
MEETING MINUTES
CAPITAL INVESTMENT COMMITTEE
CITY OF FRANKLIN, TENNESSEE
CITY HALL BOARDROOM
THURSDAY, MARCH 11, 2010, 4:00 PM

Committee Members

Alderman Dana McLendon, Chair P
Alderman Clyde Barnhill, Vice Chair P
Alderman Pearl Bransford A
Alderman Margaret Martin P

Other Attendees

Eric Stuckey, City Administrator P
Russell Truell, ACA Finance & Administration P
David Parker, City Engineer/CIP Executive P
Eric Gardner, Engineering Director P
Mark Hilty, Water Management Director P
Joe York, Streets Director P
Lisa Clayton, Parks Director P
Mayor John Schroer P
Alderman Ken Moore P
Alderman Ann Petersen P
Alderman Michael Skinner P
Lanaii Benne, Assistant City Recorder P
Linda Fulwider, Board Recording Secretary P

1. Call to Order

Alderman McLendon, Chair, called the meeting to order at 4:00 p.m.

2. Approval of Minutes

Alderman Barnhill moved to approve the February 11, 2010 meeting minutes as presented. Seconded by Alderman Martin. Motion carried unanimously.

3. Presentation on the Harpeth River Restoration and Removal of the Low Head Dam and Impoundment Grant Project

David Parker, City Engineer/CIP Executive

David Parker introduced Brian Belcher, Beaver Creek Hydrology, who gave a presentation on the Harpeth River Restoration Project: Low Head Dam Replacement with Natural Channel Design Approach.

Problems with Harpeth River

- EPA's 303(d) Listed for siltation, habitat alteration, nutrient enrichment and low dissolved oxygen
- Impaired due to Watershed Disturbances:
 - Agricultural activities
 - Stormwater runoff
 - Eroding stream banks
 - Restricted fish passage
 - Lack of fish habitats
- Primary In-Stream Impact: Low Head Dam
 - 6.2 feet high, 66 feet across
 - Almost stagnant during low flow
 - DO = 1 mg/l (TN state standard is 5 mg/l) in the pool, study by HRWA
 - Aquatic habitat loss
 - Adds to downstream bank instability
 - Sedimentation issues

Restoration Goals & Objectives

Primary Goals

- Increase fish habitats and remove fish passage barriers
- Improve channel stability
- Improve recreational activities
- Modernize water withdrawal by eliminating river barrier

Primary Objectives

- Replace low head dam with “natural” in-stream structures
 - Reconnect 36 miles upstream (meet southeast aquatic habitat plan)
 - Restore freshwater passage and habitats (physical)
 - Increase dissolved oxygen level (chemical) (help meet Franklin’s stormwater permit requirements)
- Install “Natural” In-stream Habitats
 - Recreate a more natural river channel which is stable with respect to plan, profile and cross section without accelerated aggradations or erosion
 - Stabilize vertical stream banks and prevent erosion
 - Create riffle/run/pool/glide habitats for native species (meet southeast aquatic habitat plan)
 - Address impairments listed by State
 - Improve this TWRA winter trout stocking site

Restoration Methodology

- Priority II River Restoration Using Natural Channel Design/Build Techniques:
 - Excavation of a **bankfull bench** along the south side of the site and hauling the material offsite and out of 100-year floodplain
 - Installation of **native boulder structures** cross vanes and j-hook weirs for grade control and for fisheries/habitats
 - Installation of **coir matting and live stakes** for bank stabilization
 - Planting of **native trees, shrubs and grasses** to increase the riparian buffer
 - **Removal of low-head dam** and placement of a modified cross-vane structure to accommodate the existing water intake feature

