

Comments on the Proposed ATM Article to Obtain Wastewater Design Flow for the Library

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Summary: The proposed article is to obtain the wastewater capacity necessary to hook the Library building to the Wayland Wastewater Management District (WWMD) at a cost of about \$70,000. The town currently has 4100 gallons per day (gpd) capacity in the Public Safety and Town Buildings and 3000 gpd allocated for the Municipal pad. The current proposed article adds 820 gpd, which could presumably be used by the Library if its current leaching field fails. Previously, John Moynihan had the connection of the Library to the WWMD in his Facilities Capital Plan with an additional construction cost estimated to be \$60k. Following connection, additional costs will occur in the future to pay for operating expenses---at about \$2100/year, increasing slowly over time. An alternative to obtaining the 820 gpd is to use part of the allocation for the Municipal Pad. This will limit the size of the building on the Municipal Pad, but probably not so much to limit its function as a location for the Council on Aging facility. However, the ultimate size of a building there will be less than 40,000 sqft, which is the largest building previously anticipated.

Background: Right now the Public Safety Building is connected with a design flow of 1100 gpd (gallons per day), so the town pays based on the design flow (aka capacity) and the water usage. The Town Building is not connected but the design flow of 3000 gpd is allocated and paid for quarterly. Finally, the so-called Municipal Pad has an allocated design flow of 3000 gpd. The total for the Town is 7100 gpd. This is about 9% of our total capacity.

Recently two portions of our total capacity were relinquished by their owners: 440 gpd from Bastons and 380 gpd from Wayland Commons. The WWMDC wants to sell this capacity to gain money for the users. This is not an increase of the total capacity, just a reuse of 820 gpd of design capacity

I believe that there is no formal document calculating the Library needs because (as odd as it seems) the Title V regs do NOT have anything for libraries. We could treat the library (~14,000 sqft) as an office (75 gpd/1000 sqft) and allocate a design capacity of 1050 gpd. However, the default method of calculating design flow in the Title V regs is double the existing water usage. For the library, this is ~200 gpd. Hence, the better amount of design flow is about 400 gpd. About ten years ago, the WWMDC estimated the Library needs to be 500 gpd. If that building is enlarged, the new area is uncertain without another design study. An enlarged library will need more capacity. A conservative estimate might be double the current amount to 800 gpd. This coincides with what the WWMDC can re-allocate.

In summary, the town currently has 4100 gpd in the Public Safety and Town Buildings and 3000 gpd allocated for the Municipal pad. The total is 7100 gpd or ~9% of the aggregate design capacity for the WWMD. The current proposed article adds 820 gpd, which could presumably be used by the Library if its current leaching field fails.

Estimates of Cost: According to Library files, John Moynihan made ballpark estimates for the cost of connecting the Library to the Wastewater Management District (WWMD) of \$30k in FY09 and \$60k in FY10. These are engineering design and construction costs for the on-site piping, infrastructure, and grinder pump to make the connection to the WWMD main. These costs would be borne at a time when the actual connection is made, possibly some years hence.

The Article for ATM is for an acquisition cost to allow the Library building to join the WWMD. The

\$70,000 for this article is to obtain the capacity at a rate equivalent to what Wayland Commons paid as a privilege fee about 8 years ago. They paid \$600,000 for 7,200 gallons per day (gpd). The capacity available now is 820 gpd. The scaled amount is $(820/7200)*\$600,000$ or \$68,333. Inflation is not included in this amount.

Note also that at some point, say at connection time or earlier, the WWMDC would begin to charge the Library for operating costs, as is done for the Town Building (not yet connected but charged) and the Public Safety Building (connected and charged). In FY2015, the operating cost would have been ~\$1750. When the Library is connected, an additional operating cost would be added for water usage or flow. With the Library water usage of about 200 gpd, the FY2015 amount would have been \$316. These values will increase slowly over time to pay for inflation of operating expenses.

In summary, John Moynihan had the connection of the Library to the WWMD in his Facilities Capital Plan with a construction cost estimated to be \$60k. The current article is to obtain the wastewater capacity necessary to hook the Library building to the WWMD. The cost is about \$70k. Additional costs will occur in the future to pay for operating expenses---at about \$2100/year, increasing slowly over time.

Discussion of article: Right now, Ben Keefe is making the argument that the Town has enough capacity to allocate some to the Library. This would come from the 3,000 gpd earmarked to the Municipal Pad. That amount is good for a 40,000 sqft building, and right now only 20,000 sqft is contemplated. The implication is that the 3,000 gpd is sufficient Title V design flow (capacity) for both a building on the Municipal Pad and the Library. I can't argue that this is definitely wrong, but I think it is a restriction to the amount that was originally contemplated for the Municipal Pad.