Westborough Advisory Finance Committee Minutes of Meeting No. 20 FY2008 March 31, 2008 Approved April 10, 2008

Members Present: Ian Johnson, Chair, Brigitte Casemyr, Judy Lucas, Cliff Watts, Ronn Moody, Jo Lown, John Arnold, Carolyn Spring (arrived 7:37 p.m.). Absent: None.

At 7:06 p.m. Mr. Johnson called the meeting to order in the Selectmen's Meeting Room.

## **Open Forum**

There were no requests to address the Committee.

### Approval of minutes -Meetings No. 18, March 24, 2008, and No. 19, March 27, 2008, FY2008.

Mr. Watts moved approval of the minutes of Meetings No. 18, March 24, 2008, and No. 19, March 27, 2008. The vote to approve the minutes of Meeting No. 18, March 24, 2008 was 7 in favor with 7 members being present. The vote to approve the minutes of Meeting No. 19, March 27, 2008 was 5 in favor and 2 abstentions, with 7 members being present.

**Budget and Article Review – ARTICLE 24. Amend Previous Town Meeting Action (Waste Water Treatment Plant)** Requesting funding of \$9,500,000 in addition to the \$28,235,000 previously appropriated, for the purpose of financing construction costs and related engineering services associated with improvements to the Wastewater Treatment Plant.

Mike Stanton, Chairman, WWTP Board, Chris Pratt, WWTP Board, Richard Jubinville, Earth Tech, Inc., Steve Calabro, Stantec, WWTP OPM, Jack Goodhall, WTPB, and Tom Parece, Earth Tech Design Engineer, presented the WWTP Board's request for funding for Article 24 of the ATM Warrant.

Ms. Lown thanked the WWTP committee for all the information provided and for the tour of the WWTP.

Mr. Parece began the presentation with the history and schedule of the WWTP upgrade project. In 2000, six communities formed the Assabet River Consortium to develop a Comprehensive Wastewater Management Plan (CWMP) for the Assabet River. The study was done in four phases, with the goal of meeting the mandated reduction in phosphorus discharge to the Assabet River. The schedule was driven by the NPDES Permit issued in 2005. The CWMP was completed in December 2007. Key Milestones for the project will be:

July 19, 2008 – commence construction

May 26, 2010 – NPDES Renewal Application due

July 19, 2010 – commence operation

November 26, 2010 - NPDES Renewal due

Anticipated costs for the project were presented to the Westborough Capital Expenditures Committee in August 2002. The engineer for the project was selected in mid-2006. During 2007 they developed a preliminary design. From 6/2007 to 2/2008 the final design and pre-qualification of bidders was completed. Construction will commence in July 2008 and is to be completed by July 2010.

In order to secure funding from the Water Pollution Abatement Trust (WPAT) the WTPB had to submit a funding request with a dollar amount by August 2006, even though only two of four phases of the CWMP had been completed. The ATM Article was approved in May 2007, Phase III of the CWMP was approved in July 2007, and Phase IV of the CWMP was approved in November 2007. The current Article is based on the scope of work identified in the completed CWMP.

The current plant is 20 years old. The scope of the work is phosphorus driven, and includes repairs and upgrades to current equipment as well as additions. Improvements in the Base Case are:

- Selective Roof Replacement
- Mechanical Aeration Upgrade
- Improve Chemical Systems
- Modify Septage Receiving
- Secondary Clarifier Addition
- Add RAS Pumping
- Site Improvements

Added Treatment Improvements include

- Phosphorus Treatment
- Support Systems

In general, structures last 50-plus years, equipment lasts 10 to 20 years, pavement lasts 10 to 15 years, and roofing lasts 20 years. Good maintenance at this plant has allowed equipment to be used longer than its expected useful life. However, the Effluent Flow Measurement Structure was determined to be too small. This caused a snowball effect of necessary upgrades. Because of this, some items originally listed in the Base Case were removed, and others were added. Necessary modifications that were not known in August 2006 and not included in the original upgrade include:

- Effluent Flow Measurement Structure
- Post Aeration
- UV Disinfection
- Emergency Generators
- Scum Processing
- Otis Street PS Force Main

Some Useful Life Replacements include

- Primary Sludge Pumps
- WAS Pumps
- Aeration

Items currently listed as Alternative Items:

- Additional roofing
- Slide gates
- Odor Control systems
- Selector Tank
- Paving and fencing

These items are strongly recommended to remain in compliance with Current Permit Limits, for Operation and Maintenance savings, for useful life replacements, for operator safety, to prevent future failures, and for security. These items are estimated to cost \$4,950,000.

Four additional Alternative Items:

- SCADA Phase II
- Screw Pumps
- Primary Clarifiers
- Windows

These items are recommended for Operation and Maintenance savings, useful life replacements, and to prevent future failures. These items are estimated to cost \$2,000,000. The Screw Pumps have reached their useful life. All flow goes through these, and to replace them after the upgrade is done would require removal of the

roof to give access. The Primary Clarifiers are covered and so cannot be maintained. Windows in the building leak.

Two additional Alternative Items:

- First Sand Filter to a Cloth Filter Conversion
- Second Sand Filter to a Cloth Filter Conversion

These items are recommended as a useful life replacement, and to ensure compliance with Current Permit Limits. Cloth filters are more efficient and effective. These upgrades would be required for compliance with Future Permit Limits. The estimated cost for these items is \$1,980,000.

All of these items, if done individually, would cost much more. The project gives economy of scale, and adds efficiency savings by doing the work in a more organized plan.

Currently, the metal roofs are leaking and causing rust. Only the two smallest roofs do not leak. The pavement is not draining properly. The windows have failed and leak, causing mold to grow in between the layers of glass.

