

CFAC Sub Committee on  
Clean Water Protection Project

January 16, 2010

Attending: Bob Ciolek, Laura Cronin, Ralph Krau, Mark Mine,  
Guest: Peter Boyer, former town Manager, Falmouth,  
Visitors: Mary Pat Flynn, Select Woman, Falmouth, Richard Enders, Ed Maroney ,  
Patriot Paper, Laura Rexford, Enterprise Paper, Meri Farnwort, Louise DiCicca, , Oliver  
Cippolini

Peter B. gave the committee an explanation on his concept(s) for financing a sewer system for the Town of Falmouth, MA His estimates were at \$600 Million in total cost, financed with borrowings from the SRF in the amount of \$400 million, and the balance through betterments, taxes and sewer rate payers over a 20 to 50 year time line, and to bill monthly similar to other utility bills. To keep betterments at a reasonable level, he used the 30/70 rule .....30% funded from the entire town taxes, and 70% from betterments of the homeowners. He felt that this financial model made the most sense so as to share the cost by the entire Town and the most equitable for all parties.

He advised to plan projects based on when the Town would be at its lowest debt level.

He advised that they had an alternative system installed at New Silver Beach, and thus too early to provide data on how successful it is in reference to reducing nitrogen. This project had mandatory hook ups, and there is always an issue as to who is monitoring these systems 24/7 365 days per year. He also indicated that alternative systems need to have some place to put the treated water, or have it sent to another location (a treatment plant or hauled away. Falmouth prior to this install did develop guide lines for hookups, to prevent any misunderstanding, by the Board of Health.

His comments with reference to the sewerage in "unaccepted "roads was that, first the trench needs to settle for at least a year, and that they would remain in that condition unless the homeowners wished to pay for their upgrades.

He stated that Mashpee was in the process of testing 1 cluster of an alternative system...with Pio Lombardo, and Stearns & Wheeler is their consultant to evaluate a conventional system. Barnstable should try and follow their progress on the handling of nitrogen and associated costs capital and operational on these tests.

Respectfully submitted, Ralph M. Krau

GUEST COMMENTARY:

# A financial strategy for sewers

By Peter F. Boyer  
guest@barnstablepatriot.com

*Editor's note: Peter F. Boyer, a former Falmouth town administrator, did some deep thinking about how to pay for wastewater infrastructure in his town. We believe his thoughts bear upon Barnstable's situation as well, and present them here with his permission.*

## PART ONE

**A**s we embark on a public discussion of future wastewater treatment in the town of Falmouth, it is evident that we are all alarmed at the prospect of huge costs to the community. I believe this alarm fuels the debate to consider alternatives to a central sewer system. While it is imperative that this community discussion proceeds, I am hopeful of providing a pathway to lessen the anxiety about the burden of carrying the costs of this project. In doing so, I have created my own version of a

financial model. Please keep in mind that the numbers I display are, at their most charitable, "educated guesses." Information about actual costs will emerge over the coming years through the decisions yet to be made about system design, site, project area and schedule.

The first assumption I make is that the project area is largely south of Route 28, from Teaticket to the Mashpee line.

My next supposition is that there are 7,000 properties in this area which would be subject to betterments.

Third, I assume that bond counsel and our fiduciary agent would agree that 50-year term bonds would be marketable at a fair interest rate.

Fourth, I have made some guesses about project element costs that are not supported by real information, and I have not attempted to forecast increased costs due to inflation.

With those disclaimers, here goes!

CONTINUED ON PAGE A:9

# A financial strategy for sewers...

CONTINUED FROM PAGE A-7

## Treatment and Disposal

I have used a figure of \$90 million as the conservative working number for a central, tertiary treatment plant construction and whatever method of disposal is decided - outfall, well injection, settling basins. I hope that we can obtain a State Revolving Fund (SRF) zero interest loan for this cost at a 30-year term. The cost of this element would be 100 percent tax levy.

Thus, \$90 million principal divided by 30 years = \$3 million per year on the tax levy.