Benefits and Significance of Project

- Enhances **aquatic species habitats** and **fish passage issues**
 - Darters habitat and Mussel reestablishment
- Helps alleviate some of the low **dissolved oxygen** issues
 - Studies by HRWA and TDEC (2006 and 2007)
- Assists in mitigating sediment supply due to **bank instabilities**
 - Restore appropriate natural supply and balance of **sediment transport**
- Improves Recreation and Tourism
 - **Harpeth River Blueway** (Upper to Lower)
 - Promote rivers for tourist and recreational activities
 - Increase public awareness about importance of rivers
 - Natural Resource Heritage
 - Be flagship project for **Harpeth River Restoration Initiative** (TDEC, Franklin, Williamson County)
 - Upgrade access and signage as part of entire river system
 - Part of Franklin’s **Greenways and Parks Master Plans**
- Demonstration of Modern Civil Infrastructure Design
 - How modern intake and withdrawals are done to maintain natural aquatic habitat and in-stream flows
 - Use of modern, natural looking river in-stream restoration features that can easily be used for onsite education for field trips
 - Meet State withdrawal **ARAP** permit to remove low-head dam with upgrade of intake

Project Team Organization

Steering Group

- HRWA: grant proposals, overall project management, reporting, design
- Beaver Creek Hydrology: grant proposals, concept planning, design, hydraulic and sediment transport modeling, engineering, and construction project management/observation
- City of Franklin: implementation, in-kind, capital dollars

Committees

Steering Committee

Technical Committee

Preliminary Project Budget

Project Management, Engineering Design, Construction Management, Post-Construction Monitoring & Maintenance \$300,000

Construction \$700,000

USFW Grant Funds + \$350,000

Capital and In-Kind Matching Funds Required - \$650,000

Project Schedule

Funding officially secure in April with agreement with FWS and HRWA

End date: September 2012 – 3 low flow seasons – can get 1 year extension

Phase I: in-stream restoration below low-head dam – conduct this summer/fall

Phase II: low-head dam removal and in-stream restoration above

Design/engineering this year, conduct next summer

Eric Stuckey noted the grant offers an opportunity to work with the Watershed to help restore the river and to look at water intake for years to come.

Discussion:

- What happens in the summer when the river dries up? The flow rates will not change and there will be deep pools connected to groundwater, between them a trickle flow, or saturation. There will be several 100 ft. long pools. The river never completely dries up.
- Structures will not need maintenance with the natural channel design with boulders.
- There will be tree removal to excavate to bring down the terrace. They reforest with density on the banks. Many trees can be preserved.
- Alderman Barnhill asked how this ties in with the Integrated Water Plan. Eric Stuckey explained this project reduces the cost and does not keep the City from doing the water plant. It is an opportunity to leverage grant dollars, and it touches on stormwater as well as touches on projects already in the capital program. The question tonight is should the City take the next step and partner with the others.
- David Parker: it can fit into the plan quite nicely. Pipes would not have to be put under the river with this therefore reducing the cost. A monitoring station would need to be added as has been discussed previously.
- \$350,000 worth of grant money plus looking at what other partners can bring, and how it fits in the capital program. It is a multi-faceted project.
- Dorie Bolze noted to pay for everything would be \$1 million. Many are contributing and some things have already been identified. A committee will be established.
- A decision to pursue removal of the dam will not in any way affect the decision on the water treatment plant. Will continue to develop the concept.

4. Consideration of Request for Authorization to Use a Septic System for a Six (6) Acre Lot at 4341 Carothers Road in Lieu a Sanitary Sewer System Extension

David Parker, City Engineer/CIP Executive

Mr. Parker recommended going forward with this waiver agreement due to the exceptionally high cost to run a sewer line to a single lot. The owner could divide the property into two or three acre lots and build one additional house. If a decision were made to build a total of three houses, the owner would need to come back to the City.

Alderman Barnhill moved to approve the request for a septic system. Seconded by Alderman Martin. Motion carried unanimously.

5. Consideration of Proposal from CDM for Construction Management-at-Risk for the Delivery of the Jackson Lake Dredging/Rehabilitation Project

David Parker, City Engineer/CIP Executive

Deferred to the next meeting.

6. Consideration of the Agreement with Carothers Land Company for the Purchase of Rights-of-Way and Easements Necessary for the South Carothers Parkway Extension in the Amount of \$146,000.00

David Parker, City Engineer/CIP Executive

This purchase exceeds limits of what the City Administrator can approve. It is within the budget amount set with a budget amendment.

