

# Memo

To: Tom Rice, Mayor  
From: Chuck Osborne  
CC: City Council  
Law Director  
Date: 5/22/02  
Re: The Proposed Pipeline Connection to Canton Should Be Reconsidered

---

Dear Mayor Rice:

There are a number of concerns that I have regarding the proposed pipeline between North Canton and Canton and as a result, I would like to ask that the proposed pipeline connection to Canton be evaluated again. Recent information has revealed that the East Maple Street well field can once again be a viable water source for the city. In addition, it appears that there is the possibility that the July 1 completion of the proposed pipeline might not be attainable.

It is because of these two concerns, as well as the ones detailed below, that I feel the issue of the proposed pipeline to Canton should be reconsidered.

Concerns with the proposed pipeline connection to Canton are:

- **The project is legally required to be put out for bid.**

I have consulted with outside legal counsel and have been advised that the proposed pipeline project is required by law to be bid. The East Maple Street pipeline project and the proposed pipeline running north and south along the railroad are distinctly different projects with a different scope of work.

In addition, the change in construction sites and the changes in job requirements have resulted in an additional \$397,904.76 in funding requirements. This amounts to nearly 36 percent of the initial contract and far exceeds what the state would allow for a change order even if this project would qualify as the same project.

- **The project may not be completed in time for peak summer needs.**

The project completion date that was presented to council prior to the vote on the legislation was given as July 1. I have received estimates from contractors with experience doing similar work and they have told me that under ideal conditions the project would take 65 working days resulting in completion of the project in 98 calendar days. And that was being optimistic. The estimate was based on installation of 250 feet of pipe a day. Residents on Thunderbird Circle were told by individuals working for the contractor looking over the job site that they would be lucky to install 100 feet of pipe a day.

Just this week I have been told that the contractor for the job intends to work two crews and work weekends to complete this project. Obviously, this is a considerable labor expense. Why is a project of this magnitude being rushed?

Did proper planning precede this pipeline project? Were the goals simply to put the pipeline in ground in the most expeditious manner possible regardless of cost?

The question remains. Can this project be completed in time to alleviate possible low water reserves in July and August of this year? If there is a possibility that it will not be completed in time for the city's increased demand for water this summer, is there really any need to rush this project at this time? Maybe the city should rethink the water situation. By this time next year, North Canton could easily be ready to move ahead on its East Maple Street well field. The city has buried pipe in the ground on that project and that pipe could now be put to good use.

- **The city can only use a fraction of the pipeline capacity being proposed.**

Due to water pressure concerns for downstream water customers and supply problems (12-inch line feeding a 24-inch line) from Canton's 12-inch pipeline, North Canton will only be able to utilize approximately 13 to 18 percent of the capacity of the 24-inch pipeline that is being proposed. The City of Canton will have to install additional water lines that connect to this 24-inch water line if North Canton is ever able to utilize anywhere near the capacity of the 24-inch pipeline.

My calculations on the capacity of the 24-inch pipeline come from the flow test report completed by the Engineering firm of Burgess & Niple. Their engineering report states that the maximum future flow that can be delivered to the North Canton water treatment plant is 15 mgd (million gallons/day). At the present time, to keep the residual water pressure in Canton's 12-inch pipeline above the Ohio EPA limits of 35-psi, North Canton water demands are limited to a maximum flow of 2.75 mgd (million gallons/day).

There are other concerns that I have brought up at City Council meetings regarding the pipeline and to date the concerns have not been answered when raised in council. These other concerns are:

- **The water pressure drop for downstream Canton water users.**

Canton water customers will experience a drop in their water pressure. In a flow test report done by the Canton Water Department, it appears that with a demand of 2.0 mgd (millions gallons/day) by North Canton's water treatment plant, residual water pressure at the junction of North Canton's 24-inch pipeline with Canton's 12-inch pipeline will drop to 50-psi. An increase in demand to 2.75 mgd will result in a static pressure of 37-psi at this junction. The report stated that the OEPA required a minimum working pressure in the distribution system of 35-psi.

From the flow test record done by the Canton Water Department, it appears that at the present time the static water pressure in Canton's 12-inch water lines is approximately 83-psi. I am not a hydrologist, but I would think that a drop in water pressure from nearly 83-psi to 50-psi or less would be noticeable to homeowners serviced by this pipeline.