## Large Interceptor/Collector Mains

These sewer mains would be the major arteries carrying wastewater from the various neighborhoods to the treatment plant, and if necessary, to a disposal site. I assume 100 percent tax levy financing, no SRF money, on a 50-year loan with interest costs about one-third of the principal costs. I have used \$30 million as a working number for this element.

Thus, \$30 million principal + \$10 million interest divided by 50 years = \$800,000 per year on the tax levy.

## Collector Mains & Sewer Laterals

These systems are all of the neighborhood collection systems, pumping stations, etc. that deliver wastewater to the major interceptors. These are the estimated 7,000 properties served by sewers and subject to betterments. The working number I use for this element is \$230 million principal, with \$80 million interest charges, over a 50-year term bond. I propose that this element be financed with 100 percent betterment to each of the properties.

Thus, \$230 million principal + \$80 million interest = \$310 million divided by 7,000 properties = \$44,285, divided by 50 years = \$885 per year betterment charge.

No doubt, the concern of the property owners would

be the cost of the betterment coupled with many other costs. I would argue that over a 50-year term, especially the last 10 to 15 years, this cost would become less significant because of inflation. In addition, this represents an estimate about half of what the New Silver Beach area residents are now annually paying for betterments.

## Project Timing

Timing is everything, so when would all this take place? I actually have worked back from a time when our current debt service will decline enough for the new costs on the tax levy to be supported without significant added tax effort. According to the town's capital improvement plan document, dated Sept. 15, 2008, debt retirement schedules show that we will have achieved very substantial decline in debt by FY17 + FY18.

Thus, total tax levy debt of \$130 million should be permanently financed with a repayment schedule starting in FY2017 at an average of \$3.8 million per year, until the treatment plant is paid, and \$800,000 per year thereafter.

The implication of this proposal is that a town meeting vote in the spring of 2015 should be the target decision date for construction of the system. Of course, borrowing the entire amount would not occur at one time, but like the high school project, might occur over several years depending on construction schedules.

Such a schedule fits very well into the town's needs, I believe. The vote of the November 2009 Town Meeting for \$200,000 study funds will further move the community deliberations along. If a decision were made on the technical side, then I could foresee town meeting action in the spring of 2011 to appropriate an amount of money for environmental review, permitting and design development, approval and then construction design.

Three years for all this work is very reasonable. I suppose \$10 million for all this as a working number, financed from the tax levy.

Thus, \$10 million review and design funding, short term borrowing paid before FY17, from the tax levy.

A further implication of this strategy is that no significant new debt is added to the town in the intervening years. No new senior center, fire station, water main extensions, school renovations, or the like could be entertained for some 15 to 20 years from now. (The one exception to this might be a water filtration system at Long Pond, if forced by DEP.)

For those who would like to know what specific impact the debt service costs would have on the tax rate, an annual expenditure of \$3.8 million for wastewater debt service would be about \$40 on the tax rate. This equates to an annual cost of \$160 per year for a \$400,000 home.

The last aspect of this strategy proposes that the town share of the total cost at roughly 30 percent of the \$450 million, and the property owners share at 70 percent. While a 50-year term eases the burden, a burden exists. For the town, new debt of \$130 million almost doubles our existing total debt, and only by delaying until FY2017 can we support this obligation. For property owners, this betterment plan is accompanied by sewer connection costs and operating fees.

All of this outline represents a huge over-simplification of actual financing. Average debt service is not real debt service, which starts high and ends low. The numbers I use are not real, they are guesses. But I believe that the approach is valid, and the order of magnitude we face is reasonably accurate. I hope this helps guide the debate.

No small challenge to us all!

## PART TWO

In all likelihood, a key question about sewer financing will

emerge as to why a 50-year term for bond repayment is proposed. This question is certainly legitimate, since such a term has never been proposed for Falmouth project financing.

Is it even legal? The recent adopted state law, Chapter 312, Acts of 2008, SECTION 10 (section 1H) says in part "...a municipality or sewer district adopting section 1A may borrow and assess betterments for a term not to exceed 50 years..."

The next crucial threshold question, and one the town should determine, is whether 50-year term bonds can be sold at a reasonable interest rate. Our financial advisors should be asked for an opinion.

