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**MINUTES OF THE SPECIAL WORK SESSION  
BOARD OF MAYOR AND ALDERMEN  
FRANKLIN, TENNESSEE  
CITY HALL BOARDROOM  
TUESDAY, NOVEMBER 5, 2013 - 4:00 P.M.**

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**Board Members**

Mayor Ken Moore	P		
Alderman Brandy Blanton	P	Alderman Margaret Martin	P
Alderman Clyde Barnhill	P	Alderman Dana McLendon, Vice Mayor	P
Alderman Pearl Bransford	P	Alderman Ann Petersen	P
Alderman Beverly Burger	P	Alderman Michael Skinner	P

**Department Directors/Staff**

Eric Stuckey, City Administrator	P	Lisa Clayton, Parks Director	P
Vernon Gerth, ACA Community & Economic Dev.	P	Shirley Harmon, Human Resources Director	P
Russell Truell, ACA Finance & Administration	P	Mark Hilty, Water Management Director	P
David Parker, CIP Executive/City Engineer	P	Paul Holzen, Engineering Director	P
Mark Hilty, Water Management Director	P	Steve Sims, BPI Manager/City Court Clerk	P
Shauna Billingsley, City Attorney	P	Lawrence Sullivan, Assistant Recorder Revenue	P
David Rahinsky, Police Chief	P	Lanaii Benne, Assistant City Recorder	P
Chris Bridgewater, BNS Director	P	Linda Fulwider, Board Recording Secretary	P

**1. Call to Order**

Mayor Ken Moore called the Special Work Session to order at 4.00 p.m.

**SPECIAL WORK SESSION DISCUSSION ITEMS**

**2. Presentation of Police Non-Emergency Promotional Video**

**David Rahinsky, Police Chief**

**Milissa Reiersen, Communications Manager**

The clever video promoting the police non-emergency number has gone viral, as they say, and has been viewed across the U.S. It is on the City site on YouTube, and shared with police chiefs across the country as well as with the public. Officer Jeff Carson, a former country singer, wrote and performed the song, with other officers singing backup. 794-2513 is a catchy little ditty to implant the police non-emergency number in the minds of Franklin residents. Those involved in the project were Mike Fay, Jeff Carson, Robert Mott, Blake Anderson and Stephen Price, Digital Media Specialist.



CALL 794-2513..... CALL 794-2513 - Remember that!

**3. Consideration of Engagement Contract with Hall and Associates (COF Contract Number 2013-00185)**

**Shauna Billingsley, City Attorney**

This item is to consider obtaining specialized legal and technical assistance in the City's Aquatic Resource Alteration Permit (ARAP) Appeal.

The City's appeal is based on three primary areas of concern:

1. **Due Process** – City was never given notice of the comment period on the permit, no draft permit was issued for review, and no meaningful response was provided to multiple requests by staff and our consultant (CDM Smith) for information regarding the basis for the permit. Essentially, the City has not been provided an opportunity for meaningful dialogue regarding the permit and its basis.
2. **Scientific, river specific basis for the permit changes** – City has not been provided data or a direct scientific basis for changes in the permit related specifically to the Harpeth River. Two generic research papers/articles have been identified in our recent discussion with TDEC staff. Neither of which address the Harpeth River directly. Little reference has been made to the sophisticated modeling developed by the City as a part of the Integrated Water Resource Plan (IWRP). The IWRP river modeling was developed with extensive TDEC input.
3. **Reporting requirements** – While the City is supportive of the intent of the reporting requirements to be transparent regarding the river-related data, some of the “real time” and online requirements may well be impractical. TDEC staff did indicate a willingness to “work with the City” on these issues. However, these issues need to be identified as issues for the appeal process.

Discussion:

- Shauna Billingsley has pulled together the information for the Washington, D.C. law firm and has talked with the attorney there. They have engineers on staff as well. Ms. Billingsley stated she would hold costs down as much as possible.
- Alderman Skinner wanted a cap put on the spending.
- Mr. Stuckey and Ms. Billingsley explained the money is budgeted in the Law Department's budget category of outside counsel. It is impossible to calculate the monetary impact at this time. It is not only an issue with TDEC the City has rights.
- Alderman Blanton wants to assure the City's rights and that TDEC is accountable.
- Alderman Martin commented there is more than money to consider. Franklin cannot stand by and let this happen, if it was not done right.
- There could be some good rationale behind some things in the permit, but that has not been shared with the City and the City's voice was not heard in the process. Some issues are impractical and unrealistic.
- Mr. Stuckey will continue to provide updates to the Board and this will be discussed again.

