

**PUBLIC WORKS COMMITTEE**  
**January 20, 2009**  
**3:10 P.M.**

Councilman Rico, Chairman, called the meeting of the Public Works Committee to order with Councilpersons Bennett, Berz, Benson, Gilbert and Robinson present. City Attorney Michael McMahan and Shirley Crownover, Assistant Clerk to the Council, were also present.

Others present included Richard Beeland, Vickie Haley, Jerry Stewart, Greg Haynes, Larry Zehnder, David Johnson, Dan Johnson, Steve Leach, Jim Templeton and Dennis Malone. Minkara Mounir joined the meeting later.

Before getting into agenda matters, Adm. Leach announced that there was a big celebration in Washington, but we had a big celebration here, too—that it was Dan Johnson’s birthday. Councilwoman Berz led everyone in singing “Happy Birthday”.

Adm. Leach noted that **Ordinances—Final Reading**, were heard last week. **Resolution (a)** is for Change Order No. 1 for Ashland Terrace Milling and Paving with Talley Construction Co., decreasing the contract amount. This is at the Norcross Intersection and now Ashland Terrace is totally completed.

**AGENDA ITEMS FOR JANUARY 27, 2009**

**Resolution 7©** authorizes payment from Hamilton County relative to the Contract for Revision of Water Quality Fee Structure for reimbursement of orthophotography services by Sanborn and JJ&G in the amount of \$176,000.00. Adm. Leach explained that this was a mapping system that we used for orthophotography and is payment back from Hamilton County with Sanborn Co. He noted that there was a representative from JJ&G here. He next showed topographical maps indicating that the “squiggly” lines were topos, and this is aerial photography that shows the elevation above sea level.

**Resolution (d)** authorizes an Agreement with Chattanooga State Technical Community College relative to the development of a Web-Based Watershed Academy for the Lower Tennessee River Watershed in an amount not to exceed \$57,500.00 to be funded in full by a grant from the State of TN, Dept. of Agriculture. This is an on-line type project. Adm. Leach stated that Dr. Mo was here for questions, noting that this was a grant from the State.

Minkara Mounir reiterated that this was a Grant for education, and we will sub-contract; that it will involve ten courses to be continuing education to educate the public and neighborhood groups. Adm. Leach added that this was part of our legal agreement. Mr. Mounir noted that this has to be done across the State. Councilwoman Berz asked who would go to the classes. Mr. Mounir responded that they had not targeted specific groups nor audiences. Councilwoman Berz indicated that she liked this; that Hickory Valley people would love to know more about water.

**Resolution (e)** authorizes an Agreement with David Mathews Surveying, Mapping & Engineering (DMS) relative to the Friar Branch Restoration Project, in an amount not to exceed \$6,750.00. Adm. Leach explained that this was in regards to the Golf Course that the City has purchased and the creek will become more of a natural system.

Mr. Mounir reiterated that we had acquired the Golf Course that is located on the main Friar Branch; that this goes through a vacant lot, and we will purchase 20 acres that is in the flood zone. Adm. Leach again noted that this would become a normal stream pattern.

Councilman Benson added that this stream is 10 yards from the back porches of residents.

Councilwoman Robinson asked if the Waters of the State set our boundaries, thereby making it impossible for us to alter them?

Councilman Benson explained that this was not a natural stream.

Attorney McMahan explained that we applied for a Permit to do this, and we are working with the State to return this to a natural stream.

Councilwoman Robinson confirmed that an artificial trench will go away, and it will return to its natural boundaries.

Adm. Leach noted that there would still be flooding—that this was a WPA ditch.

Councilman Benson noted that the problems had been horrendous.

Councilwoman Berz wanted to know if this would alleviate the flooding in the area? Adm. Leach responded that it would help.

Councilwoman Robinson wanted to know why we were doing this? Adm. Leach responded that it would make for a better situation; that the City will buy 20 acres in the open flood plain; that people out here are often surrounded by water, and there are certain things we can do. He noted that at the Enterprise South site we are building basins, but it won't eliminate flooding altogether.

Councilman Benson explained that it would be moving the creek further from homes.

Councilwoman Berz asked in talking about Hickory Valley, if this would help the homes that are getting flooded? Mr. Mounir explained that it involved the Bridge on Standifer Gap—that it was not big enough, and we would still have some flooding. Councilman Benson added that it was the Coker Farm area. Adm. Leach noted that some of the problems on Hickory Valley are attributed to the Mall area; that there is lots of water sitting in yards and homes could get damaged.

Councilwoman Berz asked if we could do anything to alleviate this? Adm. Leach noted that in some cases we had bought homes and moved them from flood zones—that low lying areas will get water. Councilwoman Berz stated that there seemed to be some sort of Plan to look at this situation, and she asked if we could let the people know this—that right now communication is not good. Adm. Leach stated that we are working on a model, which should be helpful. Councilwoman Berz stated that these were not unreasonable people and suggested having a meeting with them so that they can understand that we are considering this.