I have not been able to find any water model testing results that simulate water use by both Canton water customers downstream of this connection and North Canton at the same time. The flow test done by the Canton Water Department was done around 10:00 a.m. This is not what I would consider peak time for Canton water users downstream of this connection. This added demand for water might result in a further drop in water pressure in this line when coupled with water demand from North Canton.

- **The user fees for the right-of-way have no cap.**

Although the right-of-way fees that are to be paid each year appear to be inconsequential, they are adjusted each year based on the CPI (Consumer price Index) for inflation. As a result, the annual fees go up each year and the compounding of interest comes in to play which dramatically affects the payout over the lifetime use of the waterline. The lifetime use of the waterline (100-years) will result in the payout in annual fees for the right-of-way totaling nearly \$1.1 million dollars. And North Canton still will not own the right-of-way. These are merely yearly user fees. The City of Canton paid a one-time fee of \$95,700 for a permanent right-of-way that it owns. This was negotiated with the railroad less than two-years ago.

- **The pipeline must be removed from the railroad right-of-way when use of it is discontinued.**

The agreement with the railroad requires the City of North Canton to dig up the 24-inch pipeline when the city decides to end use of the line. I have not seen any cost figures on what that will cost the city nor has the cost to accomplish this been discussed. In fact, I was of the understanding that this requirement was to have been removed from the proposal with the railroad but I now find that it remains in the final agreement.

- **The routing of pipeline must allow for planned upgrades to the Zimber Ditch.**

Planned improvements to the Zimber Ditch call for the installation of large concrete box culverts in various locations to improve the flow of the waters in the Zimber Ditch and reduce the potential for flooding in North Canton. This is documented in a study published in March, 1997, titled, *Zimber Ditch Study*. If the pipeline is installed without regard to the future placement of these concrete box culverts, the pipeline will have to be dug up and relocated at additional expense in the future. I have related this concern in council and I still do not know if this concern has been considered in the design of the pipeline.

It appears that the City of Canton has already put their 12-inch line at the Everhard Road crossing right where the concrete box culvert was planned to go in the Zimber Ditch Study. As a result, the 12-inch line will probably have to be relocated at great taxpayers' expense when improvements to the Zimber Ditch are implemented.

- **The homeowners will lose natural screening from Belden Village.**

The installation of the pipeline along the railroad right-of-way will result in the destruction of trees and bushes. These trees, bushes, and natural vegetation shield homeowners who live along the railroad right-of-way from noise and lights that emanate from the commercial development in Belden Village.

Should this project move forward given the concerns described above? The pipeline project to connect to Canton water is a big project and it is being rushed. A number of questions come to mind here:

Why didn't the city elect to use the existing right-of-way that currently carries raw water in a 30-inch water line from existing well fields for the path of the new pipeline? By running the proposed 24-inch pipeline in the same right-of-way as the present 30-inch pipeline there would be no need to locate the proposed waterline on the railroad right-of-way and a great deal of expense could be avoided. This pipeline could more conveniently serve as a backup to the older 30-inch pipeline.

Is it really worth complying with the demands of the railroad to encase the proposed waterline in a steel casing just to be able to use the railroad right-of-way? The railroad's requirement to encase a portion of the proposed pipeline in a steel casing has added considerable cost to this project. For the added cost of this requirement, a permanent easement could have been secured from private landowners thus eliminating all future right-of-way payments at a considerable cost savings to the City of North Canton.

Does the city really have a water emergency? If there were such a water emergency in past summers, why didn't the city ever declare a water emergency and implement mandatory water rationing? Bans on in-ground sprinklers or other measures could have been implemented if there had been true water emergencies in previous years.

The city is spending \$1.2 million dollars to draw water from Canton during peak summer water demands lasting for 4-6-weeks each year. Will this pipeline just sit dormant the rest of the year?

Will the proposed pipeline be needed at all when the city brings the East Maple Street well field on line?

It appears that the East Maple Street well field has been cleared of contaminants. Since the city already has several hundred thousand dollars worth of 24-inch pipeline in the ground, it seems that it would make sense to move ahead with development of the East Maple Street well field. City residents could finally get a return on the several hundred thousand dollars of pipeline that has already been put in the ground.

Given all of the above concerns, it seems prudent to rethink the proposed pipeline connection to Canton. If a pipeline connection to Canton is still deemed necessary, it would be prudent to plan a different route that is more favorable in the long run to the city rather than one that is simply the quickest to put in place.

Sincerely,



Chuck Osborne  
Councilman at-Large  
City of North Canton

cc:  
City Council  
Law Director  
City Engineer