If feasible, why do it? Let us examine a set of hypothetical alternatives with an assumed betterment charge to each property of \$35,000. One alternative is to pay cash up front, \$35,000, and be done with it. Two, a 20-year term with principal and interest cost of \$40,000, or \$2,000 per year. Three, a 30-year term, with principal and interest costs of \$45,000, or \$1,500 per year. And finally, a 50-year term for \$50,000 principal and interest, with annual payments of \$1,000.

Which alternative do you choose? For some lucky ones, the idea of paying cash is easy, but for most of us it is not. My guess is that, say, 80 percent of us can manage to pay this charge in a 20- or 30-year time period. It might be a hardship, but possible. It is the last 20 percent, or even 10 percent, that this proposal intends to protect.

A few years ago, in the course of my work for The 300 Committee, I happened to meet an elderly woman, living alone, who wished to protect her property, a beautiful waterfront modest home and marshland, with a conservation restriction. One of her means of supporting herself depended on going out on the roadways several times a week to collect bottles for the 5-cent deposit, but her health was failing and that was becoming more difficult. That \$10 per week was very important to her. Now imagine her paying

the betterment charge.

Those living on a fixed income, close to the edge, will have an enormous difficulty paying this bill. I think it is incumbent on the town to do as much as possible to lessen the impact.

Further, the question of the life of the improvement for which we are paying is relevant. Clearly, the sewer pipes serving each property have a lifetime of at least 50 years. Remember, some of our water pipes are twice that age. So, you have to ask yourself whether you want to pay off that charge sooner than the life span of the pipes. For many, I believe that the answer is "No." Add to this the thought that many of those property owners will probably own the property for 20 years, max. Only the hardiest will own it for 50. Should not a subsequent owner pay for a share of the service? I think so.

### PART THREE

This article discusses the question of the ratio of taxes versus betterments as the allocation of cost sharing for the construction of sewers in Falmouth. While it is appropriate to raise the question for public reflection and discussion, no conclusions can possibly be reached before the actual design of construction work is done, several years from now. That is when hypothetical costs become real estimates.

There is no "right" answer to this ratio. Each community must decide for itself, necessarily through a highly public process, which ratio of tax support to betterment support fits best. As we have seen, there are legal and financial consequences for any decision Falmouth makes.

I will consider three different models of such a ratio, based on differing public policy goals. Two of these were presented in the draft Comprehensive Wastewater Management Plan given to the Falmouth Board of Selectmen last month. The third is based on my own hypothetical model proposed in a previous article.

One model in the CWMP suggested the option of full

support of the cost through taxes, without any betterment charges being assessed. Depending on the terms of the debt, this idea would cost the taxpayer \$10 million to \$11 million per year, or roughly \$400 on the average property tax bill. It would double the current debt load of the town.

The second model in the CWMP proposes that property taxes pay for 100 percent of the treatment and disposal costs of the project, and 30 percent of the collection system costs, leaving 70 percent covered by betterments. This version, at least using my number estimates, would result in a 50 percent to 50 percent split in the ratio for the entire project cost.

The third model is presented in my previous analysis. The total cost in that speculative model, including principal and interest costs, was \$450 million, with the tax share of \$140 million. That model roughly represents a tax share 30 percent, betterment share 70 percent (the actual ratio used in the small New Silver Beach sewer project).

The financial goals could range from "no impact on property taxes" to "no added burden to sewer property owners," but most likely, the answer lies somewhere in between. Personally, I oppose the first two models, and favor the 30 percent to 70 percent ratio as the most financially feasible. I believe it strikes the right balance between taxes and betterments.

Another aspect of this model might include assessing betterments for 50 years, but borrowing funds for 30 years, if our fiduciary advisors recommend. Such a difference shifts a marginally greater cost burden to the taxpayer, but would make properties in the sewer district more affordable for owners. Betterment assessments collected for the first 30 years would not completely cover the debt payments, but would cushion the expense.

Other considerations will doubtlessly emerge during the public discussion of these matters. I remain confident that Falmouth will arrive at a just solution

table  
to  
that