Adm. Leach stated that **Resolutions (f) and (g)** can be considered in conjunction; that David Reece with JJ&G was present, as was Dixie Brackett of Earthworx. He then called on Jerry Stewart.

Mr. Stewart noted that we had been discussing this for two to three years in relation to CMOM; that one of the things we don't have is a Model of our Sanitary Sewer System; that water is coming from orifices that we have never seen; that we need to have this model done to see where water is getting into our system; that we do not have a good GIS Map of the Sewer System; that the sewer system in North Chattanooga was built before 1970 and is running through yards and there are issues.

Adm. Leach noted that the Missionary Ridge system was another example; that not all of our sewer systems were built at one time, and we don't have knowledge of all the individual systems.

Councilman Benson noted that we have to process stormwater like sewers, wanting to know if it were a long-term investment?

Mr. Stewart responded a 3-4 million dollar investment; that a lot of stuff is going on; that we looked at this 18 months ago and solicited information from seven firms and ended up with Jordan, Jones and Goulding, Inc.; that Dixie is also doing work concerning this; that Dixie was originally doing both jobs, but now we have funds for the GIS stuff.

**David Reece of JJ&G** spoke next, stating that he would give an overview; that this Computer-Based Dynamic Hydraulic Model was for the management of information. He mentioned that not too long ago a bridge collapsed in Minnesota and this kind of information was needed; that it is a nationwide issue and Chattanooga is better off than most. He gave a real brief summary, stating that there are 1,249 miles of gravity sewers; 35 miles of pressure sewers; 29,145 manholes; and 71 pump stations. Some of the sewers were built before 1898. Some of the older areas were absorbed through annexation, and Mr. Reece noted that Jerry and Steve have very limited information available; that we need to know how they all work together.

Mr. Reece went on to say that during the wet weather we have been infiltrated with raw sewage, which is illegal. He next posed the question of “Why Build a Hydraulic Model?” The answer being that we need to understand how the system operates and what causes the overflows; that they are now all “stitched” together, and we need to know where the problems are. The bottom line is that it will enable the City to meet regulatory requirements and result in proactive management versus reactive.

Councilwoman Bennett asked about the penalties in Knoxville? Mr. Reece stated that it was up in the millions. Mr. Stewart added that they had to commit \$540 million dollars over ten years. Councilwoman Bennett noted that it was best that this be done by choice. Mr. Reece agreed, stating that when you get into consent orders, the timeframe is short and rates are increased significantly.

Mr. Reece went on to say that this Model will support development; that we will be able to see if we can handle the flow for new industry; that with new industry today, we have to just guess.

Councilwoman Bennett asked if we had had this before the Hamilton Place Development was built, would we have known about the stormwater on the front end?

Mr. Reece responded that what she was talking about was stormwater and this is sewer; however we do know on the front end concerning sewers.

Councilman Gilbert asked if this would help us as we annex new areas? Mr. Reece stated that was exactly right. He asked if it would save us money and was told “yes”.

Mr. Reece stated that mapping was part of this; that Dixie would gather up the information in the field, which would provide a tool for cost-effective planning and keep the regulators away.

Councilwoman Berz noted that it would take about \$5 million dollars to get this done. She wanted to know the timeframe.

Mr. Reece stated that right now it was two years; that it might even be 30 months.

Councilwoman Berz asked if he thought \$5 million would cover this or would there be change orders? Mr. Reece responded that they had become very knowledgeable and had gone through the steps; that they were very comfortable that they had identified the right price; that they had worked hard. He noted that Dixie was here and asked her how long this might take?

Dixie responded that they could gather the data in about 12 months—that this would be an aggressive timeframe; that they had some knowledge, and she thought they could get it done in this period of time and allow Mr. Reece’s firm the digital information; that the information would be put into a data base, and they would like to be able to give him more time in order to keep the cost down. She stated that she was trying to put the pressure on herself and her people to get this data in 12 months; that they would have to work at full capacity and did not think they would have to come back to the Council for more money; that she was trying to be straightforward so the City would get the best work for the money spent. She stated that they would use the dollars wisely; that she thought they could get this done in this timeframe without additional money and time.

Councilman Benson noted that this was nearly \$5 million dollars and questioned what our savings would be.

Mr. Stewart responded that it would save us money if we built sewers the right way; that we would be able to better handle this than in the past; that these were comparable costs; that they had looked at this and knew it would be expensive, but they had saved this money out of their fund balance; that it should save millions of dollars.

Councilman Benson questioned if we would save more than we will be spending and if it was a good investment? Mr. Stewart answered in the affirmative.

Adm. Leach stated that this concluded their presentation.

The meeting adjourned at 3:45 p.m.