Alderman Barnhill moved to approve the rights-of-way. Seconded by Alderman Martin. Motion carried unanimously.

7. Consideration of the Final Change Order with Stansell Electric Co. for the Riverview Street Lighting Project for a Decrease to the Contract Price in the Amount of \$21,653.51

David Parker, City Engineer/CIP Executive

Alderman Barnhill moved to approve the final change order for a decrease to the contract price. Seconded by Alderman Martin. Motion carried unanimously.

8. Discussion Concerning the Maintenance of the Fieldstone Farms Stormwater Pump Station at the Pedestrian Tunnels as related to Contract Number 2009-0076 regarding Ownership and Maintenance of the Pedestrian Tunnels

David Parker, City Engineer/CIP Executive

David Parker pointed out the number one issue is if the City takes over maintenance it will be a safer system for pedestrian use. At this time someone from Fieldstone locks the tunnel gates at dark and during rainy weather.

Mark Hilty related they are looking at what would be required for his staff to maintain the pump station. The Board had indicated the City would take over maintenance of the tunnels. They are still looking at what is required for maintenance and if the Fieldstone Farms HOA would make a one-time \$10,000 payment to the City for taking over the responsibility. He asked if there was an expectation to have the tunnels open 24 hours a day. Now there is often water in the tunnels and the HOA does not do regularly scheduled maintenance. Is the preference never to have an inundation of water in the tunnels? Other pump stations are inspected daily by his staff and maintenance is scheduled once a month.

Staff recommends that for the City to assume operation and maintenance of the stormwater pump station and tunnels, the level of service of the pedestrian tunnels be evaluated relative to access during wet weather events. The pump station historically has not always prevented stormwater from entering the tunnels due to either pump failure or storm events beyond the pump station capacity. Operation of the tunnels should be carefully considered to address concerns of public safety for when this occurs in the future. Estimated annual maintenance costs \$7,096.

Alderman McLendon stated the HOA would dedicate the tunnels to the City connecting the west and east sides of Fieldstone and several miles of designated walkway that is part of the City's walkway program. If the City takes ownership tamper proof lighting can be installed and the tunnels will be kept open at night. The tunnels are heavily trafficked and are safer than crossing Hillsboro Road with no pedestrian crossing.

Mr. Parker advised money for maintenance would come from Stormwater since it is a stormwater facility, and the Water Department would do the maintenance. It was pointed out that the Stormwater Program is being developed to take care of these issues. Mr. Stuckey asked that a draft agreement be done to take to the Board.

9. Discussion on Advanced Metering Infrastructure

David Parker, City Engineer/CIP Executive

Mark Hilty introduced the concept of advanced metering infrastructure (AMI). Currently the Department uses automatic meter reading (AMR) technology to read the majority of approximately 17,000 active water accounts. Since this was implemented in the early 1990s newer technologies have emerged that provide a wider array of options to help monitor the distribution system, address customer inquiries and improve efficiency. Staff recommends the Department continue to research AMI to provide adequate information for potential consideration of migrating to this technology.

Mr. Hilty noted there are a great many benefits with the AMI system. The meters are in ground and at least three towers would be strategically placed. Existing meters would still work and there would be no need to replace all meters, although some would be replaced. The system could detect leaks early on allowing earlier correction of problems. The system also provides advantages for maintenance and billing. Mr. Hilty will come back to committee with a cost analysis.

10. Consideration of the Dedication of Sanitary Sewer Pump Station Property known as Tax Map 64, Parcel 20.01 by Southern Land Company, LLC

David Parker, City Engineer/CIP Executive

Southern Land would like to dedicate the sewer pump station property located at 870 Old Charlotte Pike to the City.

Alderman Martin moved to approve dedication of the sanitary sewer pump station property to the City. Seconded by Alderman Barnhill. Motion carried unanimously.