The recommended construction will meet current levels of phosphorus only. New, lower limits which are expected in 2010 will not require capital outlays, only increased operating and maintenance costs. The cost to decrease the phosphorus level is not linear. To lower the level from 0.1 mg/liter to 0.05 mg/liter may cost much more than to lower it from 0.75 mg/liter to 0.1 mg/liter.

The schedule for applying for eligibility in the State Revolving Loan Fund (SRF) is set by the Massachusetts DEP. Eligibility in the SRF is based on the type of project, the size of the project, and the environmental impact. This entire project is SRF eligible, but some individual items would not be eligible if they were not part of the larger project. The project has been approved for a 2% loan interest rate with a 20 year payback. Borrowers are allowed to increase the length of the payback period but the interest will increase to about 2.4%. The entire amount of the increased project cost is SRF eligible at 2% interest.

These upgrades will result in a plant with a 20-year life. The project gets an economy of savings. It is unknown if this project will meet SRF Eligibility in the future, so reduced funding now may require additional funding in the future. The bidding on this project has begun. Sub-bids will be accepted opening on 4/16, with general contractor bids opening on 5/8. The WWTP Board will vote on 5/14, so there will be precise numbers for the ATM on 5/17. The current bidding climate is favorable to the town, as not many projects are seeking bidders currently so contractors are looking for work.

Issues always arise when building while running a plant. It will require a lot of coordination with contractors. Contractors will try to do as much work outside of the flow train as possible. Bid requirements are very specific, and include permit requirements. Pre-qualification committee has certified six general contractors based on their experience, size, etc. There is a penalty of \$25,000/day/plant for not meeting the permit requirements by 2010. Performance and guarantee bonds are included in the pre-qualification process.

Pilot testing of equipment specified has proven it to be capable of meeting the 0.1 mg/liter standard.

The SRF prioritizes projects based on environmental impact.

Screw Pumps have a 10 - 20 year life expectance. This plant is 20 years old. If these fail, it will cost more to replace them in an emergency situation.

Construction will require heavy traffic off Route 9 only. Pavement will be done last.

DEP/EPA standards are expected to go to 0.025 mg/liter limit, probably within 10 years.

Aluminum and other metal-based chemicals used in the treatment process are under watch now, and are monitored in the effluent. Chlorine is a good example of a chemical added in the treatment process then needs to be taken out before dumping in the river. UV disinfectants are currently in the plan because they don't add anything to the water that then needs to be removed.

There are no plans to increase capacity. The capacity is limited by the Permit requirements.

Committee members had questions for further review:

If approved (total of \$37,500,000) what is the effect on sewer rates, and when should it be expected? How much phosphorus comes into the plant, and what can consumers do to minimize phosphorus?

Steve Calabro, OPM, stated he does not feel the current funding approved last May will do a good job. They would have to move ahead if this Article is not passed but would rather not have to do this.

The minimal additional needed to make a good project is \$5,400,000 (items 1 through 6.) Items 1 through 10 should be done. Items 11 and 12 are to deal with future limit reductions. Sand and cloth filters cost about the same to operate. Cloth may be minimally more expensive.

### Budget and Article Review - Westborough Treatment Plant Board

Jack Goodhall and Chris Pratt presented the Waste Water Treatment Plant budget request of \$3,197,080, an increase of \$238,520 over last year. The Treatment Plant Board is one of only two boards in town whose members are paid. They have been paid \$300 / member / year for many years. This is included in the Intermunicipal Agreement.

Expenses which are increasing include:

\$133,800 increase in Electricity. This is the last year of the town contract, which is currently at  $5.8\phi$  for supply and  $3\phi$  for delivery. This will go up January 1, 2009. The actual new contract is not known, but they are estimating  $12\phi$  for supply. The Board does plan to remain in the town's contract. The budget includes the total cost. Shrewsbury and Hopkinton then pay their share. Contractors modifying the plant will have their own generators.

\$6,000 increase in legal services. This is based on the average for the last five years. There are no expected legal needs in the year, so this may be able to come down.

\$96,300 increase in contractual services. This figure is CPI and PPI based. The figure comes out in July in an annual report. If the money in this line is not spent it goes back to the town.

\$2,000 increase in plant insurance. The insurance covers catastrophic repairs to the plant. This will probably increase when the plant is upgraded.

Operation costs of the new plant are not known. There is a possible increase in chemicals and manpower. It will not be an effect this year, but may effect the year after. Manpower increases would be to the contractor, not the town.

#### **Liaison Updates**

- Ms. Lucas asked the committee if they wished to hear Gene Carlo presentation. The Committee decided that they did not need to have him present unless he wanted to do so. So much information has been given already, in the presentation to the Board of Selectmen.
- Ms. Lown gave references to the Massachusetts Stormwater Handbook. This document is too large to print out for each member. Ms. Lown has questions about specific language in Westborough's bylaw. The Handbook states "shall not apply to a single family house, unless in a

- "critical area". Our proposed by-law is more strict, and adds an additional layer of regulatory requirement on the DPW. What will this cost?
- Mr. Johnson handed out an article from the Boston Globe on civilian flaggers vs. Police Details.
- Mr. Johnson noted no presentations scheduled for Thursday, but meeting will be held. Monday, April 7 meeting will be cancelled. Presentations still to schedule are DPW Stormwater Article (4/3, 4/10,or 4/17 at 7:10 p.m.), Planning Board possibly in late April, Board of Selectmen on the Government Study recommendations (after Warrant is posted).

# Adjournment

At 9:13 p.m. Mr. Watts moved to adjourn the meeting. The vote to adjourn was unanimous (8 members present and in favor).