
CONCORD PUBLIC WORKS

DATE: August 5, 2013

MEMORANDUM

To: William B. Edgerton, Director CPW

Via: Alan Cathcart, Water/Sewer Division Superintendent

From: Paul Cote, Assistant to the Water/Sewer Supt.

Subject: Sewer Improvement Fee- History

Background

Events leading up to the Creation of the Sewer Improvement Fee

In the 1970's several new service areas connected to the sewer system, such as Concord Greene and the Concord-Carlisle High School. This pushed the capacity of the system to its limit, and there was a brief period of moratorium on all new sewer service connections.

At the same time, Federal and State grants became available for design and construction of new wastewater facilities. A facilities planning study was completed in 1982 and design started on a new treatment plant, pumping stations and new collection system extensions to serve 4 neighborhoods where new sewers were needed according to the plan. The philosophy behind the plan of improvements authorized at the 1984 Town Meeting was to build a treatment plant to serve the current need, but not to provide for future growth. The Wastewater Treatment plant came on-line in 1988 and was 92% funded by Federal and State grants with a limited amount of additional capacity for flows.

In a memo from the plant's designers Camp, Dresser and McKee dated February 12, 1986 the available capacity for peak flows was estimated to be 460,000 gallons per day, with a maximum of 38% of that total being in available in West Concord. While the plant was being constructed the PWC



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approved 12 new connections to the sewer system using almost 5% of the capacity that would become available [20,690 g.p.d.].

As soon as the Plant was finished in 1987 the Public Works Commission received numerous requests for sewer connections including one from a proposed Chapter 40B development named 'Concord Commons' to be built on land off Sudbury Road which eventually was purchased by Walden Woods and which would have used a significant portion of the available capacity of the plant as soon as it began operating.

Creation of the Sewer Improvement Fee

In 1988 the Public Works Commission formulated a policy to deal with Sewer Connections and changes in sewer use, which were outside the scope of the Facilities Plan. The Commission recognized that it is very difficult to draw the line between what the system can accommodate and what it cannot until it actually reaches a state of chronic overload. Secondly, it recognized that the Town may have limited legal authority in the case of Chapter 40B developments to deny connection or expanded use of the sewer system by properties currently connected to the system, even if it wanted to do so.

Therefore, the Commission developed a financial approach to sewer connection and use policy whereby new connections and uses outside the plan are accepted, but must provide financial resources required to create capacity in the sewer system for the additional flows. This avoided the need to judge the merits of one particular use compared with other potential, competing uses in order to allocate the limited capacity available to the Town.

At the same time it recognized that in some cases the Town will plan to extend sewers into areas not suitable for on-site wastewater disposal systems for the public good and this will be financed by betterment's and tax dollars after a full and deliberate debate by Town Meeting.



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This policy was authorized by Town Meeting in 1989, in Article 25, which created a Sewer Improvement Fee, and was implemented with the amendment of the Sewer Rules and Regulations on December 13, 1989, and the adoption of a fee on March 13, 1990. The regulations stated that the fee would be calculated using Title 5 flows for the building and use. In their discussion the Commission stated that this would be the fairest and most objective way of calculating flows for all types of sewer customers.

The Commission assumed that any increase in flows from new connections or changes in use would be offset by removal of inflow and infiltration, or expansion of the plant with an increase in permitted discharge flows.

History of the Sewer Improvement Fee in Concord

Since the fee was first adopted, new connections and changes in use having peak flows totaling 121,726 g.p.d. have been added to the system.

The facilities plan has been updated by the Wastewater Management Plan. The Basis of Design Report for the Wastewater Treatment plant indicated that the maximum daily flow through 2001 was 2.9 m.g.d. Improvements are being designed which will provide maximum daily flows of 3.7 m.g.d. [both figures are 3.1 times the average daily flow, based on historical peaking measurements].

Most of this additional capacity is intended for parcels identified in the Wastewater Management Plan as requiring off-site solutions, or parcels which have already paid a betterment for sewer extensions in the 1980's but which have not yet connected to the sewer system. The only allowance for increased flows in the area already sewered is for an average daily flow of 49,875 g.p.d. or 154,333 g.p.d. of peak flows. Since the plan was published in 2004, 49,104 g.p.d. in additional peak flows have been added to the system, [excluding homes in the Phase I neighborhoods]. These flows represent 32% of the available capacity for additional flows from sewered parcels.