11. Consideration of Request from the Villages of Clovercroft to Use Individual Residential Low Pressure Grinder Pumps for Lots 140, 141 & 142 Versus Extending the City's Gravity Sanitary Sewer System to Serve these Lots

David Parker, City Engineer/CIP Executive

Mr. Parker related sanitary sewer for these lots was to be through Hurstbourne, an adjacent development to the south. Hurstbourne has not completed sanitary sewer construction and it may be three or more years before they complete it due to the economy. The State of Tennessee design standards state "Low-pressure systems should be considered for situations in which gravity sewers are extremely costly or impractical, such as rock or high groundwater table." Based on the assessment that the construction of gravity sewer is neither impractical nor cost prohibitive, staff recommends requiring the installation of a gravity sanitary sewer system and disapproving the appeal of Jones Company.

Dan Crunk was present to appeal to the committee to consider the grinder pumps for these lots. Two of the lots flow back to Watson's Branch. Three could not because of topography. Originally they had asked to go to the manhole in Ivy Glen; however, the City wanted them to go to Hurstbourne. Now, with opportunities to sell the houses on these lots, they request grinder pumps because they are cheaper. There is an existing manhole in Hurstbourne some 700 feet away, and years away from completion. To provide sewer they would have to go further and seven lots in Hurstbourne would be served as well. They feel they would be creating free infrastructure for another developer. The cost with grinders included is approximately \$45,000 vs. a gravity system for at least \$70,000. The cost of the road is not included.

Mayor Schroer related the City approved grinders for development of three lots behind his house on Boyd Mill. It is contradictory to say okay for the City to approve that, but not approve for someone else.

Mr. Parker prefers a gravity system and if an interim period with grinder pumps is allowed would ask if

Jones Corp. would agree to put in gravity. Mr. Crunk said the northern most manhole in Hurstbourne is 150 feet away. Eric Gardner said on this case the plan reviewer thought the lots were going north. It was questioned if the approval for sanitary sewer in the Villages of Clovercroft had expired since it was approved on July 21, 2006. Alderman McLendon said if it had lapsed he recommended making a deal for grinder pumps now with the obligation to hook on to gravity later. If the plan has not lapsed it cannot be changed now. Engineering will check the status and forward the issue directly to BOMA.

12. Consideration of Final Change Order with Garney Companies, Inc. for the Five Mile Creek Interceptor Sewer Project for A DEDUCT of \$119,549.60

David Parker, City Engineer/CIP Executive

Alderman Barnhill moved to approve the Final Change Order for a deduct of \$119,549.60. Seconded by Alderman Martin. Motion carried unanimously.

13. Status Reports

Report on status of all projects distributed. Eric Gardner did say notice to proceed on the ARRA project was received today.

- a. Mack Hatcher Parkway Extension**
- b. Hillsboro Road Improvements**
- c. McEwen Drive, Phase III Improvements**
- d. Third Avenue Extension**
- e. South Carothers Parkway Extension**
- f. Columbia Avenue Streetscape Project**
- g. Carlisle Lane/Boyd Mill at SR 96 West Signalization**
- h. Jordan Road**

14. Water Management Status Reports

- a. ARRA Drinking Water Project – Raw Water Reservoir Rehabilitation**
- b. ARRA Green Projects – West Reclaimed Water Line, Downs Boulevard Reclaimed Water Line**
- c. ARRA Clean Water Projects – Boyd Mill Low Pressure Sewer, Country Road Low Pressure Sewer**
- d. Southeast Water Line**
- e. Monticello Wastewater Collection**
- f. Carter Street Wastewater Collection, Water Distribution**
- g. Downs Boulevard Water Line**
- h. Franklin Integrated Water Resources Plan**
- i. Water, Wastewater and Reclaimed Water Specifications**
- j. Fieldstone Farms Wastewater Pump Station #2 Upgrade**

ADJOURN

Meeting adjourned @ 5:18 p.m.

Dana McLendon, Chair

Minutes prepared by Linda Fulwider, Board Recording Secretary, City Administrator's Office - 4/20/2010 10:21 AM