#### 4. **Presentation of Ultraviolet (UV) Disinfection Options for Franklin Water Treatment Facility** **David Parker, City Engineer/CIP Executive** **Mark Hilty, Water Management Director**

This item is to provide information regarding the Long Term 2 Surface Water Treatment Rule (LT2Rule) compliance and the need concerning the installation of an interim ultraviolet (UV) disinfection improvement at the City of Franklin Water Treatment Plant.

Staff and the City's consultant have evaluated two feasible options for this interim UV disinfection treatment:

- **Option 1:** 12" UV Reactor for Disinfection – 12" reactor would be installed in the existing 12" transfer pump line in the pipe gallery of the WTP. Final plant upgrades are being designed with a new treatment (process) train that includes UV disinfection, so once the plant upgrades are complete, this reactor would no longer be of value for the plant operations, nor usable anywhere else in the City's system.
- **Option 2:** 24" UV Reactor (Upgradeable to advanced oxidation) for Disinfection – the 24" reactor would be installed where the existing 12" line is in the pipe gallery on the transfer pump line. The piping would also have to be increased to a 24" line size. It would be necessary to relocate this 24" UV reactor to its permanent location as part of the plant upgrade for the UV

advanced oxidation process (AOP) system.

Discussion ensued on what needs to be in place prior to bidding on the work that must be completed by September 2014, and the benefit of going with the 24" line.

- ◆ Vice Mayor McLendon joined the meeting at 4:28 p.m.

This is a pullout piece from the larger upgrade project and is to meet the regulatory compliance deadline. Per request, Mr. Hilty will provide the Board with cost and replacement schedule information.

## 5. Discussion of Solids Treatment Options at the Franklin Water Reclamation Facility

David Parker, City Engineer/CIP Executive

Mark Hilty, Water Management Director

Zack Daniel, CDM Smith, gave the following presentation on Solids Treatment at the Franklin WRF:

### Recap of Work to Date

- Existing Facilities Condition Assessment
  - All facilities at the end of their useful lives
  - Additional capacity needed to handle future wastewater flows
- Biosolids Workshops
  - Key goals
    - Reduce risk
    - Improve operational efficiency
    - Earn environmental/public acceptance
    - Produce Class A biosolids
    - Control odors
- Preliminary Engineering Analysis
  - Four solids process train alternatives
  - Concept-level facility sizing, economic analyses
  - Non-cost evaluation
  - Scoring of alternatives based on cost & Non-cost factors

### Preliminary Engineering Analysis Conclusions

- Alternative 1 - Continue Current Treatment Process
  - Unsustainable - continues dependence on landfill disposal
  - No reduction in solids quantity
  - Does not produce Class A biosolids
- Alternative 2 - Replace Thickening, Add Digestion & Screw Press Thickening
  - Reduces solids quantity, produces biogas
  - Solids can be beneficially reused in limited applications, primarily agriculture
  - Does not produce Class A biosolids
- Alternatives 3 & 3A - Alternative 2 Plus Solar Drying
  - Reduces solids quantity, produces biogas
  - Solids can be beneficially reused in agriculture
  - Not guaranteed to produce Class A biosolids
  - Alternative 3A - pilot installation of two solar dryers (lower cost)
- Alternatives 4 & 4A - Alternative 3 Plus Thermal Hydrolysis
  - Greatest reduction in solids; fewer solar dryers required for ultimate build-out
  - Produces more biogas compared to Alternatives 2, 3 & 3A
  - Produces Class A biosolids for beneficial reuse by the public
  - Alternative 4A - pilot installation of two solar dryers (lower cost)

