


**Hooksett Sewer Commission  
Workshop Meeting  
September 17, 2019**

This workshop was held between 10:00am and 12:00pm. Present were Chairman Sidney Baines, Commissioner Frank Kotowski, Commissioner Richard Bairam, Superintendent Bruce Kudrick, David Scarpetti, Alden Beauchemin and David Mercier from Underwood. The purpose of the workshop was to discuss solar, the Route 3A sewer expansion and sewer connection fees. A typed list of discussion topics for the workshop was provided by Underwood Engineers and is attached. The workshop was for informational purposes only and no decisions were made. The workshop adjourned at 12:05pm.

Respectfully Submitted,

  
Frank Kotowski

Clerk

HOOKSETT WWTF, HOOKSETT, NH  
**Commissioners Meeting Discussion Topics**  
**September 17, 2019 @ 10:00 AM**

ILLICIT DISCHARGE INVESTIGATION

- UE has prepared an Engineering Services Request (ESR) #12 for \$2,500 to provide on-call assistance to the HSC relative to this topic

SOLAR FIELD PROPOSAL

- UE is proposing a different approach – design/build with a solar specialty designer/contractor with UE as third party reviewer on HSC's behalf
- Revision Energy out of Enfield, NH
- Upper limit to desirable solar field size
- Power purchase agreement (PPA) versus ownership at outset
- Targeting proposal presentation at 10/1/19 Commissioners Meeting

ROUTE 3A SEWER EXPANSION

- Zone 1 presented to TIF Advisory Board in August. \$8.5M included new pumping station and force main under river to Martins Ferry PS with pump/controls upgrade.
- Zone 2 to be presented 9/18/19. \$7.35M assumes use of Zone 1 pumping station with wet well upgrade at Martins Ferry PS.
- Martins Ferry PS. Data review suggests PS controls can be modified to get more flow out of existing PS. Would benefit from a wet well expansion regardless.
- Martins Ferry force main. 8" cast iron pipe; 50 years old half way through expected useful life of 100 years. Cost estimate to install new force main in RR ROW \$3.5M to \$5.0M, assuming pipe is installed 20 feet away from future second rail.
- UE believes modified Martins Ferry PS and existing force main can handle initial flows from Zone1/Zone2. Rate of new development will drive how long before a new force main is needed.

CONNECTION FEES

- Tap fee versus system development fee (SDF) – see attached.
- Current HSC rate/fee structure only incorporates the equivalent of a tap fee.
- SDFs are being used elsewhere in the country and starting to catch on in NH.
- Gives utility to ability to charge new connections their proportionate share of the investment that has been made by others in the existing infrastructure they will get the benefit of.

***What are the two most common types of sewer connection fees?***

**Tap fee:** a one-time charge for a sewer connection that recovers the municipality's *cost related to construction of the tap*, meaning the individual service line from the sewer main to the customer's property line. The costs to be recovered are the labor, equipment, and materials for construction of the service line to the property line, and the labor for inspection of the work on private property.

**System development fee (SDF):** a one-time charge to recover the costs associated with the *upfront capital investments incurred to make sewer available* to new properties. These capital costs include the construction of and past upgrades to pipes, facilities, land acquisition, engineering, surveys, right-of-way acquisition and other related costs.

***Why are SDFs necessary?***

The water and wastewater industry uses SDFs to fund capital projects that will provide service to new or future users of the system. This practice helps mitigate the need for the system's existing customers to pay for system growth and expansion through increased user rates. In essence, a SDF assigns growth-related costs primarily to the new customers responsible for creating those additional costs.

***How much are SDFs and who pays them?***

SDFs are assigned based on the amount of flow the new customer will use. This is based on either the type of use anticipated or the amount of flow the customer wishes to purchase if the standard allotment is less than desired. The SDF is paid when a new tap is placed and the customer applies for initial service. If the property then changes hands, a new SDF is not typically collected unless the property is redeveloped for a changed use.

***How are SDFs typically calculated?***

1. The net asset cost of the sewer system is calculated based on the costs of the sewer main, pump stations, force main, and treatment facilities, less any principal balance left on any debt.
2. Note: The costs in Item 1 above can be calculated as original costs or original costs inflated to today's dollars, and either option can choose to consider depreciation or not to consider depreciation.
3. The net asset cost is then divided by the average daily gallon capacity of the sewer system to get \$/gpd.

***Early Draft Example Hooksett Connection Fee Calculations:***

1. **Tap Fee.** Average service in road = 25 feet x \$100/foot = \$2,500 plus \$500 for private property service inspection = **\$3,000.**

2. **SDF.** Assume the Hooksett sewer system net asset cost in original dollars not accounting for depreciation is \$25M.  $\$25\text{M}/1.1\text{MGD} = \$22.73/\text{gpd}$ . In Hooksett, the average residential household uses 225 gpd. Based on the above SDF, a new single family residence would pay a SDF of  $\$22.73/\text{gpd} \times 225 \text{ gpd} = \mathbf{\$5,114.25}$ .
3. Therefore a new single family residence in Town would incur the following: a tap fee of \$3,000, a SDF of \$5,114.25, and a cost to run the service to their home from the property line of 75 feet  $\times$  \$50/foot = \$3,750. Total = **\$11,864.25**. This should be compared to the cost a homeowner would incur to construct their own private leach field of **\$10,000 to \$15,000**.
4. For Route 3A Zones 1 and 2, current development uses 70,000 gpd of water. Applying the existing HSC connection fee would raise  $\$13.33/\text{gpd} \times 70,000 \text{ gpd} = \mathbf{\$0.933\text{M}}$ . Using the above early draft example of combined tap fee and SDF would raise  $\$36.06/\text{gpd} \times 70,000 \text{ gpd} = \mathbf{\$2.52\text{M}}$ .

~~$65,000 \times 225 = 14,625,000$~~   
 ~~$65,000 \times 22.73 = 1,477,450$~~   
 ~~$2288 \text{ units} \times 3000 = 6,864,000$~~   
 ~~$811,000$~~