systems and come back with a decision.

Consensus: **TO USE THE PIPE BURSTING SYSTEM EAST OF THIRD STREET AND MOVE TO THE JUNE 3, 2000, REGULAR COUNCIL MEETING.**

Adjournment

There being no further business, the meeting adjourned at 7:45 p.m.

Richard A. Brown, Mayor

Attest:

Lisa Volpe, CMC, City Clerk

Approved: _____