### Economic Analysis - Capital Cost

Process Train	Estimated Capital Cost at Each Phase (millions)			Net Present Capital Cost of Three Phases <sup>1</sup> (millions)
	Phase I (2018-2023)	Phase II (2024-2031)	Phase III (2032-2040)	
<u>Alternative 1:</u> Continue Current Treatment Process	\$18.0	\$3.4	\$0.0	\$19.0
<u>Alternative 2:</u> Replace Thickening, Add Digestion	\$33.0	\$11.6	\$1.6	\$38.0
<u>Alternative 3:</u> Alternative 2 Plus Solar Drying	\$67.0	\$21.0	\$22.0	\$84.0
<u>Alternative 3A:</u> Alternative 3 with Partial Solar Drying	\$41.0	\$12.0 <sup>2</sup>	\$5.0 <sup>2</sup>	\$47.0 <sup>2</sup>
<u>Alternative 4:</u> Alternative 3 Plus Thermal Hydrolysis	\$64.0	\$15.0	\$6.0	\$70.0
<u>Alternative 4A:</u> Alternative 4 with Partial Solar Drying	\$50.0	\$6.0 <sup>2</sup>	\$3.0 <sup>2</sup>	\$51.0 <sup>2</sup>

<sup>1</sup> 2013 dollars    <sup>2</sup> Does not include Phase II or III solar dryer expansion

Progress Since August Presentation to Board

- Initiated discussions with Thermal Hydrolysis (THP) System Vendors
- Solicited & Currently Reviewing Equipment Package Alternatives for THP Vendor as a Means to Reduce Biosolids Processing and Treatment and Handling Capital Cost

Decisions Needed

- **Alternative 4 is the only process alternative that produces a guaranteed Class A biosolids**
- This process achieves greatest reduction of solids
- Recommend biosolids processing and dewatering final design based on Alternative 4A
- Consider adding a pilot solar drying installation
  - Built-in redundancy option for production of Class A
  - Reduces quantity of solids to be disposed – lower O&M disposal cost and increased disposal options due to “dryer” product

Alternative 4A Overview Equipment Package

- Grease receiving, storage & treatment
- Pre-THP sludge dewatering
- THP system
- Anaerobic digestion
- Biogas treatment and combined heat & power (CHP) system
- Post-digestion dewatering
- Solar drying (pilot installation of two dryers)
- Odor control

Thermal Hydrolysis

- Technology was developed in the 1990s
- Over 20 installations in Europe
- New to the United States
  - First U.S. CAMBI system under construction in D.C.
  - Although new to U.S., so proven worldwide, manufacturers guarantee system and performance
- Benefits
  - Smaller digesters due to doubled digester loading
  - Increased biogas production
  - Pathogen-free and stabilized biosolids product (Class A)

There was discussion and questions were asked throughout the presentation:

- 15-20% of solids are hauled to Camden landfill, a 100-mile trip one way. It is expensive and there is risk involved.

- More choices of landfills that accept Class A solids.
- Alternative 3 and 4 volumes are significantly lower than what is produced now.
- Alternative 3 solar drying does not have blanket Class A. It would have to be tested.
- Metro Nashville and Bowling Green, KY, use gas dryers. Use of gases discussed.
- Thermal Hydrolysis produces more complete breakdown, thus reduces volume.
- Alternative 4 has positives/incentives.
- Equipment cost for gas drying such as Metro uses would be \$3.4 million equipment cost.
- Costs will be clearer as this moves forward. Implementation of odor control in quite expensive.
- Alternative 4a makes the most sense. Larger capital cost, reduction of volume and add-ons are less. This is the treatment approach for biosolids regardless of expansion or a new plant; therefore need this no matter what. Phase 1 to 16 MGD. Just to upgrade to continue to haul to Camden landfill would cost \$18 million.
- Recommend biosolids processing and dewatering final design based on Alternative 4a
- Consider adding a pilot solar drying installation
- Introduce FOG - grease from local restaurants can be added to boost biogas production in the digesters.
- 3a and 4a adding thermal hydrolysis better process to produce Class A, worth the \$3.5 million. Save \$14 million, which gives 16 MGD. 3a is Class B, less volume in Alternative 4.
- Eric Stuckey asked to have a report on applying the Bowling Green example to Franklin regarding cost, product, etc. for comparison of what is known in this region with similar amount of waste.
- Mr. Daniel advised there are companies that deal with market analysis that could give insights.
- Alderman Skinner asked about plugging this into future rate increases. Mr. Stuckey said that could be provided when this is brought back as well as the rate sensitivity study.

## 6. Discussion of 2014-2018 Capital Investment Program

### David Parker, City Engineer/CIP Executive

Staff provided recommendations as to possible funding of some of the CIP Projects that were in the BOMA's and/or staff's top ten rankings for implementation. Funding would be utilizing Facility Tax Revenues, Hotel/Motel Tax Revenues or funding through bonds without exceeding the latest PFM Group's projections for the City's Debt Capacity Model:

1. Facility Tax Revenues totaling \$7,650,000
  - A. Fire Station #8 Westhaven - Fund construction and furnishings (\$3,050,000)
  - B. Fire Station #7 Berry Farms - Fund construction and furnishings (\$3,050,000)
  - C. New City Hall - Fund Professional Services [Design] (\$1,550,000)
2. Hotel/Motel Tax Revenues totaling \$310,000
  - D. Public Restrooms @ Harlinsdale Farm - Fund (\$160,000)
  - E. Harpeth River Walk - Fund Professional Services [Design] (\$150,000)
3. City's Funding Capacity totaling \$2,711,500
  - F. Franklin Road Streetscape - Fund Professional Services [Final Design] (\$150,000)  
(Harpeth River Bridge to Harpeth Industrial Court - Ultimately various funding sources {i.e. Stormwater Funds, Road Impact Fees, possible grants})
  - G. Long Lane/Old Peytonsville Road Connection Across I-65 - Fund Land & Easement Acquisitions (\$1,400,000)
  - H. McEwen Drive Phase IV Improvements from Cool Springs Boulevard to Wilson Pike - Fund Professional Services [Final Design] (\$340,000)
  - I. Columbia Avenue Improvements from Downs Boulevard to Mack Hatcher Parkway - Fund Professional Services [Design] (\$821,500). Funding contingent upon project being approved in the MPO TIP as recommended - will need contract with TDOT prior to starting design efforts - Ultimately various funding sources (i.e. State/Federal Funding of 80% with Local @ 20% if

included in approved MPO TIP and TDOT's planning cycle, Road Impact Fees, etc.) could be utilized for this project.

**Note 1:** The staff recommendations do not include the entirety of each project. In most cases, the recommendations only include the funding of the design of a project, which means that the construction will only happen once there is adequate funding to proceed.

**Note 2:** The design of the New City Hall is listed as being funded utilizing Facility Tax Revenues. Staff is investigating as whether or not this funding can be allocated for the entire design effort for City Hall or if only a new growth prorated share of the cost of design can be used.

Mr. Stuckey related these recommendations assume \$10 million will go to 100% fund the Pension Fund. It is important to get moving forward on the design for the City Hall facility to understand what it is going to take to accomplish the project. Friends of Franklin Parks will be involved with the project for Harlinsdale restrooms. Additional design for Franklin Road Streetscape is to prepare for when construction funds are available.

Some aldermen expressed concern over not being able to make changes in their rankings after other pressing projects were mentioned, such as sidewalks on Highway 96 to Pinkerton Park. It is a safety issue with people walking along the roadway and it should be on the priority list. Mr. Stuckey pointed out that, just as there are drainage obstacles on Franklin Road in relation to sidewalks, the same is true on Highway 96 with deep ditches. Easements, rights-of-way and drainage are involved and a quick fix is not feasible. Alderman Petersen thought sidewalks on 96 to Pinkerton Park should be priority on the list.

There was also some question about the new City Hall being on the list. Alderman Blanton commented that people unfamiliar with the building do not understand its poor condition. The City needs to take care of its employees. She was puzzled by the Harpeth River Walk being on the list as well.

Vice Mayor McLendon mentioned the number of sidewalks built, that are not part of a road project, are built downtown. Sidewalks are needed all over the City. He voiced his opinion that it is time to serve the people of Franklin instead of tourists.

### 3. Other Business

None

### ADJOURN

Work Session adjourned 6:17 p.m.

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Dr. Ken Moore, Mayor